Australian Government
Australian Institute of
Health and Welfare

Aboriginal and Torres Strait Islander

Health Performance Framework
2014 report

Detailed analyses
Tier 1

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Detailed analyses
Tier 1

Australian Institute of Health and Welfare
Canberra
Cat. no. IHW 167

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This publication is part of the Australian Institute of Health and Welfare's Aboriginal and Torres Strait Islander Health Performance Framework reports. A complete list of the Institute's publications is available from the Institute's website <www.aihw.gov.au>.

ISSN 978-1-74249-877-5 (PDF)
ISBN 978-1-74249-878-2 (Print)

Suggested citation

Australian Institute of Health and Welfare 2015. Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses. Cat. no. IHW 167. Canberra: AIHW.

Australian Institute of Health and Welfare
Board Chair
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Published by the Australian Institute of Health and Welfare
Cover art by William Sandy, *Emu Dreaming* 2010

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Acknowledgments

The main authors of this report are Charles Hudson, Anh Pham Waddell, Therese Bourke and Tracy Dixon. Special contributions by Shampa Barua, Tetteh Dugbaza, Bernadette Kok, Amitha Jason, Helen Johnstone, Christian Jung, Rachael Kitchens, Corinna Kovacevic, Andy Le, Quan Nguyen, Ruth Penm, Ronda Ramsay, Brendan Scott, Alexandra Sendall, Rowan Shepherd, Jan Watson, Nancy Stace-Winkles, Kate Wright, Bronwyn Wyatt and Qinghe Yin are gratefully acknowledged. Thanks are also extended to Fadwa Al-Yaman, who provided ongoing guidance and comments.

The following organisations are acknowledged for providing data for various sections of the report: Australian Bureau of Statistics; Department of Health; Australian Institute of Criminology; Department of Education and Training; Australian Curriculum, Assessment and Reporting Authority; National Centre for Vocational Education and Research; Department of Social Services; Northern Territory Acute Rheumatic Fever and Rheumatic Heart Disease Program; Australian and New Zealand Dialysis and Transplant Registry; Primary Health Care Research and Information Service; Australian General Practice Accreditation Limited; Department of Human Services; GPA Accreditation Plus; Rural Health Workforce Australia; Office of the Registrar of Indigenous Corporations; National Notifiable Diseases Surveillance System; The Kirby Institute, University of New South Wales; Australian Capital Territory Health; New South Wales Health; Northern Territory Department of Health; Queensland Health; South Australia Department for Health and Ageing; Tasmanian Department of Health and Human Services; Victorian Department of Health and Human Services; Western Australia Department of Health; and the Australian General Practice Statistics and Classification Centre.

Thanks for supply of data and review of relevant material are extended to a number of units within the Australian Institute of Health and Welfare including: Maternal Health, Children and Families; Child Welfare and Prisoner Health; Mental Health and Palliative Care; Cardiovascular, Diabetes and Kidney; Cancer and Screening; Population Health and Primary Care; Expenditure and Workforce; Housing and Homelessness Reporting and Development; Indigenous Community and Health Service Reporting; and Hospitals Data; the AIHW collaborating units including Dental Statistics and Research Unit, National Injury Surveillance Unit and National Perinatal Epidemiology and Statistics Unit.

Many thanks to the AIHW Publishing Unit for their assistance with production of this report.

This work received financial support from the Australian Government Department of the Prime Minister and Cabinet. Thanks to Kirrily Harrison, Ruth Nicholls, Scott Copley, Kylie Sjoberg, Katrina Anderson and Timothy Saunders for review and advice.

Abbreviations

AATSIHS	Australian Aboriginal and Torres Strait Islander Health Survey
ABS	Australian Bureau of Statistics
ACIR	Australian Childhood Immunisation Register
ACT	Australian Capital Territory
AGPAL	Australian General Practice Accreditation Limited
AHW	Aboriginal health worker
AIHW	Australian Institute of Health and Welfare
AMS	Aboriginal Medical Service
ANZDATA	Australian and New Zealand Dialysis and Transplant Registry
AODTS-NMDS	Alcohol and Other Drug Treatment Services National Minimum Data Set
AQF	Australian Qualifications Framework
ARF	acute rheumatic fever
BEACH	Bettering the Evaluation and Care of Health
BMI	body mass index
CDEP	Community Development Employment Projects scheme
CHINS	Community Housing and Infrastructure Needs Survey
CIs	confidence intervals
COAG	Council of Australian Governments
COPD	chronic obstructive pulmonary disease
CSOM	chronic suppurative otitis media
DASR	Drug and Alcohol Services Reporting
DEEWR	(Australian Government) Department of Education, Employment and Workplace Relations
DoHA	(Australian Government) Department of Health and Ageing
DSNMDS	Disability Services National Minimum Data Set
ERP	estimated resident population
ESKD	end-stage kidney disease

FaCSIA	(Australian Government) Department of Families, Community Services and Indigenous Affairs
FaHCSIA	(Australian Government) Department of Families, Housing, Community Services and Indigenous Affairs
FASD	fetal alcohol spectrum disorder
FOBT	fecal occult blood test
FTE	full-time equivalent
GP	general practitioner
GPA+	General Practice Accreditation Plus
GPMP	General Practice Management Plan
GSS	General Social Survey
HfL	Healthy for Life
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
HPF	Aboriginal and Torres Strait Islander Health Performance Framework
ICD-10-AM	International statistical classification of disease and related health problems, 10th revision, Australian modification, 4th edition
IHO	Indigenous Housing Organisation
IRSAD	Index of Relative Socio-Economic Advantage and Disadvantage
KPI	key performance indicator
MBS	Medicare Benefits Schedule
MCEECDYA	Ministerial Council for Education, Early Childhood Development and Youth Affairs
NAGATSIHID	National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data
NAHA	National Affordable Housing Agreement
NAPEDCD	National Non-admitted Patient Emergency Department Care Database
NAPLAN	National Assessment Program—Literacy and Numeracy
NATSIHON	National Aboriginal and Torres Strait Islander Health Officials Network
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NCMHCD	National Community Mental Health Care Database
NCVER	National Centre for Vocational Education Research

NDA	National Disability Agreement
NHMRC	National Health and Medical Research Council
NHMD	National Hospital Morbidity Database
NHS	National Health Survey
NIRA	National Indigenous Reform Agreement
NMDS	national minimum data set
NNDSS	National Notifiable Diseases Surveillance System
NOPSAD	National Opioid Pharmacotherapy Statistics Annual Data
NPAH	National Partnership Agreement on Homelessness
NPSU	National Perinatal Statistics Unit
NSSC	National Schools Statistics Collection
NSW	New South Wales
NT	Northern Territory
NTER	Northern Territory Emergency Response
OATSIH	Office of Aboriginal and Torres Strait Islander Health
OECD	Organisation for Economic Co-operation and Development
ORIC	Office of the Registrar of Indigenous Corporations
OSR	Online Services Report
PBS	Pharmaceutical Benefits Scheme
PES	Post Enumeration Survey
PMRT	Performance Measurement and Reporting Taskforce
Qld	Queensland
RHD	rheumatic heart disease
SA	South Australia
SAAPNDC	Supported Accommodation Assistance Program National Data Collection
SAR	Service Activity Reporting
SEIFA	Socio-Economic Indexes for Areas
SFNT	Stronger Futures in the Northern Territory
SHSC	Specialist Homelessness Services Collection

SIDS	sudden infant death syndrome
SIH	Survey of Income and Housing
STIs	sexually transmissible infections
TAFE	Technical and Further Education
Tas	Tasmania
TCA	Team Care Arrangement
VET	Vocational Education and Training
Vic	Victoria
VII	Voluntary Indigenous Identifier
WA	Western Australia
WHO	World Health Organization

Summary

The *Aboriginal and Torres Strait Islander health performance framework 2014 report: detailed analyses* finds improvements in the health of Aboriginal and Torres Strait Islander people, and areas of concern.

Areas of improvement

Health status

- A 16% decline in the overall mortality rate for Indigenous Australians. There was a significant narrowing (15%) of the gap in mortality between Indigenous and non-Indigenous Australians in the period from 1998 to 2013.
- A 40% decline in the death rate due to circulatory disease. This was the leading cause of death for Indigenous Australians, in the period from 1998 to 2012.
- A significant decrease (40%) in the death rate due to kidney disease, in the period from 2006 to 2012.

Risk factors

- Smoking rates declined significantly by 7 percentage points for Indigenous Australians (from 51% to 44%) between 2002 and 2012–13, for those aged 15 and over. The current gap between Indigenous and non-Indigenous Australians is 25 percentage points.

Child and maternal health

- A 31% decline in the mortality rate for Indigenous children aged 0–4, and a significant narrowing of the gap between Indigenous and non-Indigenous Australians in the period from 1998 to 2013.
- The low birthweight rate declined by 9% between 2000 and 2011 for babies born to Indigenous mothers and the gap between Indigenous and non-Indigenous Australians narrowed.
- Smoking during pregnancy declined from 54% to 50% for Indigenous mothers between 2005 and 2011.

Health system

- Medicare services claimed by Indigenous Australians have doubled over the last decade. There were increases in health assessments, chronic disease management items and overall GP care. The age-standardised rate of Medicare GP services claimed by Indigenous Australians is now higher than the rate for non-Indigenous Australians (6,115 compared with 5,583 per 1,000 population).
- Episodes of care delivered by Australian government funded Indigenous primary health care organisations increased from 1.2 million in 1999–2000 to 3.1 million in 2012–13, partly reflecting expansion in the sector.

Social determinants

- The gap in the year 12 or equivalent attainment rate between Indigenous and non-Indigenous Australians for those aged 20–24, narrowed by 11.6 percentage points.
- There have been improvements in overcrowding, homelessness and home ownership over the last decade.

Areas of concern

Health status

- 47% of Indigenous Australians aged 18 and over had a disability or restrictive long-term health condition in 2012–13, compared with 29% of their non-Indigenous counterparts.
- Cancer death rates for Indigenous Australians have increased by 11% between 2006 and 2012, although rates for non-Indigenous Australian have declined (5%).
- There has been no reduction in the mortality rate due to diabetes or injury, including for suicide and transport accidents.
- In 2012–13, 11% of Indigenous adults had diabetes, 3 times the rate for non-Indigenous Australians. Of those diagnosed with diabetes, 61% had high blood sugar levels.
- The incidence rate of end stage kidney disease for Indigenous Australians in 2010–2012 was 7 times the rate for non-Indigenous Australians.

Risk factors

- 44% of Indigenous Australians aged 15 and over reported being a current smoker in 2012–13, this is 2.5 times the rate for non-Indigenous Australians. The smoking rate in *Very remote* areas (56%) has not improved over the last decade.
- 66% of Indigenous Australian aged 15 and over were overweight or obese in 2012–13.
- 20% of Indigenous adults had high blood pressure and most (79%) did not know that they had the condition.

Child and maternal health

- 12.6% of babies born to Indigenous mothers in 2011 were low birthweight, twice the rate for non-Indigenous Australians.
- 50% of Indigenous women smoked during pregnancy in 2011, this is 4 times the rate for non-Indigenous Australians.

Health system

- In 2012–13, 21% of Indigenous Australians reported having problems accessing dentists, 14% doctors, 9% counsellors, 9% other health professionals and 6% hospitals.
- The rate of discharge from hospital against medical advice for Indigenous Australians was 8 times the rate for non-Indigenous Australians in the 2 years to June 2013.
- Indigenous Australians had lower rates of hospitalisations with a procedure recorded compared with non-Indigenous Australians. They also had lower rates recorded for elective surgery, and waited longer for elective surgery.

Social determinants

- No progress on the employment target for Indigenous Australians was recorded since 2008.
- Indigenous students' achievements in reading, writing and numeracy remain below the corresponding proportions for all students.
- In 2012–13, 43% of Indigenous adults were in the lowest quintile of equivalised household incomes, compared with 17% of non-Indigenous adults.
- In 2011, 28% of homeless Australians were Indigenous.

Table S1: Key indicators of Aboriginal and Torres Strait Islander health

		Current period			Trends			
Topic	**Indicator (current time period)**	**Indig.**	**Non-Indig.**	**Gap(a)**	**Time period**	**Indig.**	**Non-Indig.**	**Gap(a)**
Health status and outcomes								
Low birthweight	Low birthweight live born babies per 100 live births (2011)	12.6	6.0	6.6*	2000–2011	↓	↔	↓
Hospitalisations	Total hospitalisations (excluding dialysis) per 1,000 population, age-standardised (2011–12 to 2012–13)	393.1	327.6	65.5(b)	1988–89 to 2012–13	↑	↑	↔
Disease incidence and prevalence	Age-standardised proportion of persons reporting circulatory disease as a long-term condition (2011–12)	19.7	16.0	3.7*	. .	n.a.	n.a.	n.a.
	Age-standardised proportion of persons with diabetes (2012–13)	17.9	5.1	12.8	. .	n.a.	n.a.	n.a.
	Age-standardised incidence rate of cancer per 100,000 population (2005–2009)	408.1	440.0	–31.9(b)	. .	n.a.	n.a.	n.a.
	Age-standardised incidence rate of treated end-stage kidney disease per 100,000 population (2010–2012)	61.7	9.3	52.4*	1996–2012	↑	↑	↑
Self-assessed health status	Age-standardised proportion of persons aged 15 and over reporting very good/excellent health (2012–13)	34.1	55.8	–21.7*	2004–05 to 2012–13	↓	↔.	↔
Community functioning	Recognises homeland/traditional country (2012–13)	72.9	. .	. .	2002 to 2012–13	↑	. .	. .
	Speaks an Indigenous language (2008)	19	. .	. .	. .	n.a.	. .	. .
	Lived in only 1 dwelling in last 12 months (2008)	78	. .	. .	. .	n.a.	. .	. .
	Not a victim of physical or threatened violence in the last 12 months (2008)	75	. .	. .	. .	n.a.	. .	. .
	Adult participated in sport/social/community activities in last 3 months (2008)	89	. .	. .	. .	n.a.	. .	. .
Social and emotional wellbeing	Age-standardised proportion of adults reporting high/very high levels of psychological distress (2012–13)	29.5	10.9	18.6*	. .	n.a.	n.a.	. .
Disability	Age-standardised proportion of persons with a profound, severe or moderate core activity limitation (2012–13)	13.1	8.3	4.8	. .	n.a.	n.a.	n.a.

(continued)

Table S1 (continued): Key indicators of Aboriginal and Torres Strait Islander health

		Current period			Trends			
Topic	**Indicator**	**Indig.**	**Non-Indig.**	**Gap**[(a)]	**Time period**	**Indig.**	**Non-Indig.**	**Gap**[(a)]
Oral, ear and eye health	Age-standardised hospitalisation rate for dental problems per 1,000 population (July 2011 to June 2013)	1.9	1.5	0.4[(b)]	. .	n.a.	n.a.	n.a.
	Proportion of children aged 0–14 with ear/hearing problems (2012–13)	7.1	3.6	3.5	2001 to 2012–13	↓	↓	↔
	Age-standardised proportion of persons with eye/sight problems (2012–13)	48.3	51.9	–3.6[(b)]	2004–05 to 2012–13	↔	↔	↔
Mortality	Life expectancy at birth, males (2010–2012)	69.1	79.7	–10.6[(b)]	2005–07 to 2010–12	↑	↑	↓
	Life expectancy at birth, females (2010–2012)	73.7	83.1	–9.5[(b)]	2005–07 to 2010–12	↑	↑	↓
	Infant mortality rate per 1,000 live born infants (2009–2013)	6.3	3.7	2.6*	1998–2012	↓	↓	↓
	Child 0–4 mortality rate per 100,000 population (2009–2013)	169.2	89.2	79.9*	1998–2013	↓	↓	↓
	Perinatal mortality rate per 1,000 births (2008–2012)	9.6	8.1	1.5*	1998–2012	↓	↓	↓
	Age-standardised mortality rate per 100,000 population (2009–2013)	985.0	585.2	399.8*	1998–2013	↓	↓	↓
	Age-standardised mortality rate for circulatory diseases per 100,000 population (2008–2012)	285.7	191.8	93.8*	1998–2012	↓	↓	↓
	Age-standardised mortality rate for avoidable and preventable deaths (0–74) per 100,000 population (2008–2012)	592.9	218.7	374.2*	1998–2012	↓	↓	↓
Determinants of health								
Housing	Proportion of people aged 15 and over living in overcrowded households (2012–13)	22.7	5.3	17.4*	2004–05 to 2012–13	↓	↔	↓
Environmental tobacco smoke	Proportion of children aged 0–14 living in households with daily smokers (2012–13)	56.9	26.0	30.9*	2004–05 to 2012–13	↓	↓	↓

(continued)

Table S1 (continued): Key indicators of Aboriginal and Torres Strait Islander health

		Current period			Trends			
Topic	**Indicator**	**Indig.**	**Non-Indig.**	**Gap**[a]	**Time period**	**Indig.**	**Non-Indig.**	**Gap**[a]
Education	Apparent retention rate for year 7/8 to Year 12 (2013)	55.1	82.9	–27.8[b]	1999–2013	↑	↑	↓
	Apparent retention rate for year 11 to Year 12 (2013)	71.3	87.4	–16.1[b]	1999–2013	↑	↔	↓
	Proportion of persons aged 25–64 who had a post-school qualification (2011)	37.9	61.7	–23.9	2001–2011	↑	↑	↔
Literacy and numeracy	Proportion of Year 3 students achieving reading benchmark (2014)	74.7	94.7	–20.0[b]	2008–2014	↔	↔	↔
	Proportion of Year 3 students achieving writing benchmark (2014)	75.8	94.9	–19.1[b]		n.a.	n.a.	n.a.
	Proportion of Year 3 students achieving numeracy benchmark (2014)	78.2	95.7	–17.5[b]	2008–2014	↑	↑	↓
	Proportion of Year 3 students achieving grammar/punctuation benchmark (2014)	72.9	94.9	–22.0[b]	2008–2014	↔	↔	↔
Employment	Labour force participation rate, persons aged 15–64 (2012–13)	60.1	80.0	–19.9*	2008 to 2012–13	↓	↔	↑
	Employment rate (proportion of population employed), persons aged 15–64 (2012–13)	47.5	76.6	–29.1*	2008 to 2012–13	↓	↔	↑
	Unemployment rate, persons aged 15–64 (2012–13)	20.9	4.2	16.7*	2008 to 2012–13	↑	↑	↑
Income	Proportion of persons aged 18 and over in the bottom 20% of equivalised gross weekly household income (2012–13)	42.5	16.9	25.6*	. .	n.a.	n.a.	n.a.
Transport	Proportion of households in *Non-remote* areas with access to motor vehicles (2008)	49.8	84.7	34.9*	. .	n.a.	n.a.	n.a.
Community safety and criminal justice	Proportion of persons aged 18 and over who reported they were a victim of physical or threatened violence in last 12 months (2008)	20.5	10.8	9.7	. .	n.a.	n.a.	n.a.
	Age-standardised imprisonment rate per 100,000 adults (2013)	1,730.9	132.8	1,598.1	2000–2013	↑	↑	↑
	Child protection substantiations per 1,000 children aged 0–17 (2013)	38.1	5.7	32.4	. .	↔	↔	↔

(continued)

Table S1 (continued): Key indicators of Aboriginal and Torres Strait Islander health

		Current period			Trends			
Topic	**Indicator**	**Indig.**	**Non-Indig.**	**Gap[a]**	**Time period**	**Indig.**	**Non-Indig.**	**Gap[a]**
Health behaviours	Age-standardised proportion of persons aged 15 and over who are current daily smokers (2012–13)	40.7	15.4	25.3*	2002 to 2012–13	↓	n.a.	n.a.
	Age-standardised proportion of persons aged 18 and over who drank at risky/high risk levels on any occasion during last 12 months (2012–13)	51.9	45.3	6.6	2004–05 to 2012–13	↔	↔	↔
	Proportion of persons aged 15 and over who used illicit drugs in last 12 months (2012–13)	22.7	. .	. .	2002 to 2012–13	↔	. .	. .
	Age- standardised proportion of mothers who smoked during pregnancy (2011)	48.7	12.0	36.7*	. .	↓	↓	↑
	Proportion of infants (0–3) currently being breastfed (2012–13)	18.6	19.1	–0.5	. .	n.a.	n.a.	n.a.
Overweight and obesity	Age-standardised proportion of persons aged 15 and over who are obese (measured height and weight) (2012–13)	41.0	26.2	14.8*	. .	n.a.	n.a.	n.a.
Health system performance								
Early detection and prevention, health promotion	Proportion of mothers who attended at least 1 antenatal care session during the first trimester of pregnancy (age-standardised) (2011)	51.4	66.2	–14.8*	. .	n.a.	n.a.	n.a.
	Proportion of 2 year olds fully vaccinated (2013)	91.4	92.2	–0.9	2001–2013	↑	↑	↔
	Proportion of Indigenous primary health care services that offered at least 1 health promotion program (2012–13)	98.5	. .	. .	. .	n.a.	. .	. .
	Age-standardised proportion of women aged 50–69 who participated in BreastScreen Australia programs (2011–12)	33.3	54.9	–21.7[b]	1999–00 to 2011–12	↑	↓	↓
	Child 0–14 health checks, rate per 1,000 population (2013–14)	194.2	. .	. .		↑	. .	. .
	Adult 15–54 health assessments, rate per 1,000 population (2013–14)	205.0	. .	. .	2006–07 to 2013–14	↑	. .	. .
	Adult 55+ health assessments, rate per 1,000 population (2013–14)	325.0	. .	. .		↑	. .	. .

(continued)

Table S1 (continued): Key indicators of Aboriginal and Torres Strait Islander health

		Current period			Trends			
Topic	**Indicator**	**Indig.**	**Non-Indig.**	**Gap**[(a)]	**Time period**	**Indig.**	**Non-Indig.**	**Gap**[(a)]
Chronic disease management/care planning	General Practice Management Plans (GPMPs), age-standardised rate per 1,000 population (2013–14)	114.0	72.0	41.7*	2005–06 to 2013–14	↑	↑	lead increased
	Team Care Arrangements (TCAs), age-standardised rate per 1,000 population (2013–14)	96.0	58.0	37.7*	2005–06 to 2013–14	↑	↑	lead increased
	MBS allied health items claimed, age-standardised rate per 1,000 population (2013–14)	334.0	386.0	–51.8*	2003–04 to 2013–14	↑	↑	↔
	Proportions of persons with diabetes who had an HbA1c test in the last 12 months (2012–13)	68.7	72.1	9.4[(b)]	. .	n.a.	n.a.	n.a.
Access to hospital procedures	Age-standardised proportion of hospitalisations (excluding dialysis) with a procedure recorded (2011–12 to 2012–13)	58.8	79.9	–21.1[(b)]	. .	↑	↑	↓
Potentially preventable hospital admissions	Age-standardised hospitalisation rates for potentially preventable hospital admissions (2011–12 to 2012–13)	96.6	28.5	68.0[(b)]	. .	n.a.	n.a.	n.a.
Governance and cultural competency	Age-standardised per cent for discharge from hospital against medical advice (excluding mental and behavioural disorders) (2011–12 to 2012–13)	3.6	0.5	3.1[(b)]	. .	↑	↑	↑
	Proportion of Aboriginal and Torres Strait Islander primary health care services that have representatives on external boards (2012–13)	57.1	. .	. .	. .	n.a.	. .	. .
	Proportion of Indigenous persons experiencing discrimination (2008)	27.3	. .	. .	. .	n.a.	. .	. .
Access to health services	MBS non-referred GP services claimed, age-standardised rate per 1,000 population (2013–14)	6,115	5,583	532.3*	2003–04 to 2013–14	↑.	↑.	↓
	Proportion of Indigenous population who had problems accessing a dentist (2012–13)	21.0	. .	. .	. .	n.a.	. .	. .
	Proportion of Indigenous population who had problems accessing a doctor (2012–13)	14.0	. .	. .	. .	n.a.	. .	. .

(continued)

Table S1 (continued): Key indicators of Aboriginal and Torres Strait Islander health

		Current period			Trends			
Topic	**Indicator**	**Indig.**	**Non-Indig.**	**Gap**[(a)]	**Time period**	**Indig.**	**Non-Indig.**	**Gap**[(a)]
	Proportion of Indigenous population who had problems accessing a hospital (2012–13)	6.0	. .	. .	. .	n.a.	. .	. .
	Episodes of health care provided by Indigenous primary health care services (2012–13)	3,068,438	. .	. .	. .	↑	. .	. .
	Elective surgery median waiting times (days) (2013–14)	41	36	5[(b)]	. .	n.a.	n.a.	n.a.
	Emergency department waiting times—proportion meeting national benchmark (2013–14)	73	74	–1[(b)]	2010–11 to 2012–13	↑	↑	↔
	Age-standardised community mental health-care service contacts per 1,000 population (2012–13)	999.2	313.1	686.1[(b)]	. .	n.a.	n.a.	n.a.
	Proportion of presentations to emergency departments which were after hours (2011–12 to 2012–13)	58.7	56.0	2.7[(b)]	. .	n.a.	n.a.	n.a.
Accreditation	Proportion of public hospital separations in accredited hospitals (2011–12 to 2012–13)	99.2	99.2	—[(b)]	1998–99 to 2012–13	↑	↑	↓
	Proportion of Indigenous primary health care services accredited (2012–13)	42	. .	. .	. .	n.a.	. .	. .
Workforce, training and resources	People in the health workforce (per 10,000 population) (2011)	155.1	344.1	–189.0[(b)]	1996 to 2011	↑	n.a.	n.a.
	Per cent of undergraduates enrolled in health related courses who were Indigenous (2012)	1.8	. .	. .	. .	n.a.	. .	. .
	Per cent of VET students enrolled in health related courses who were Indigenous (2012)	4.8	. .	. .	. .	n.a.	. .	. .
	Estimated health expenditure per person (2010–11)	$7,995	$5,437	$2,559[(b)]	2001–02 to 2010–11	↑	n.a.	n.a.

(continued)

Table S1 (continued): Key indicators of Aboriginal and Torres Strait Islander health

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Gap is the rate difference (Indigenous age-standardised rate minus non-Indigenous age-standardised rate).

(b) Differences between Indigenous and non-Indigenous populations not tested for statistical significance.

↑ Statistically significant increase in long-term trends presented (see relevant measure in body of report for time period).

↓ Statistically significant decrease in long-term trends presented (see relevant measure in body of report for time period).

↔ No significant change in long-term trends presented (see relevant measure in body of report for time period).

n.a. Data not available or not reported.

. . Not applicable

Note: Figures reported in the current period column should not be compared as many of the indicators are based on different denominators.

Introduction

The *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*, is the fifth in a series of reports against the Aboriginal and Torres Strait Islander Health Performance Framework (HPF) which are published every 2 years. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people in Australia. Detailed tables to support the analysis presented in this report can be found on the AIHW website in the form of Excel tables.
See <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

The HPF comprises 3 tiers:

Tier 1—Health status and outcomes. This tier covers prevalence of health conditions (for example, circulatory disease, diabetes), human function (for example, disability), life expectancy and wellbeing and deaths. It aims to provide an overall indication of current health status and recent trends on a range of issues including child and maternal health, chronic diseases, injury, communicable diseases, and social and emotional wellbeing.

Tier 2—Determinants of health. This tier covers determinants of health that focus on factors outside the health system that affect the health of Aboriginal and Torres Strait Islander people. This includes socioeconomic status (for example, income and education), environmental factors (for example, overcrowding), community capacity (for example, child protection), health behaviours (for example, risky alcohol consumption and dietary behaviour) and person-related factors (for example, prevalence of overweight and obesity). Such factors have been shown to have a strong association with disease and ill health.

Tier 3—Health system performance. This tier covers the performance of the health system, including population health, primary health care and secondary/tertiary care services. There are 6 domains covered: effectiveness of health services; responsiveness of health services to Indigenous communities and individuals; accessibility of services; continuity; capability; and sustainability. This tier includes measures that deal with a range of programs and service types, including child and maternal health, early detection and chronic disease management, continuous care, assess to secondary/tertiary care, and health workforce and expenditure. The safety and quality of health care is measured through the Australian Safety and Quality Framework for Health Care <http://www.safetyandquality.gov.au>.

The tiers and domains of the HPF and selected measures are shown in Figure 1. There are currently 68 measures that can be reported at the national level but not all can be reported for individual jurisdictions due to data availability and quality issues. Information on why these indicators were selected is in the Aboriginal and Torres Strait Islander Health Performance Framework 2014 policy report (AHMAC 2015).

Tier 1—Health status and outcomes

Health conditions

1.01 Low birthweight
1.02 Top reasons for hospitalisation
1.03 Injury and poisoning
1.04 Respiratory disease
1.05 Circulatory disease
1.06 Acute rheumatic fever and rheumatic heart disease
1.07 High blood pressure
1.08 Cancer
1.09 Diabetes
1.10 Kidney disease
1.11 Oral health
1.12 HIV/AIDS, hepatitis and sexually transmissible infections

Human function

1.13 Community functioning
1.14 Disability
1.15 Ear health
1.16 Eye health

Life expectancy and wellbeing

1.17 Perceived health status
1.18 Social and emotional wellbeing
1.19 Life expectancy at birth

Deaths

1.20 Infant and child mortality
1.21 Perinatal mortality
1.22 All causes age-standardised deaths rates
1.23 Leading causes of mortality
1.24 Avoidable and preventable deaths

Tier 2—Determinants of health

Environmental factors

2.01 Housing
2.02 Access to functional housing with utilities
2.03 Environmental tobacco smoke

Socioeconomic factors

2.04 Literacy and numeracy
2.05 Education outcomes for young people
2.06 Educational participation and attainment of adults
2.07 Employment
2.08 Income
2.09 Index of disadvantage

Community capacity

2.10 Community safety
2.11 Contact with the criminal justice system
2.12 Child protection
2.13 Transport
2.14 Indigenous people with access to their traditional lands

Health behaviours

2.15 Tobacco use
2.16 Risky alcohol consumption
2.17 Drug and other substance use including inhalants
2.18 Physical activity
2.19 Dietary behaviour
2.20 Breastfeeding practices
2.21 Health behaviours during pregnancy

Person-related factors

2.22 Overweight and obesity

Tier 3—Health system performance

Effective/appropriate/efficient

3.01 Antenatal care
3.02 Immunisation
3.03 Health promotion
3.04 Early detection and early treatment
3.05 Chronic disease management
3.06 Access to hospital procedures
3.07 Selected potentially preventable hospital admissions
3.08 Cultural competency

Responsive

3.09 Discharge against medical advice
3.10 Access to mental health services
3.11 Access to alcohol and drug services
3.12 Aboriginal and Torres Strait Islander Australians in the health workforce
3.13 Competent governance

Accessible

3.14 Access to services compared with need
3.15 Access to prescription medicines
3.16 Access to after-hours primary health care

Continuous

3.17 Regular GP or health service
3.18 Care planning for chronic diseases

Capable

3.19 Accreditation
3.20 Aboriginal and Torres Strait Islander people training for health-related disciplines

Sustainable

3.21 Expenditure on Aboriginal and Torres Strait Islander health compared to need
3.22 Recruitment and retention of staff

Source: AHMAC 2015

Figure 1: Aboriginal and Torres Strait Islander Health Performance Framework measures

Demographic information

The preliminary estimated resident Indigenous population of Australia as at 30 June 2014 was 713,589 people (ABS 2014a). Indigenous people represent 3% of the Australian population (Table 1).

Table 1: Preliminary estimated resident population by state/territory and Indigenous status, 30 June 2014

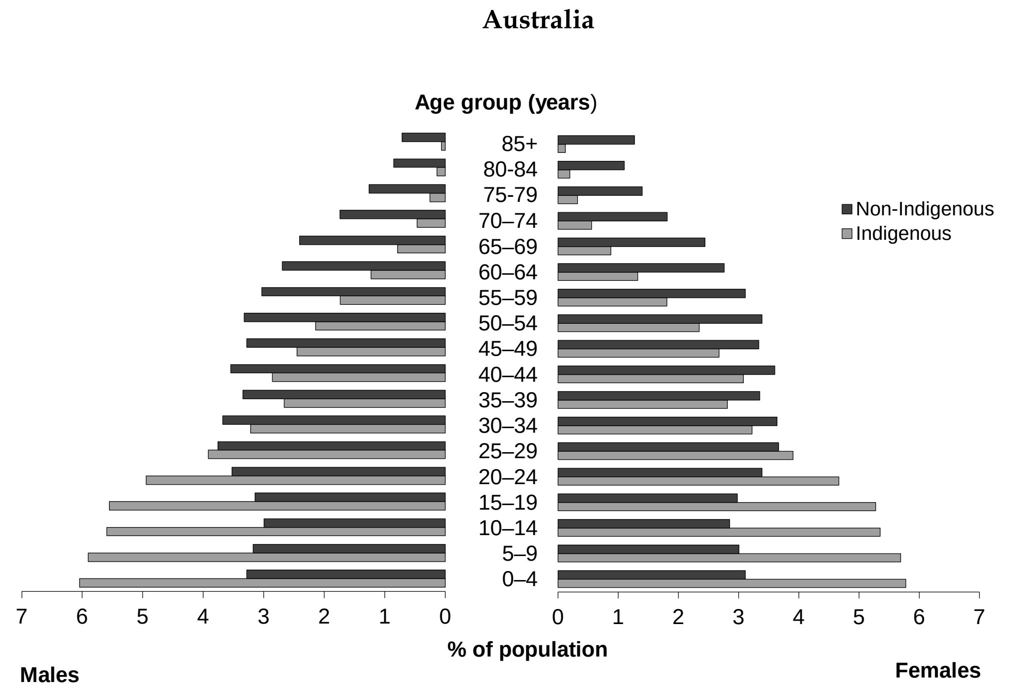
	Indigenous		Non-Indigenous		Total			
	Number	%	Number	%	Number	%	% Indig.	% Non-Indig.
New South Wales	220,902	31.0	7,272,717	31.9	7,493,619	31.9	2.9	97.1
Victoria	50,983	7.1	5,777,986	25.3	5,828,969	24.8	0.9	99.1
Queensland	203,045	28.5	4,557,648	20.0	4,760,693	20.2	4.3	95.7
South Australia	39,800	5.6	1,651,173	7.2	1,690,973	7.2	2.4	97.6
Western Australia	93,778	13.1	2,502,941	11.0	2,596,719	11.0	3.6	96.4
Tasmania	25,845	3.6	489,978	2.1	515,823	2.2	5.0	95.0
Northern Territory	72,251	10.1	171,754	0.8	244,005	1.0	29.6	70.4
Australian Capital Territory	6,707	0.9	383,373	1.7	390,080	1.7	1.7	98.3
Australia[(a)]	**713,589**	**100.0**	**22,810,466**	**100.0**	**23,524,055**	**100.0**	**3.0**	**97.0**

(a) Includes territories other than New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania, the Northern Territory and the Australian Capital Territory.

Source: AIHW analysis of ABS preliminary population estimates based on 2011 Census.

The Indigenous population has an age structure that is significantly younger than that of the non-Indigenous population. For example, in 2014, Indigenous Australians aged under 15 constituted 34% of the Indigenous population, whereas this age group represents about 18% of the non-Indigenous population. Conversely, those aged 65 and over comprise only 4% of the Indigenous population, compared with about 15% of the non-Indigenous population (Figure 2).

In 2011, over three-quarters of the total Indigenous population in Australia live in *Major cities* (35%), *Inner regional* (22%) and *Outer regional* areas (22%), with under one-quarter in both *Remote* (8%) and *Very remote* (14%) areas (Table 2).



Source: AIHW analysis of ABS preliminary population estimates based on 2011 Census, Table 3.

Figure 2: Population profile, by Indigenous status, age and sex, Australia, 30 June 2014

Table 2: Estimated resident population by remoteness area and Indigenous status, Australia, 30 June 2011

	Indigenous		Non-Indigenous		Total			
	Number	**%**	**Number**	**%**	**Number**	**%**	**% Indig.**	**% Non-Indig.**
Major cities	233,146	34.8	15,451,394	71.3	15,684,540	70.2	1.5	98.5
Inner regional	147,683	22.0	3,963,346	18.3	4,111,029	18.4	3.6	96.4
Outer regional	146,129	21.8	1,880,300	8.7	2,026,429	9.1	7.2	92.8
Remote	51,275	7.7	263,401	1.2	314,676	1.4	16.3	83.7
Very remote	91,648	13.7	111,702	0.5	203,350	0.9	45.1	54.9
Australia	**669,881**	**100.0**	**21,670,143**	**100.0**	**22,340,024**	**100.0**	**3.0**	**97.0**

Source: AIHW analysis of ABS population estimates based on 2011 Census.

Structure of this report

This report presents the most recent data available at the time of writing, which varies by data source (see Table 1 for the most recent year/period for which key statistics are reported). Analyses for each measure are presented in order, through Tier 1—Health status and outcomes, Tier 2—Determinants of health and Tier 3—Health system performance.

Detailed tables to support the analyses presented in this report are included within each measure, and can also be found on the AIHW website in the form of Excel tables. See <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Interpreting the data in this report

Data sources and limitations

Data in this report come from a number of different administrative data sets and surveys, all of which have limitations that should be considered when interpreting the results. A brief description of the major data sources used in this report is at Appendix 1; a more detailed description of all data sources and comments on data quality can be found on the AIHW website at <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Administrative data sources

Health-related administrative data sets used for this report include the Australian Institute of Health and Welfare's National Hospital Morbidity Database, the National Mortality Database, the Community Mental Health Care Database, the National Perinatal Data Collection, the Australia and New Zealand Dialysis and Transplant Registry, the National Notifiable Diseases Surveillance System, the Online Services Report data collection and Medicare databases. Administrative data related to education include the Australian Bureau of Statistics National Schools Statistics Collection, Department of Education and Training Higher Education Student Statistics Collection and the National Vocational Education and Training database. Community services related data include the National Child Protection Data collections.

The main limitation in most of these administrative data collections is the under-identification of Aboriginal and Torres Strait Islander people. Under-identification is a problem in mortality, hospital morbidity and communicable disease data, particularly in some states and territories. Data analysis using these sources has therefore been limited to jurisdictions with adequate identification of Indigenous people, and this has been noted in relevant measures. Time-series analyses may also be affected by changes in the quality of Indigenous identification over time.

For current hospitalisation results (for 2011–12 and 2012–13 combined), all states and territories are considered as having data of sufficient quality to be included in the analyses. For short-term trends (2004–05 to 2012–13), data from New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory are used. For longer-term trends (1998–99 to 2012–13), data from only Queensland, Western Australia, South Australia and the Northern Territory are used.

For both current and long-term mortality data (from 1998 onwards), New South Wales, Queensland, Western Australia, South Australia and the Northern Territory are considered as having adequate levels of Indigenous identification to be included in the analyses.

Data on communicable diseases from the National Notifiable Disease Surveillance System have been found to have varying levels of completeness across diseases and jurisdictions. Results for each disease include only data from those jurisdictions considered to have adequate levels of Indigenous identification for that disease. Footnotes in tables and figures specify which jurisdictions have been included in each case.

The incompleteness of Indigenous identification in many administrative data sources results in an underestimate of the true rates for Indigenous Australians.

Surveys and other non-administrative data sources

Surveys that were used to obtain data for this report include Indigenous-specific surveys such as the Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS), and the National Aboriginal and Torres Strait Islander Social Survey (NATSISS). Data from the Census of Population and Housing have also been used.

Surveys are also subject to a number of data limitations due to sampling and non-sampling errors, such as bias in responses. In many tables that are referred to in this report, estimates with large relative standard errors (which is a measure of the sampling variability) have been footnoted to indicate that they should be used with caution or are considered too unreliable for general use.

For convenience, text and tables including data from the 2012–13 AATSIHS and the 2011–12 Australian Health Survey (which provides a non-Indigenous comparator) are referred to as being 2012–13 data.

Table 3: Comparator population and jurisdictions included in combined totals, by data source

	Comparator population		Jurisdictions included in combined totals		
Data source	**Current period**	**Time series data**	**Current period**	**Time series—short**	**Time series—long**
ABS National Prisoner Census	Non-Indigenous	Non-Indigenous	All Australia	All Australia	n.a.
ABS National Schools Statistics Collection	Other Australians	Other Australians	All Australia	All Australia	n.a.
AIC Deaths in Custody Australia (NDICP)	Non-Indigenous	Non-Indigenous	All Australia	All Australia	n.a.
AIC Drug Use Monitoring in Australia (DUMA)	Non-Indigenous	Non-Indigenous	n.a.[(a)]	n.a.	n.a.
AIC National Homicide Monitoring Program	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
AIHW Child Protection Collection	Non-Indigenous	Non-Indigenous	All Australia	All Australia	n.a.
AIHW Health Expenditure Database	Non-Indigenous	Indigenous only	All Australia	All Australia	n.a.
AIHW Juvenile Justice NMDS	Non-Indigenous	Non-Indigenous	NSW, Vic, Qld, SA, Tas, ACT	All Australia	n.a.
AIHW National Hospital Morbidity Database	Non-Indigenous	Non-Indigenous	All Australia	NSW, Vic, Qld, WA, SA, NT	Qld, WA, SA, NT
AIHW National Non-admitted patient emergency department care database (NAPEDCD)	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
AIHW National Prisoner Health Data Collection	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
AODT-NMDS (Alcohol and Other Australians Drug Treatment Services National Minimum Dataset)	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
ARF and RHD registers	Other Australians	Indigenous only	NT, WA, Qld	NT, WA, Qld for ARF; NT, WA for RHD	NT
Australia and New Zealand Dialysis and Transplant Registry (ANZDATA)	Non-Indigenous	Non-Indigenous	All Australia	All Australia	n.a.
Australian Aboriginal and Torres Strait Islander Health Survey	Non-Indigenous[(b)]	Non-Indigenous	All Australia	All Australia	n.a.
Australian Cancer Database—incidence data	Non-Indigenous	n.a.	NSW, Qld, WA, NT	n.a.	n.a.
Australian Cancer Database—survival rates	Non-Indigenous	n.a.	NSW, Qld, WA, NT	n.a.	n.a.
Australian Childhood Immunisation Register (ACIR)	Other Australians	Other Australians	All Australia	NSW, Vic, WA, SA, NT	n.a.
Australian National Infant Feeding Survey	Non-Indigenous	n.a.	All Australia	n.a.	n.a.

(continued)

Table 3 (continued): Comparator population and jurisdictions included in combined totals, by data source

	Comparator population		Jurisdictions included in combined totals		
Data source	**Current period**	**Time series data**	**Current period**	**Time series—short**	**Time series—long**
BEACH	Other Australians	Other Australians	All Australia	All Australia	n.a.
National Bowel Cancer Screening Program	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
BreastScreen register data	Other Australians	Other Australians	All Australia	All Australia	n.a.
Census of Population and Housing	Non-Indigenous	Non-Indigenous	All Australia	All Australia	n.a.
Child Dental Health Survey	Non-Indigenous	n.a.	Qld, WA, SA, Tas, ACT, NT	n.a.	n.a.
Deadly Ears	Indigenous only	Indigenous only	Qld	Qld	n.a.
Department of Health General Practice statistics	not by Indigenous status	n.a.	All Australia	n.a.	n.a.
Department of Education Higher Education Statistics Collection	Other Australians	Other Australians	All Australia	All Australia	n.a.
Disability Services NMDS	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
GPA Accreditation Plus (GPA+) and Australian General Practice Accreditation Limited (AGPAL)	not by Indigenous status	n.a.	All Australia	n.a.	n.a.
Healthy for Life (HfL)	Indigenous only	Indigenous only	All Australia	All Australia	n.a.
Medicare—Child Dental Benefits Schedule	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
Medicare data (MBS health checks)	Non-Indigenous	Indigenous only	All Australia	All Australia	n.a.
Medicare PIP IHI	not by Indigenous status	not by Indigenous status	All Australia	All Australia	n.a.
Medicare VII (Medicare Financing and Analysis Branch, Department of Health)	Non-Indigenous	Non-Indigenous	All Australia	All Australia	n.a.
NAPLAN	Non-Indigenous	Non-Indigenous	All Australia	All Australia	n.a.
National Community Mental Health Care Data	Non-Indigenous	n.a.	NSW, Qld, WA, SA, Tas, ACT, NT	n.a.	n.a.
National Health Workforce data	not by Indigenous status	n.a.	All Australia	n.a.	n.a.
National HIV Registry	Other Australians	Other Australians	All Australia	All Australia	n.a.
National Indigenous Eye Health Survey	Indigenous only	n.a.	All Australia	n.a.	n.a.

(continued)

Table 3 (continued): Comparator population and jurisdictions included in combined totals, by data source

	Comparator population		Jurisdictions included in combined totals		
Data source	**Current period**	**Time series data**	**Current period**	**Time series—short**	**Time series—long**
National Mental Health Establishments Database.	not by Indigenous status	n.a.	All Australia	n.a.	n.a.
National Mortality Database	Non-Indigenous	Non-Indigenous	NSW, Qld, WA, SA, NT	NSW, Qld, WA, SA, NT	n.a.
National Notifiable Diseases Surveillance System (NNDSS)	Other Australians	Other Australians	varies by disease[(c)]	WA, SA, NT	n.a.
National Perinatal Data Collection—antenatal care	Non-Indigenous	Non-Indigenous	NSW, Qld, SA, Tas, ACT, NT for number of visits; All Australia for gestation at first visit	NSW, Qld, SA, NT	NSW, Qld, SA
National Perinatal Data Collection—birthweight	Non-Indigenous	Non-Indigenous[(d)]	All Australia	NSW, Vic, Qld, WA, SA, NT	NSW, Vic, Qld, WA, SA, NT
National Perinatal Data Collection—smoking in pregnancy	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
National Residential Mental Health Care Data	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
National VET provider Collection	Other Australians	Other Australians	All Australia	All Australia	n.a.
NATSISS	Non-Indigenous[(e)]	n.a.	All Australia	n.a.	n.a.
nKPI collection	Indigenous only	Indigenous only	All Australia	All Australia	n.a.
NOPSAD (National Opioid Pharmacotherapy Statistics Annual Data)	Non-Indigenous	Non-Indigenous	NSW, Qld, SA, Tas, ACT, NT	NSW, Qld, SA, ACT	n.a.
Online Services Reporting (OSR)	Non-Indigenous	Indigenous only	All Australia	All Australia	n.a.
ORIC (Register of Indigenous Corporations)	not by Indigenous status	not by Indigenous status	All Australia	All Australia	n.a.
RHOF and VOS data[(f)]	Other Australians	n.a.	All Australia	n.a.	n.a.
Rural Workforce Agency NMDS	not by Indigenous status	n.a.	All Australia	n.a.	n.a.
SHSC (Specialist Homelessness Services Collection)	Non-Indigenous	n.a.	All Australia	n.a.	n.a.
Stronger Futures NTER CHCI (Northern Territory Emergency Response Child Health Check Initiative)—Audiology and dental data	Indigenous only	Indigenous only	NT	NT	n.a.

(continued)

Table 3 (continued): Comparator population and jurisdictions included in combined totals, by data source

Data source	Comparator population: Current period	Comparator population: Time series data	Jurisdictions included in combined totals: Current period	Jurisdictions included in combined totals: Time series—short	Jurisdictions included in combined totals: Time series—long
Trachoma Surveillance	Indigenous only	n.a.	NT, SA, WA, Qld for children; NT, SA, WA for adults	n.a.	n.a.

(a) DUMA data are presented by jurisdiction only, no combined total is calculated.

(b) Comparator data are sourced from the 2011–12 Australian Health Survey.

(c) The completeness of Indigenous status information in NNDSS data varies by disease. Invasive pneumococcal disease: all Australia. Chlamydia: Qld, WA, SA, Tas, NT. Non-congenital syphilis: all Australia. Gonorrhoea: all Australia except NSW. Hepatitis C: WA, SA, Tas, NT. Hepatitis B: WA, SA, Tas, ACT NT.

(d) For the long-term time series beginning in 1991, the comparator population is Other Australians.

(e) Comparator data are sourced from the 2008–08 National Health Survey, 2007–08 Survey of Income and Housing or 2006 General Social Survey, as relevant.

(f) RHOF–Rural Health Outreach Fund; VOS–Visiting Optometrists Scheme.

Methods used for analysis

Comparator population

This report focuses on the health of Aboriginal and Torres Strait Islander people and how they are faring relative to other Australians. Wherever possible, results for Indigenous Australians are compared with those for non-Indigenous Australians—that is, people who identified as not being of Aboriginal or Torres Strait Islander origin. This is not always possible, however: some data sources do not allow for the separate identification of people who identified as not being of Aboriginal and/or Torres Strait Islander origin, and people for whom no Indigenous status information was available. For other data sources, investigation has shown that the characteristics of records with unknown Indigenous status tend to be more similar to those specified as not Indigenous than to those specified as Indigenous, and so may be grouped together with the 'not Indigenous' records. In these cases, results for Indigenous Australians are compared with those for 'other Australians', where the 'other Australians' group comprises non-Indigenous people and those of unknown Indigenous status. Text, tables and figures in this report clearly note whether 'non-Indigenous Australians' or 'other Australians' are the comparator population.

Population data

Population data are required when computing rates. The 2011 Census is the latest available data that gives an estimate of the number of Aboriginal and Torres Strait Islander people in the population. Unless otherwise noted, denominators used to calculate Indigenous Australian rates in this report are therefore based on the ABS backcast Indigenous population estimates and projections based on the 2011 Census. Estimates of the non-Indigenous population for each year have been calculated by subtracting the Indigenous population estimates from the total Australian ERP. These estimates have been used as denominators for both the 'non-Indigenous' and 'other Australian' rates.

The Census enumerated the Indigenous population from responses to a question on a person's Indigenous status. The Indigenous ERP for 2011 is computed using this enumerated figure, and adjusted for undercount based on results from the Post Enumeration Survey (PES) as well as for non-response to the Indigenous status question (ABS 2013a). Estimates of the Indigenous ERP at June 2011, based on the 2011 Census, are about 30 per cent higher than estimates of the 2006 Indigenous ERP based on the 2006 Census. This increase involved a 21 per cent increase in the Census count (mostly at age groups below 19 years) and an increase in the measured undercount (influenced by improved PES questions on Indigenous status). Historical rates presented in this report will therefore be different to those presented in previous HPF reports.

Further details on the Indigenous population and health and welfare issues are discussed in *Australia's health 2014* (AIHW 2014a) and *Australia's welfare 2015* (AIHW 2015a).

Calculating rates

This report presents both crude and age-standardised rates.

A crude rate provides information on the number of events (for example, deaths of Indigenous people) relative to the population 'at risk' (for example, all Indigenous people). No age adjustments are made when calculating such a rate.

Crude rates may not always be suitable when making comparisons across time or between groups when differences by age structure exist (for example, the Indigenous population has a much younger age structure than the non-Indigenous population). In such situations, more meaningful comparisons can be made by using age-standardised rates, with such rates taking into account differences in age structures of the populations.

For this report, the Australian estimated resident population at 30 June 2001 (based on the 2001 Census) has been used as the standard population when deriving age-standardised rates. The same population was used for males and females to allow valid comparison of age-standardised rates between the sexes.

Two different methods of age-standardisation can be used: direct and indirect. Unless otherwise noted (specifically, for hospital procedures and some perinatal data), direct age-standardisation has been used in this report to allow for comparison over time.

Effects of rounding

Entries in columns and rows of tables may not add to the totals shown because of rounding. Derived values (such as proportions, rates, rate ratios and rate differences) are calculated using unrounded numbers. Percentages cited in the text therefore may not add to 100 due to rounding.

Comparing rates at a point in time

Comparison of rates for Indigenous and non-Indigenous (or other) Australians has been done by calculating rate differences and rate ratios.

A rate difference measures the literal, or absolute, gap between 2 population rates; in this report, it is calculated as the rate for Indigenous people minus the rate for non-Indigenous people.

A rate ratio measures the relative difference between populations by taking scale into account; in this report, it is calculated as the rate for Indigenous people divided by the rate for non-Indigenous people and is interpreted as follows:

- A rate ratio of 1 indicates there is no difference between the rates.
- A ratio less than 1 indicates the rate is lower in the Indigenous population.
- A ratio greater than 1 indicates the rate is higher in the Indigenous population.

A large rate ratio does not necessarily imply that an event itself is large. Events that are rare in the comparative population (the non-Indigenous population in this report) can produce large rate ratios, even if the prevalence of that event in the population of interest (the Indigenous population) is low.

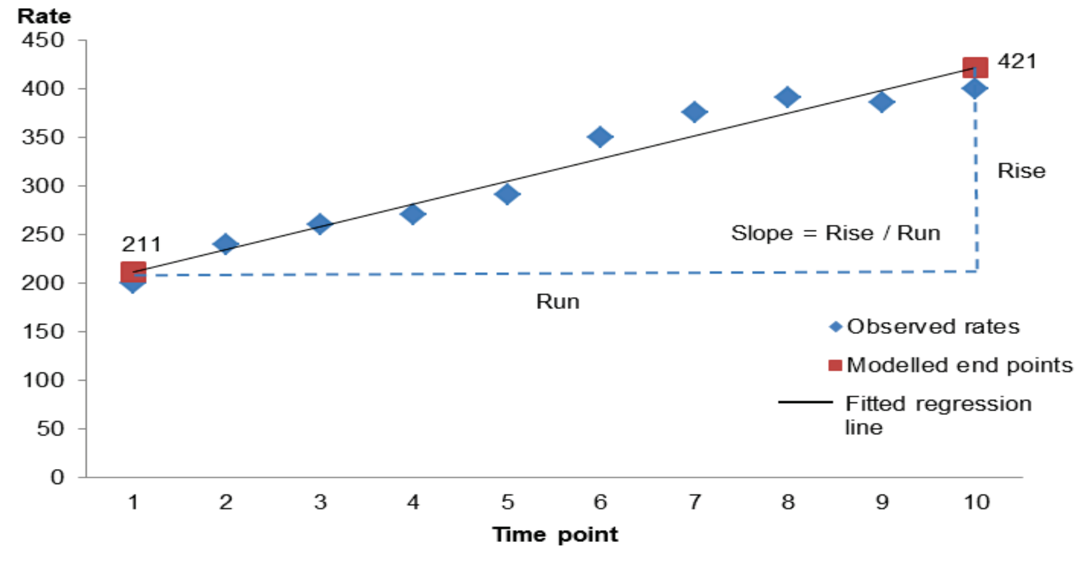
To determine whether the Indigenous and non-Indigenous rates are significantly different from each other, 95% confidence intervals are constructed around the rate difference or rate ratio. If these show that the rate difference is statistically significantly different from zero, or the rate ratio is significantly different from 1, then the rates are considered to be significantly different from each other at the $p < 0.05$ level. A similar method has been used in tables which present data for subgroups of the Indigenous population (for example, smokers and non-smokers), to determine whether the results for those groups are significantly different from each other.

Tables include an asterisk (*) next to proportions, rates, rate ratios and rate differences to indicate that the results for the relevant groups are statistically different from each other at the $p < 0.05$ level. Footnotes in each table specify which results are being compared. Where results of significance testing differ between rate ratios and rate differences, caution should be exercised in the interpretation of the tests.

Comparing rates over time

In cases where at least 4 data points are available, linear regression analysis has been used to calculate annual change and overall percentage change over the period, to determine whether there have been significant changes in the observed rates. Such analysis produces more powerful results because the regression modelling has the advantage of *jointly* considering the information contained in the series of rates, rather than considering each time point separately, which is the case when the analysis compares only the start and end points. Analysing the series of rates as a unit imposes stability and, consequently, the confidence band around the set of predicted values is narrower than the confidence limits calculated around the rates separately. When linear regression analysis was used, this has been footnoted in the tables.

Linear regression uses the least squares method to calculate a straight line that best fits the data (see Figure 3). The 'slope' of the line is an estimate of the average annual change in the data over the period; if the slope is statistically significantly greater (less) than zero then the data are said to have significantly increased (decreased) over the period. The annual change estimates presented in this report represent the change each year in the units presented in the table (for example, number of deaths, or rate per 1,000), rather than the average annual percentage change often presented in other publications.



Note: In this example, the estimate of annual change (slope) would be (421-211)/(10-1) = 23.3 per year. The total percentage change would be 100*(421-211)/211 = 99.5%.

Figure 3: An example of linear regression analysis

In contrast to previous HPF publications, the overall percentage change estimates presented in this report are calculated using the start and end points of the fitted regression line, rather than the actual start and end data points. This overcomes the problem of variation from one data point to the next leading to highly variable percentage and annual change estimates. The time-trend results in this report should therefore not be compared with those in previous HPF publications.

Because percentage change is the change from the starting point (of the trend line), percentage change estimates presented for Indigenous and non-Indigenous Australians should not be compared with each other because the starting points are generally different. In contrast, annual change estimates presented for Indigenous and non-Indigenous Australians can be compared.

Both small numbers and variability in the data from year to year can make it difficult to detect significant changes over time, and can impact on any conclusions reached from a trend analysis. This is a particular problem when analysing trends for small populations such as the Indigenous population in the smaller jurisdictions. Care should be taken when assessing apparent changes over time, particularly those involving small numbers and a small number of data points.

Time-series analysis of rate ratios has not been undertaken in the 2014 HPF as the accuracy of this testing may be low. As rate ratios often do not increase or decrease linearly, applying linear regression to rate ratios may not accurately reflect the change over time.

Remoteness areas

Remoteness is an important factor in understanding the health of Indigenous Australians. Remoteness areas in this report are classified using the Australian Statistical Geography Standard Remoteness Structure, based on the Accessibility/Remoteness Index of Australia which measures the remoteness of a point based on the physical road distance to the nearest urban centre (ABS 2013b).

The ABS classifications for remoteness have recently been subject to revision. Rates for 2011 Remoteness Areas are calculated using ERPs based on the 2011 Census and should not be compared with rates calculated using ERPs based on previous censuses.

Measuring 'the gap'

Throughout this report, the term 'the gap' is used to refer to the rate difference. For trend analyses, references to the widening or narrowing of the gap refer to changes in the rate difference over time.

Reading about diagnoses and causes of death

This report presents information on hospitalisations and deaths relating to specific diseases and injuries. This information usually refers to hospitalisations with a principal diagnosis of a particular disease or injury, or deaths with an underlying cause of the disease or external cause of injury (see Glossary of important terms below).

For ease of reading, in this report, the phrases 'hospitalisations for' or 'hospitalised due to' mean 'hospitalisations with a principal diagnosis of'. Similarly, the phrase 'deaths due to' means 'deaths with an underlying cause of'.

In death records, coding rules indicate that the event causing the injury or poisoning leading to death should be recorded as the underlying cause of death. These are referred to as 'external causes'. For ease of reading, in this report, the phrase 'deaths due to injury and poisoning' is used to mean deaths with an underlying cause of an external cause of injury or poisoning.

Data improvement activities

Jurisdictions, in liaison with the AIHW and the ABS, have been actively engaged and committed to undertaking a range of activities to improve the quality of Aboriginal and Torres Strait Islander data in health data collections. These activities were funded by the Council of Australian Governments (COAG) and the Australian Government with a total budget of $46.4 million over 4 years to June 2013 under the National Indigenous Reform Agreement (COAG 2008). The activities cover the key data sets required for NIRA Indigenous reporting; for example, mortality, morbidity, perinatal data and population estimates.

Major data development activities done or in progress by the AIHW are described below. Major data developments achieved by the ABS include: improvements to the Census Indigenous enumeration procedures and expansion of the Census PES; timing of the Indigenous Social Surveys and Health Surveys scheduled at 6-yearly cycles in order to provide 3-yearly estimates for key statistics collected in both surveys and 2011 Census records linked with death registration records to assess the level of Indigenous identification.

A variety of data improvement activities have also been done or are in progress throughout the states and territories. Further detail on these activities is available in the HPF policy report technical appendix (AHMAC 2015).

Improving Indigenous identification in health data sets

The AIHW released the *National best practice guidelines for collecting Indigenous status in health data sets* (AIHW 2010a) in April 2010. The AIHW National Indigenous Data Improvement Support Centre has been established to support jurisdictions and service providers to implement the guidelines. Reports on the assessment of the quality of Indigenous identification in labour force data collections (AIHW 2009), the National Cancer Registry, and the National Diabetes Register have been finalised. A report on Phase 1 of the support and evaluation project of the guidelines, *Towards better Indigenous health data*, has also been published (AIHW 2013a).

The AIHW has advanced the recommendations of the report *Taking the next steps: identification of Aboriginal and Torres Strait Islander status in general practice* (AIHW 2013b) through its development of the online Indigenous health check (MBS 715) data tool. This innovative tool draws together 715 MBS billing data and Indigenous population data to show numbers of health checks and usage rates (the proportion of Indigenous people who have had a health check) by quarter and financial year. Data are available at geographic levels including national, jurisdictional, by Medicare Local and by Primary Health Network. The tool can be accessed via the AIHW website at < http://www.aihw.gov.au/indigenous-australians/indigenous-health-check-data-tool/>.

National best practice guidelines for data linkage activities relating to Indigenous Australians

The AIHW and ABS in partnership with jurisdictions developed national best practice guidelines for linking data relating to Indigenous people. The guidelines covered linkage methods and protocols, privacy protocols, quality standards, and procedures. The *National best practice guidelines for data linkage activities relating to Aboriginal and Torres Strait Islander people* (AIHW & ABS 2012) were released on 9 July 2012. Two companion documents, *Report* *on the use of linked data relating to Aboriginal and Torres Strait Islander people* and *Thematic list of projects using linked data relating to Aboriginal and Torres Strait Islander people*, describe and review past, ongoing and planned data linkage studies that have an Indigenous focus (AIHW 2013c, 2013d).

Improving estimates of Indigenous under-identification in key data sets

The AIHW and the ABS work in partnership with jurisdictions to lead analysis of the level of Indigenous under-identification in key data sets. As part of this work, the AIHW conducted a study in 2011–12 to assess the level of under-identification in public hospitals data, which was a repeat of a study done in 2007 (AIHW 2010b). All states and territories have participated in the study to assess improvements in data quality. *Indigenous identification in hospital separations data: quality report* (AIHW 2010c; AIHW 2013e), which includes new correction factors for the level of Indigenous under-identification in hospital separations data at the national, state/territory and remoteness levels, was published in April 2013.

A scoping study investigating options for assessing the quality of Indigenous identification in administrative mental health services data collections is being done by the AIHW. The study will include the development of a business case for the preferred option.

Improving estimates of Indigenous mortality

The AIHW is undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several extra data sources that contain information on Aboriginal and Torres Strait Islander deaths (hospital, perinatal and residential aged care data). The enhanced data are expected to enable more accurate estimates of Aboriginal and Torres Strait Islander mortality, including life expectancy, to be made. Results from phases 1 and 2 of the project, which linked data for 2001 to 2006, produced national estimates of Aboriginal and Torres Strait Islander life expectancy at birth of 66.6 years for males and 72.7 for females, which was similar to the estimates produced by the ABS (AIHW 2012a). Two more phases of the Enhanced Mortality Database project are in progress. In Phase 3, the AIHW is linking the Enhanced Mortality Database with the NSW Native Title Services Corporation Database to validate the quality of the derived Indigenous status variable on the Enhanced Mortality Database. In Phase 4, the Enhanced Mortality Database is being extended to cover all deaths 2006–2010, with data linkage and data analysis taking place as new deaths data become available. Phase 4 is also exploring the use of extra algorithms to derive enhanced Indigenous status from the linked data.

The AIHW Linked Perinatal, Births, Deaths Dataset Project will create a national ongoing linked perinatal, birth and death data set for the purposes of analysing the factors affecting infant and child health outcomes in Australia. Infant and child mortality rates are important markers of population health. At the national level, aggregate data demonstrate that there are significant differences in infant and child mortality rates within Australia by factors such as Indigenous status. Currently, however, there is no way to link information on antenatal characteristics/behaviours with birth outcomes, and birth outcomes to infant and child deaths, and so we cannot analyse these factors simultaneously. The data set will be created by linking unit record level data across jurisdictions from perinatal data collections, birth records, and death records covering all births from 2003 to 2010, and deaths within this cohort of births from 2003 to 2015. Work on this project began in May 2013. The project has applied for, and received, ethics approval from the AIHW Ethics Committee as well as from

Health Research Ethics committees in all jurisdictions. Agreements have also been reached with the Registrars (with the exception of ACT births data) and perinatal data custodians in all jurisdictions for the supply of perinatal data for the project.

Enhanced Perinatal National Minimum Data Set

The AIHW is working with the states and territories to develop an enhanced Perinatal National Minimum Data Set (NMDS) to include nationally consistent data items on antenatal care, smoking and alcohol use during pregnancy, and Indigenous status of the baby. Nationally consistent data items on smoking during pregnancy, gestational age at first antenatal visit, and Indigenous status of the baby have been added to the Perinatal NMDS (from 1 July 2009, 1 July 2010, and 1 July 2012, respectively). A data item on number of antenatal visits was included in the Perinatal NMDS from 1 July 2013, although Victoria was not able to start collection until 1 January 2015.

Data development for alcohol consumption in pregnancy has been deferred due to the jurisdictions' inability to implement a nationally standardised data item.

Some states and territories are progressively implementing indications for induction of labour in their perinatal data collections from 1 July 2015, with the intention of adding it to the Perinatal NMDS from 1 July 2016.

Development of a business case for inclusion of Indigenous status in pathology data

The AIHW report *The inclusion of Indigenous status on pathology request forms* (AIHW 2013f) was published on 1 November 2013. It outlines work towards the inclusion of Indigenous status on pathology request forms as a way to improve Indigenous identification in national cancer, communicable disease and cervical screening registries.

Other relevant activities

Key performance indicators for Indigenous primary health care services

As part of the NIRA, the COAG agreed that the Department of Health, in partnership with the state and territory health departments and in collaboration with the AIHW, would develop a set of national Key Performance Indicators (nKPIs) for Indigenous-specific primary health care services. The AIHW receives funding from the Department of Health to collect, manage and report on the nKPIs (AIHW 2014b, 2014c). Data from more than 200 organisations are now collected every 6 months. The nKPIs are designed to enable monitoring of the contribution of this part of the health system in achieving Closing the Gap targets. They can also be used to help improve the delivery of primary health care for Aboriginal and Torres Strait Islander people and to improve health outcomes. A working paper about data quality issues and suggestions for improvement was recently published (AIHW 2015b). The data have also been used to provide insights into the New Directions Mothers and Babies Services programme, showing improvements in relevant indicators for those organisations receiving New Directions funding (AIHW 2014d).

Closing the Gap Clearinghouse

The AIHW with the Australian Institute of Family Studies delivered the Closing the Gap Clearinghouse. The Clearinghouse is an online collection of research and evaluation evidence on what works to overcome Indigenous disadvantage, focusing on 7 subject areas: early childhood, schooling, health, economic participation, healthy homes, safe communities, and governance and leadership. It aims to support policymakers and service providers involved in overcoming Indigenous disadvantage by providing access to and synthesising the evidence on particular topics.

The contract for the Clearinghouse ended in June 2014. All resources and publications on the website will continue to be publicly available. However, once all commissioned issues papers and resource sheets have been released (towards the end of 2015), no new material will be added to the website.

The Closing the Gap Clearinghouse can be found on the AIHW website at <http://www.aihw.gov.au/closingthegap/>.

Mapping of health services and need

The AIHW is undertaking a series of projects examining the geographic distribution of health services and mapping against potential need for these services among Aboriginal and Torres Strait Islander people. The first project involved the development of an area-based index that measures access to general practitioners relative to the need for primary health care for both the Indigenous and non-Indigenous populations. The index takes into account travel times by road as well as the capacity of general practitioners (GPs) to meet the demands of the populations they serve. *Access to primary health care relative to need for Indigenous Australians* (AIHW 2014e) shows that, on average, there is a general decrease in access to GPs and access to GPs relative to need with increasing remoteness in both population groups, but that the effect appears to be greater for the Indigenous population.

The second project, reported in *Spatial variation in Aboriginal and Torres Strait Islander people's access to primary health care* (AIHW 2015c), aimed to identify areas where critical service gaps exist for the Indigenous population in relation to their access to primary health care. Areas with potential service gaps were defined as areas (Statistical Areas Level 2) with no Indigenous-specific primary health care service located within 1 hour's drive and with poor access to GP services in general. This project also examined the types of services provided by Indigenous-specific primary health care services, with a specific focus on maternal health services and diabetes management, using data from the Online Services Reporting (OSR) data collection, the nKPI data collection and the AIHW's National Hospital Morbidity Database.

The third project uses data from the National Health Workforce Data Set to analyse variation in the distribution of the medical workforce, the nursing and midwifery workforce, the allied health workforce and the dental workforce to enhance our understanding of area-level patterns and gaps in the supply of the health workforce for Indigenous Australians. The results of this project are expected to be published towards the end of 2015.

The fourth project is examining the distribution of maternal and child health services in relation to the geographic distribution of Indigenous women of childbearing age and Indigenous children. The aim of this work is to identify gaps and examine whether there is an association between supply of these services and relevant health outcomes (for example, low birthweight, smoking during pregnancy, antenatal care use) at low geographic levels. This project is expected to be completed in late 2015 with results published in 2016.

Timing of impact of Closing the Gap initiatives

In 2012–13, AIHW was co-funded by AHMAC to examine the likely timing of the impact of COAG Closing the Gap health initiatives on the Indigenous child mortality target. This work involved examining the main drivers impacting on the child mortality target; interventions that have been shown to be effective in reducing risk factors and child mortality; and time lags between program implementation, expected reductions in child mortality, and the availability of data to measure outcomes achieved. The report, *Timing impact assessment for COAG Closing the Gap targets: child mortality* (AIHW 2014f), suggests that the full effect of the COAG maternal and child health initiatives may not be evident for a number of years to come.

Burden of disease

The AIHW received funding from the Department of Health and the previous Australian National Preventive Health Agency to revise and update Australia's burden of disease estimates for the Indigenous and non-Indigenous Australian population. This work, which was last updated in 2007 using 2003 data, builds on the AIHW's previous burden of disease studies and existing disease monitoring work and aims to identify the extent and distribution of health problems in Australia and quantify the contribution of key health risks. Estimates will be produced specifically for the Indigenous population.

Estimates of the fatal burden of disease for Indigenous Australians are presented in *Australian burden of disease study: fatal burden of disease in Aboriginal and Torres Strait Islander people 2010* (AIHW 2015d). Final estimates, expected to be released in 2016, will provide information on the amount of ill health due to death and disability from a variety of diseases, injuries and health risks to help determine the total burden of disease in Australia for the total population and the Aboriginal and Torres Strait Islander population.

Effect of health on socioeconomic factors

The AIHW undertook a study that looked at how poor health can adversely affect participation in education and employment using data from the ABS 2004–05 NATSIHS and ABS 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). Multiple variables, including health status, were analysed to determine their effect on education, employment and a number of other socioeconomic factors. After controlling for age, sex, remoteness and marital status, health status was found to have the following effects on socioeconomic factors:

- The odds of an Indigenous child or youth aged 5–17 with poor self-assessed health status to be currently studying were one-fifth that of an Indigenous child or youth with excellent self-assessed health status (odds ratio of 0.225).
- Indigenous people aged 15–64 who reported poor or fair self-assessed health were less likely to be working full-time compared with not in the labour force (odds ratios of 0.110 and 0.305, respectively). Similarly, people with disability were less likely to be working full-time (odds ratio of 0.154). Having circulatory disease, high cholesterol, high blood pressure, diabetes, arthritis or high psychological distress also decreased the likelihood of being employed full-time.
- Poor health outcomes such as poor or fair self-assessed health, diabetes, disability and high psychological distress were associated with lower income for Aboriginal and Torres Strait Islander households.

Analyses of ABS 2012–13 AATSIHS data indicated that poor health reduced attendance rates at both school and work for Indigenous Australians in the 2 weeks prior to being surveyed.

- 19% of Indigenous people aged 5–24 who were studying reported that they had days away from study due to their own illness or injury.
- 18% of employed Indigenous people aged 15–64 also reported that they had days away from work due to their own illness or injury (AIHW analysis of ABS 2012–13 AATSIHS); this was the same proportion reported in the ABS 2004–05 NATSIHS.

The contribution of risk factors and social determinants to the health gap

The AIHW used data from the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and National Health Survey (NHS) to investigate the relative contribution of social determinants and behavioural risk factors to the gap in health status between Indigenous and non-Indigenous Australians. For the purpose of this analysis, health was defined as a composite of reported self-assessed health status, long-term conditions and emotional wellbeing.

Social determinants alone, including school and non-school education, employment status, overcrowding, and household income, explained 46% of the health gap between Indigenous and non-Indigenous persons. Behavioural risk factors alone, including smoking status, alcohol consumption, diet, exercise level, body mass index and high blood pressure explained 26% of the gap. Together, behavioural risk factors and social determinants explained 57% of the health gap (Figure 4) (AIHW 2014a).

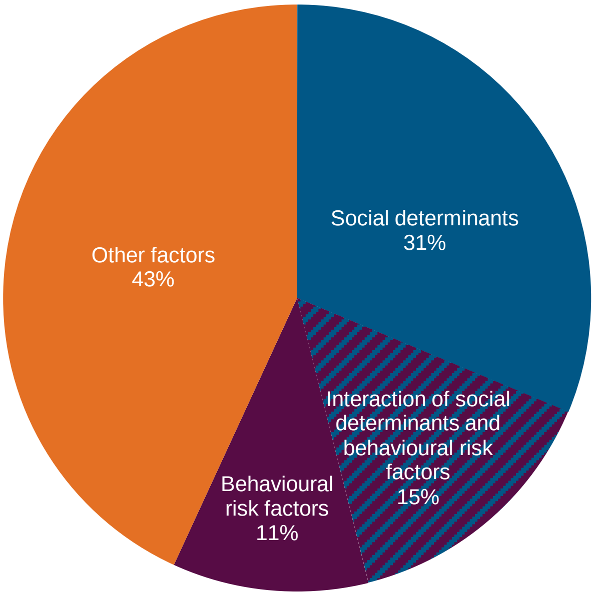


Figure 4: Proportion of the health gap explained by social determinants and behavioural risk factors

The greatest individual factor attributable to the health gap was household income, which by itself explained 36% of the gap. Other significant factors were school education and employment status, which on their own explained 23% and 21% of the gap, respectively.

The analysis underscores the importance of social determinants in relation to the observed health gap between Indigenous and non-Indigenous Australians. It also illustrates the magnitude of the gap which is currently not explained by the selected social determinants or behavioural risk factors. Unfortunately the contribution of health service access could not be estimated from the available data, but will be the focus of future research.

Glossary

Aboriginal or Torres Strait Islander: a person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander. See also **Indigenous**.

additional diagnosis: a condition or complaint that either coexists with the principal diagnosis or arises during an episode of admitted patient care. An additional diagnosis is reported if the condition affects patient management. Compare with **principal diagnosis**.

age-specific rate: an estimate of the proportion of people experiencing a particular event in a specified age group relative to the total number of people 'at risk' of that event in that age group. See also **crude rate.**

age-standardised rates: rates adjusted for age to take into account differences in age structures when comparing different populations or across time.

associated cause(s) of death: all causes listed on the death certificate, other than the **underlying cause of death**. They include the immediate cause, any intervening causes, and conditions which contributed to the death but were not related to the disease or condition causing the death. See also **cause of death.**

cause of death: all diseases, morbid conditions or injuries that either resulted in or contributed to death, and the circumstances of the accident or violence that produced any such injuries, as entered on the Medical Certificate of Cause of Death. Causes of death are commonly reported using the **underlying cause of death**. See also **associated cause(s) of death.**

crude rate: an estimate of the proportion of a population that experiences an outcome during a specified period. It is calculated by dividing the number of people with the outcome in a specified period by the number of people in the population during that period.

determinant: a factor that can increase the chances of ill health (risk factor) or good health (protective factor) in a population or individual. By convention, services or other programs that aim to improve health are usually not included.

dialysis: a process used to treat kidney failure. A machine is connected to the patient's bloodstream to filter the blood externally to the body, removing water, excess substances and waste from the blood, as well as regulating the levels of circulating chemicals. In doing this, the machine takes on the role normally played by the kidneys.

external cause: the term used in disease classification to refer to an event or circumstance in a person's external environment that is regarded as a cause of injury or poisoning.

gap: in this report, 'the gap' refers to the rate difference.

hospitalisation (or separation): an episode of admitted patient care, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (for example, from acute care to rehabilitation).

household: a group of 2 or more related or unrelated people who usually reside in the same dwelling, and who make common provision for food or other essentials for living, or an individual living in a dwelling who makes provision for his or her own food and other essentials for living, without combining with any other person.

incidence: the number of new cases (of an illness or event, and so on) occurring during a given period. Compare with **prevalence.**

Indigenous: a person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander. See also **Aboriginal or Torres Strait Islander**.

non-Indigenous: people who have indicated they are not of **Aboriginal or Torres Strait Islander** descent. Compare with **other Australians.**

other Australians: includes people who do not identify as being of Aboriginal or Torres Strait Islander origin, and people for whom information on their Indigenous status was not available. Compare with **non-Indigenous**.

prevalence: the number or proportion (of cases, instances, and so forth) in a population at a given time. Compare with **incidence.**

principal diagnosis: the diagnosis established after study to be chiefly responsible for occasioning a patient's episode of admitted patient care. Compare with **additional diagnosis.**

remoteness areas: a classification of the remoteness of a location using the Australian Statistical Geography Standard Remoteness Structure, based on the Accessibility/Remoteness Index of Australia which measures the remoteness of a point based on the physical road distance to the nearest urban centre (ABS 2013b).

statistical significance: an indication from a statistical test that an observed difference or association may be significant or 'real' because it is unlikely to be due just to chance. In this report, references to 'significant' or 'statistically significant' differences refer to differences at the $p<0.05$ level—that is, there is less than a 1 in 20 chance that the result occurred by chance. The words 'significant' and 'significantly' are not used in this report other than in their statistical context.

underlying cause of death: the disease or injury that initiated the sequence of events leading directly to death, or the circumstances of the accident or violence that produced the fatal injury. See also **cause of death** and **associated cause(s) of death**.

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AIHW 2013b. Taking the next steps: identification of Aboriginal and Torres Strait Islander status in general practice. Cat. no. IHW 100. Canberra: AIHW.

AIHW 2013c. Report on the use of linked data relating to Aboriginal and Torres Strait Islander people. Cat. no. IHW 92. Canberra: AIHW.

AIHW 2013d. Thematic list of projects using linked data relating to Aboriginal and Torres Strait Islander people. Cat. no. IHW 91. Canberra: AIHW.

AIHW 2013e. Indigenous identification in hospital separations data: quality report. Cat. no. IHW 90. Canberra: AIHW.

AIHW 2013f. The inclusion of Indigenous status on pathology request forms. Cat. no. IHW 103. Canberra: AIHW.

AIHW 2014a. Australia's health 2014. Australia's health series no. 14. Cat. no. AUS 178. Canberra: AIHW.

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AIHW 2014f. Timing impact assessment for COAG Closing the Gap targets: child mortality. Cat. no. IHW 124. Canberra: AIHW.

AIHW 2015a. Australia's welfare 2015. Australia's welfare no. 12. Cat. no. AUS 189. Canberra: AIHW.

AIHW 2015b. The nKPI data collection: data quality issues working paper. Cat. no. IHW 153. Canberra: AIHW.

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Related publications

There are earlier editions that can be downloaded for free from the AIHW website <http://www.aihw.gov.au/indigenous-australians-health-and-welfare-publications/>. The website also includes information on ordering printed copies.

The earlier editions are:

AIHW 2013. Aboriginal and Torres Strait Islander Health Performance Framework 2012: detailed analyses. Cat. no. IHW 94. Canberra: AIHW. Viewed 30 June 2015 <http://www.aihw.gov.au/publication-detail/?id=60129543821>.

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 1 of 68 **Detailed analyses**

1.01 Low birthweight

This measure reports on the incidence of low birthweight among live born babies of Aboriginal and Torres Strait Islander mothers

Introduction

This is no. 1 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- National Perinatal Data Collection
- Healthy for Life data collection.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Low birthweight (newborns weighing less than 2,500 grams) is associated with pre-term birth or restricted fetal growth. Low birthweight infants are at a greater risk of dying during the first year of life, and are prone to ill health in childhood and the development of chronic disease as adults (OECD 2011; Scott 2014). Low birthweight is a risk factor for neurological and physical disabilities and for ill health in childhood, with the risk of adverse outcomes increasing with decreasing birthweight (Ford et al. 2003).

Data are presented for all live births and for live singleton births (that is, excluding multiple births). Trend analysis presented in the text below is limited to live singleton births because low birthweight is associated with multiple births and there has been an increasing trend in multiple births over time. Inclusion of multiple births may therefore confound the results of trend analyses on low birthweight.

For more information about low birthweight, see measures 2.21 and 3.01. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Low birthweight babies in the National Perinatal Data Collection, see tables 1.01.1–8.
- Low birthweight babies, international comparison, see Table 1.01.9.
- Birthweight of babies born to clients of the Healthy for Life Program, see Table 1.01.10.

Overview

Current period

- In 2011, the low birthweight rate for babies born to Aboriginal and Torres Strait Islander mothers was twice the rate for those with a non-Indigenous mother (13% compared with 6%) (Table 1.01.1).
- When multiple births are excluded, 11% of live born babies born to Indigenous mothers were of low birthweight compared with 5% of those born to non-Indigenous mothers (Table 1.01.1).
- The low birthweight rate for babies born to Aboriginal and Torres Strait Islander mothers was significantly higher in *Remote* areas (15%) than in *Non-remote* areas (12%) (counter to the gradient for babies born to non-Indigenous mothers) (Table 1.01.6).

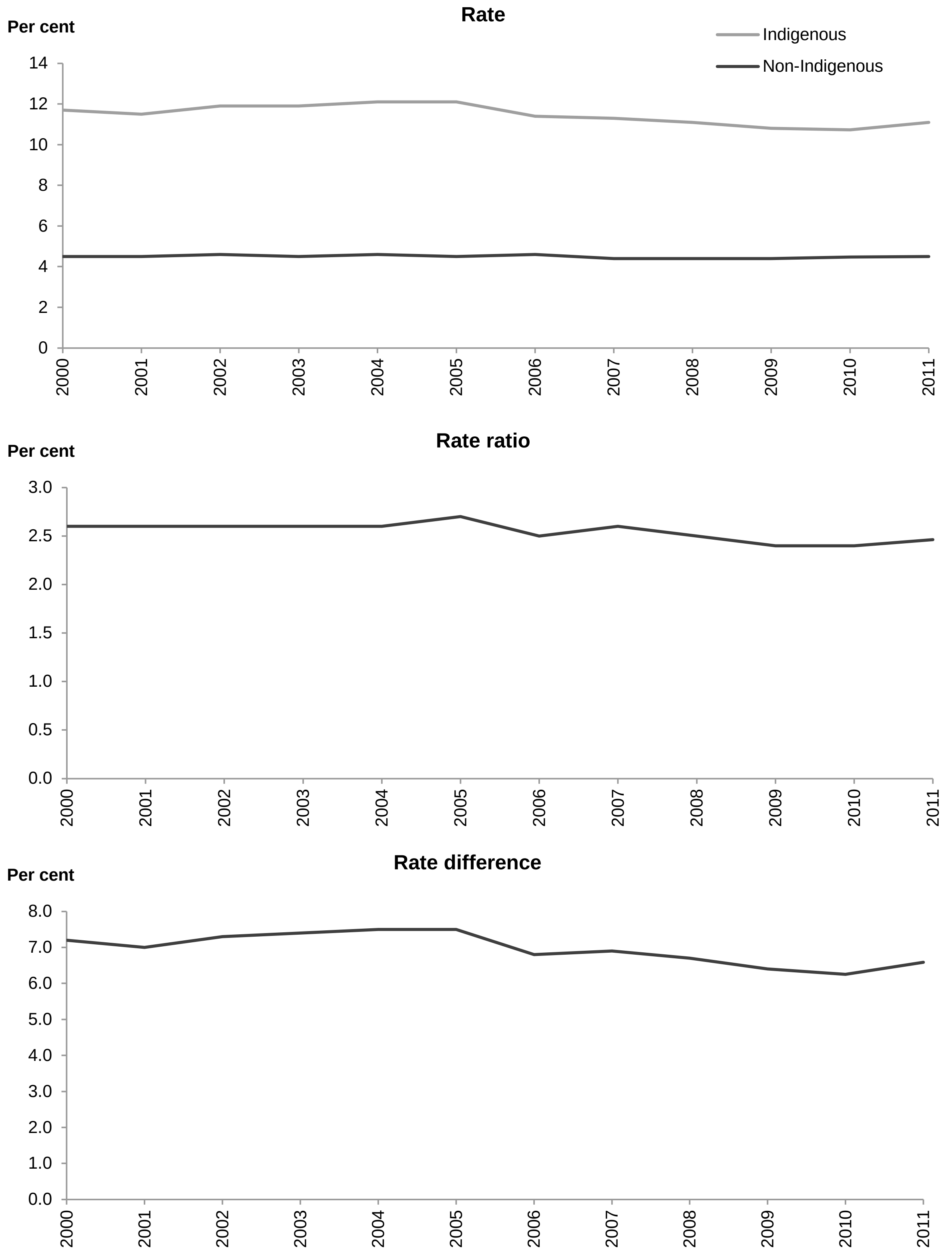
Trend

- Between 2000 and 2011, excluding multiple births, the low birthweight rate for babies born to Indigenous mothers declined significantly by 9%. There was a significant 13% narrowing of the gap between Indigenous and non-Indigenous babies with a low birthweight (Table 1.01.2, Figure 1.01.1).

Maternal characteristics

Current period

- In 2009–2011, excluding pre-term and multiple births, 51% of low birthweight births to Indigenous mothers were attributable to smoking, compared with 19% for other Australian mothers (Table 1.01.7).
- After adjusting for age differences and other factors, it was estimated that if the smoking rate for Indigenous pregnant women was the same as it was for other Australian mothers, the proportion of low birthweight babies could be reduced by 26% (Table 1.01.8).
- For Indigenous mothers, the percentage of low birthweight births was highest for those in the 35 years and over age group (19%) and between 12% and 13% for the other age groups (including teenagers). For non-Indigenous mothers, rates were highest among those aged 35 and over and those under 20 (8%) (Table 1.01.6).



Source: Table 1.01.2.

Figure 1.01.1: Incidence of low birthweight among live born singleton babies, by Indigenous status of the mother and state/territory, NSW, Vic, Qld, WA, SA and NT, 2000 to 2011

Table 1.01.1: Low birthweight babies, by Indigenous status of mother and usual state of residence, 2011(a)(b)(c)(d)(e)

	Live births				Live born singletons		
	Total number	Number low birthweight	Per cent low birthweight(f)	Risk ratio(g)	Total number	Number low birthweight	Per cent low birthweight(h)
NSW							
Indigenous	3,102	379	12.2	1.1	3,004	322	10.7
Non-Indigenous	94,984	5,461	5.7	1.0	92,215	4,038	4.4
Rate difference	. .	. .	*6.5**	. .	. .	. .	*6.3*
Rate ratio	. .	. .	*2.1**	. .	. .	. .	*2.4*
Vic							
Indigenous	850	110	12.9	1.2	814	89	10.9
Non-Indigenous	70,582	4,379	6.2	1.0	68,388	3,212	4.7
Rate difference	. .	. .	*6.7**	. .	. .	. .	*6.2*
Rate ratio	. .	. .	*2.1**	. .	. .	. .	*2.3*
Qld							
Indigenous	3,644	405	11.1	REF	3,556	354	10.0
Non-Indigenous	58,360	3,528	6.0	REF	56,439	2,492	4.4
Rate difference	. .	. .	*5.1**	. .	. .	. .	*5.5*
Rate ratio	. .	. .	*1.8**	. .	. .	. .	*2.3*
WA							
Indigenous	1,692	224	13.2	1.2*	1,658	198	11.9
Non-Indigenous	30,286	1,714	5.7	0.9	29,440	1,266	4.3
Rate difference	. .	. .	*7.6**		. .	. .	*7.6*
Rate ratio	. .	. .	*2.3**		. .	. .	*2.8*
SA							
Indigenous	694	85	12.2	1.1	680	78	11.5
Non-Indigenous	19,413	1,269	6.5	1.1	18,854	989	5.2
Rate difference	. .	. .	*5.7**	. .	. .	. .	*6.2*
Rate ratio	. .	. .	*1.9**	. .	. .	. .	*2.2*
Tas							
Indigenous	294	39	13.3	1.2	286	31	10.8
Non-Indigenous	5,883	429	7.3	1.2*	5688	328	5.8
Rate difference	. .	. .	*6.0**	. .	. .	. .	*5.1*
Rate ratio	. .	. .	*1.8**	. .	. .	. .	*1.9*
ACT							
Indigenous	76	12	15.8	1.4	74	10	13.5
Non-Indigenous	4,843	307	6.3	1.0	4,678	216	4.6
Rate difference	. .	. .	*9.5**	. .	. .	. .	*8.9*
Rate ratio	. .	. .	*2.5**	. .	. .	. .	*2.9*

(continued)

Table 1.01.1 (continued): Low birthweight babies, by Indigenous status of mother and usual state of residence, 2011(a)(b)(c)(d)(e)

	Live births				Live born singletons		
	Total number	Number low birthweight	Per cent low birthweight(f)	Risk ratio(g)	Total number	Number low birthweight	Per cent low birthweight(h)
NT							
Indigenous	1,379	227	16.5	1.5*	1,335	193	14.5
Non-Indigenous	2,502	159	6.4	1.1	2,428	116	4.8
Rate difference	. .	. .	*10.1**	. .	. .	. .	*9.7*
Rate ratio	. .	. .	*2.6**	. .	. .	. .	*3.0*
Total							
Indigenous	**11,731**	**1,481**	**12.6**	**1.1***	**11,407**	**1,275**	**11.2**
Non-Indigenous	**286,853**	**17,246**	**6.0**	**1.0**	**278,130**	**12,657**	**4.6**
Rate difference	**. .**	**. .**	***6.6****	**. .**	**. .**	**. .**	***6.6***
Rate ratio	**. .**	**. .**	***2.1****	**. .**	**. .**	**. .**	***2.5***

REF Reference group

* Represents statistically significant differences at the $p < 0.05$ level. Only live birth rates were tested.

(a) Table includes live births of 20 weeks gestation or more or of 400 grams or more birthweight. Low birthweight is defined as less than 2,500 grams.

(b) Data represent one calendar year.

(c) Data relate to the Indigenous status of the mother only and therefore underestimate Indigenous births.

(d) Indigenous and non-Indigenous data exclude births where the mother's Indigenous status is not stated.

(e) Data are by place of usual residence of the mother. Table excludes non-residents, external territories and not stated state/territory of residence.

(f) Number of low birthweight live born babies/number of live born babies.

(g) Live birth risk ratio: crude rate of low birthweight live births in the jurisdiction divided by the crude rate in the reference group, by Indigenous status.

(h) Number of low birthweight live born singletons/number of live born singletons.

Source: AIHW/NPESU analysis of National Perinatal Data Collection.

Table 1.01.2: Incidence of low birthweight among live born singleton babies, by Indigenous status of the mother and state/territory, NSW, Vic, Qld, WA, SA and NT, 2000 to 2011(a)(b)(c)(d)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Annual change 2000–2011	% change over time 2000–2011	Annual change 2007–2011	% change over time 2007–2011
Indigenous																
Number	977	965	1,011	1,017	1,048	1,127	1,093	1,165	1,172	1,153	1,170	1,223	23.2*	26.4*	11.4	4.0
Per cent	11.7	11.5	11.9	11.9	12.1	12.1	11.4	11.3	11.1	10.8	10.7	11.1	-0.1*	-9.1*	-0.1	-2.8
Non-Indigenous																
Number	10,349	10,139	10,296	10,224	10,450	10,927	11,372	11,506	11,545	11,703	11,820	12,028	187.6*	20.6*	131.9*	4.6*
Per cent	4.5	4.5	4.6	4.5	4.6	4.5	4.6	4.4	4.4	4.4	4.5	4.5	-0.0	-2.2	0.0*	2.5*
Rate ratio(e)	**2.6**	**2.6**	**2.6**	**2.6**	**2.6**	**2.7**	**2.5**	**2.6**	**2.5**	**2.4**	**2.4**	**2.5**	**n.p.**	**n.p.**	**n.p.**	**n.p.**
Rate difference(f)	**7.2**	**7**	**7.3**	**7.4**	**7.5**	**7.5**	**6.8**	**6.9**	**6.7**	**6.4**	**6.3**	**6.6**	**-0.1***	**-13.3***	**-0.1**	**-6.3**

* Represents statistically significant increases or decreases at the $p < 0.05$ level over the period.

(a) Low birthweight is defined as less than 2500 grams. Data excludes babies with unknown birthweight.

(b) Data relate to live births. Data exclude stillbirths; births less than 20 weeks gestation and less than 400 grams birthweight; and multiple births.

(c) Data are by place of usual residence of the mother. Table excludes non-residents, external territories and not stated state/territory of residence.

(d) Data on Indigenous births relate to babies born to Indigenous mothers only, and excludes babies born to non-Indigenous mothers and Indigenous fathers. Therefore the information may not be based on the total count of Indigenous babies.

(e) Rate ratio is the proportion of low birthweight babies born to Indigenous mothers divided by the proportion of low birthweight babies born to non-Indigenous mothers.

(f) Rate difference is the proportion of low birthweight babies born to Indigenous mothers less the proportion of low birthweight babies born to non-Indigenous mothers.

Note: Data exclude all births in the Australian Capital Territory and Tasmania, and births to mothers with usual residence in the Australian Capital Territory and Tasmania.

Source: AIHW/NPESU analysis of National Perinatal Data Collection.

Table 1.01.3: Rate (proportion), rate ratio and rate difference between live born low birthweight babies of Indigenous and other mothers, by state/territory 1991–2011

	Low birthweight live born babies				Low birthweight singleton live born babies			
Year	Indigenous	Other[(a)]	Rate ratio	Rate difference	Indigenous	Other[(a)]	Rate ratio	Rate difference
				NSW				
1991	9.9	5.6	1.8	4.4	9.0	4.5	2.0	4.5
1992	10.6	5.4	1.9	5.1	9.0	4.3	2.1	4.7
1993	9.3	5.4	1.7	3.9	8.7	4.3	2.0	4.4
1994	11.1	5.3	2.1	5.7	10.5	4.2	2.5	6.4
1995	10.4	5.4	1.9	5.1	9.7	4.3	2.3	5.5
1996	9.9	5.3	1.8	4.5	9.5	4.3	2.2	5.2
1997	11.1	5.6	2.0	5.5	10.0	4.4	2.3	5.6
1998	9.8	5.4	1.8	4.4	8.5	4.2	2.0	4.2
1999	11.9	5.8	2.1	6.1	11.0	4.4	2.5	6.6
2000	11.2	5.9	1.9	5.3	10.7	4.3	2.5	6.4
2001	12.5	5.8	2.1	6.7	11.1	4.4	2.5	6.8
2002	12.3	5.8	2.1	6.5	11.4	4.4	2.6	7.0
2003	11.7	5.7	2.1	6.0	10.7	4.3	2.5	6.4
2004	12.3	5.7	2.1	6.5	11.0	4.4	2.5	6.6
2005	12.0	5.7	2.1	6.2	10.5	4.2	2.5	6.2
2006	11.9	5.8	2.1	6.1	10.6	4.3	2.5	6.3
2007	11.2	5.5	2.0	5.7	10.0	4.2	2.4	5.8
2008	10.9	5.7	1.9	5.2	9.8	4.3	2.3	5.6
2009	10.3	5.5	1.9	4.9	9.6	4.1	2.3	5.5
2010	10.7	5.6	1.9	5.1	9.3	4.2	2.2	5.2
2011	11.6	5.6	2.1	6.0	10.2	4.3	2.4	5.9

(continued)

Table 1.01.3 (continued): Rate (proportion), rate ratio and rate difference between live born low birthweight babies of Indigenous and other mothers, by state/territory 1991–2011

Year	Low birthweight live born babies: Indigenous	Low birthweight live born babies: Other[(a)]	Rate ratio	Rate difference	Low birthweight singleton live born babies: Indigenous	Low birthweight singleton live born babies: Other[(a)]	Rate ratio	Rate difference
				Vic[(b)]				
1991	7.0	5.6	1.2	1.4	6.0	4.4	1.4	1.6
1992	6.5	5.6	1.2	0.9	5.9	4.4	1.3	1.5
1993	6.2	5.8	1.1	0.4	6.1	4.4	1.4	1.6
1994	10.5	5.7	1.8	4.7	9.3	4.4	2.1	4.9
1995	8.9	6.0	1.5	2.9	8.3	4.6	1.8	3.8
1996	10.1	5.8	1.7	4.2	9.1	4.5	2.0	4.6
1997	12.0	6.0	2.0	6.0	10.8	4.5	2.4	6.2
1998	11.6	6.3	1.8	5.3	9.7	4.8	2.0	4.9
1999	14.7	6.3	2.3	8.4	12.8	4.8	2.7	8.0
2000	14.1	6.1	2.3	8.0	13.3	4.6	2.9	8.7
2001	11.7	6.2	1.9	5.5	10.9	4.7	2.3	6.3
2002	13.5	6.5	2.1	7.0	12.6	4.8	2.6	7.7
2003	13.1	6.4	2.0	6.7	11.1	4.8	2.3	6.3
2004	16.2	6.3	2.6	9.9	14.6	4.7	3.1	9.9
2005	13.6	6.3	2.1	7.2	12.3	4.7	2.6	7.6
2006	13.1	6.4	2.1	6.7	11.6	4.7	2.5	6.9
2007	12.0	6.3	1.9	5.7	10.5	4.7	2.3	5.9
2008	14.2	6.1	2.3	8.1	12.9	4.5	2.9	8.4
2009	13.8	6.2	2.2	7.6	12.1	4.6	2.6	7.5
2010	10.3	6.3	1.6	4.0	9.6	4.8	2.0	4.8
2011	12.6	6.2	2.0	6.3	10.5	4.7	2.2	5.8

(continued)

Table 1.01.3 (continued): Rate (proportion), rate ratio and rate difference between live born low birthweight babies of Indigenous and other mothers, by state/territory 1991–2011

	Low birthweight live born babies				Low birthweight singleton live born babies			
Year	Indigenous	Other[(a)]	Rate ratio	Rate difference	Indigenous	Other[(a)]	Rate ratio	Rate difference
				Qld				
1991	11.7	6.1	1.9	5.6	10.9	4.7	2.3	6.2
1992	11.5	5.9	1.9	5.5	10.6	4.6	2.3	6.0
1993	10.4	6.1	1.7	4.4	8.9	4.6	1.9	4.3
1994	10.9	6.1	1.8	4.8	10.2	4.7	2.2	5.5
1995	9.9	6.1	1.6	3.8	9.3	4.6	2.0	4.6
1996	10.9	5.8	1.9	5.0	9.9	4.6	2.2	5.3
1997	11.0	6.1	1.8	4.9	10.4	4.6	2.3	5.8
1998	10.5	6.1	1.7	4.4	9.6	4.7	2.0	4.9
1999	10.4	5.9	1.7	4.4	9.1	4.6	2.0	4.6
2000	11.7	6.2	1.9	5.4	10.5	4.7	2.2	5.8
2001	11.2	6.0	1.9	5.2	9.8	4.5	2.2	5.3
2002	11.9	6.5	1.8	5.4	11.0	4.6	2.4	6.3
2003	11.6	6.1	1.9	5.5	10.6	4.6	2.3	6.0
2004	11.5	6.4	1.8	5.1	10.7	4.7	2.3	5.9
2005	11.8	6.3	1.9	5.5	10.8	4.7	2.3	6.1
2006	10.7	6.6	1.6	4.0	9.6	4.8	2.0	4.8
2007	11.2	6.0	1.9	5.2	10.1	4.4	2.3	5.7
2008	10.4	6.1	1.7	4.3	9.0	4.4	2.0	4.6
2009	11.0	6.3	1.7	4.7	9.9	4.7	2.1	5.2
2010	11.5	6.1	1.9	5.4	10.2	4.6	2.2	5.6
2011	11.2	6.1	1.8	5.1	10.1	4.5	2.3	5.6

(continued)

Table 1.01.3 (continued): Rate (proportion), rate ratio and rate difference between live born low birthweight babies of Indigenous and other mothers, by state/territory 1991–2011

	Low birthweight live born babies				Low birthweight singleton live born babies			
Year	Indigenous	Other[(a)]	Rate ratio	Rate difference	Indigenous	Other[(a)]	Rate ratio	Rate difference
				WA				
1991	13.8	5.5	2.5	8.3	12.6	4.2	3.0	8.4
1992	10.9	5.8	1.9	5.1	10.1	4.4	2.3	5.7
1993	12.3	5.6	2.2	6.7	11.2	4.4	2.6	6.8
1994	13.0	5.5	2.4	7.5	12.0	4.2	2.9	7.8
1995	11.1	5.8	1.9	5.4	10.4	4.4	2.4	6.0
1996	12.4	5.9	2.1	6.5	11.4	4.5	2.5	6.9
1997	12.3	5.8	2.1	6.5	11.5	4.2	2.7	7.2
1998	12.0	5.9	2.0	6.1	11.2	4.6	2.4	6.6
1999	13.9	5.7	2.5	8.2	12.0	4.3	2.8	7.7
2000	14.1	5.9	2.4	8.3	13.0	4.3	3.0	8.6
2001	15.6	5.9	2.6	9.7	13.8	4.2	3.3	9.6
2002	13.6	5.7	2.4	7.9	12.3	4.3	2.9	8.0
2003	14.2	5.9	2.4	8.4	12.8	4.3	3.0	8.6
2004	14.4	6.1	2.4	8.3	13.6	4.5	3.0	9.1
2005	15.5	6.0	2.6	9.5	14.1	4.4	3.2	9.7
2006	14.2	5.9	2.4	8.3	13.1	4.4	2.9	8.7
2007	16.2	5.7	2.8	10.5	14.5	4.4	3.3	10.1
2008	14.8	5.7	2.6	9.1	13.8	4.3	3.2	9.5
2009	13.7	5.7	2.4	7.9	12.7	4.3	3.0	8.5
2010	13.6	5.6	2.4	8.0	12.3	4.3	2.9	8.1
2011	13.0	5.7	2.3	7.4	11.7	4.3	2.7	7.4

(continued)

Table 1.01.3 (continued): Rate (proportion), rate ratio and rate difference between live born low birthweight babies of Indigenous and other mothers, by state/territory 1991–2011

Year	Low birthweight live born babies		Rate ratio	Rate difference	Low birthweight singleton live born babies		Rate ratio	Rate difference
	Indigenous	Other[(a)]			Indigenous	Other[(a)]		
				SA				
1991	12.2	5.9	2.1	6.3	11.6	4.6	2.5	7.0
1992	14.3	6.0	2.4	8.3	12.5	4.7	2.6	7.7
1993	13.5	6.2	2.2	7.3	13.0	4.8	2.7	8.2
1994	14.3	6.1	2.4	8.3	13.1	4.7	2.8	8.4
1995	14.8	6.0	2.5	8.8	13.0	4.6	2.8	8.4
1996	14.6	6.7	2.2	7.8	12.4	5.1	2.4	7.4
1997	14.6	6.3	2.3	8.3	13.8	4.8	2.9	9.0
1998	13.8	6.4	2.2	7.4	12.3	4.7	2.6	7.5
1999	15.6	5.9	2.7	9.8	14.9	4.5	3.3	10.4
2000	17.5	6.5	2.7	11.0	16.5	4.9	3.4	11.6
2001	16.5	6.1	2.7	10.4	15.8	4.8	3.3	11.0
2002	18.9	6.3	3.0	12.6	16.5	4.7	3.5	11.8
2003	17.3	6.2	2.8	11.1	17.0	4.5	3.8	12.6
2004	17.6	6.3	2.8	11.3	15.1	4.6	3.3	10.5
2005	17.7	6.7	2.6	10.9	16.8	5.1	3.3	11.7
2006	13.4	6.2	2.2	7.2	11.8	4.8	2.5	7.1
2007	16.2	6.1	2.7	10.1	14.4	4.7	3.0	9.7
2008	16.3	6.1	2.7	10.2	14.6	4.7	3.1	10.0
2009	12.8	6.6	1.9	6.2	10.7	5.0	2.1	5.7
2010	16.0	6.5	2.5	9.5	15.0	4.8	3.1	10.1
2011	15.2	6.6	2.3	8.5	13.7	5.3	2.6	8.3

(continued)

Table 1.01.3 (continued): Rate (proportion), rate ratio and rate difference between live born low birthweight babies of Indigenous and other mothers, by state/territory 1991–2011

Year	Low birthweight live born babies: Indigenous	Low birthweight live born babies: Other[(a)]	Rate ratio	Rate difference	Low birthweight singleton live born babies: Indigenous	Low birthweight singleton live born babies: Other[(a)]	Rate ratio	Rate difference
				NT				
1991	14.1	7.5	1.9	6.6	13.7	6.1	2.2	7.6
1992	15.8	7.7	2.1	8.2	14.8	6.3	2.3	8.5
1993	12.3	6.2	2.0	6.1	11.2	5.4	2.1	5.7
1994	13.6	5.9	2.3	7.6	12.3	4.7	2.6	7.5
1995	12.8	5.7	2.3	7.2	12.2	4.4	2.8	7.8
1996	14.7	6.9	2.1	7.9	13.5	6.1	2.2	7.4
1997	15.2	6.5	2.4	8.7	14.2	5.8	2.4	8.4
1998	11.9	7.9	1.5	4.0	11.3	6.5	1.8	4.9
1999	12.7	7.0	1.8	5.7	11.2	6.0	1.9	5.2
2000	13.4	6.8	2.0	6.6	12.3	5.2	2.4	7.2
2001	12.7	6.0	2.1	6.7	11.9	4.5	2.6	7.3
2002	12.9	5.4	2.4	7.6	11.9	4.3	2.8	7.6
2003	14.3	6.8	2.1	7.5	13.9	5.3	2.6	8.6
2004	14.0	6.4	2.2	7.6	13.6	5.8	2.3	7.8
2005	14.5	6.7	2.2	7.9	13.7	5.3	2.6	8.4
2006	14.2	6.9	2.1	7.3	13.8	5.2	2.7	8.7
2007	12.5	4.9	2.6	7.6	12.1	4.1	3.0	8.0
2008	13.8	4.7	2.9	9.0	13.3	4.0	3.3	9.2
2009	13.9	6.3	2.2	7.5	12.5	5.0	2.5	7.5
2010	13.8	5.9	2.3	7.9	11.9	4.5	2.7	7.4
2011	15.6	6.1	2.5	9.5	14.0	4.7	3.0	9.3

(continued)

Table 1.01.3 (continued): Rate (proportion), rate ratio and rate difference between live born low birthweight babies of Indigenous and other mothers, by state/territory 1991–2011

	Low birthweight live born babies				Low birthweight singleton live born babies			
Year	Indigenous	Other[(a)]	Rate ratio	Rate difference	Indigenous	Other[(a)]	Rate ratio	Rate difference
	NSW, Vic, Qld, WA, SA and NT combined							
1991	11.9	5.7	2.1	6.2	11.1	4.5	2.5	6.6
1992	11.8	5.7	2.1	6.1	10.8	4.4	2.4	6.3
1993	10.8	5.7	1.9	5.1	9.7	4.5	2.2	5.3
1994	11.9	5.7	2.1	6.3	11.0	4.4	2.5	6.7
1995	10.9	5.8	1.9	5.2	10.2	4.5	2.3	5.7
1996	11.6	5.8	2.0	5.9	10.7	4.5	2.4	6.2
1997	12.1	5.9	2.1	6.3	11.3	4.5	2.5	6.8
1998	11.0	5.9	1.9	5.1	10.0	4.6	2.2	5.4
1999	12.2	6.0	2.0	6.2	10.9	4.6	2.4	6.3
2000	12.7	6.1	2.1	6.6	11.7	4.5	2.6	7.2
2001	12.8	6.0	2.1	6.8	11.5	4.5	2.6	7.0
2002	12.9	6.1	2.1	6.8	11.8	4.6	2.6	7.3
2003	12.9	6.0	2.1	6.9	11.9	4.5	2.6	7.4
2004	13.1	6.1	2.2	7.0	12.1	4.6	2.6	7.5
2005	13.3	6.1	2.2	7.2	12.1	4.5	2.7	7.5
2006	12.4	6.2	2.0	6.3	11.4	4.6	2.5	6.8
2007	12.6	5.9	2.1	6.7	11.3	4.4	2.6	6.9
2008	12.2	5.9	2.1	6.4	11.1	4.4	2.5	6.7
2009	11.9	5.9	2.0	6.0	10.8	4.5	2.4	6.4
2010	12.0	6.0	2.0	6.1	10.7	4.5	2.4	6.2
2011	12.5	6.0	2.1	6.5	11.1	4.5	2.5	6.6
Annual change 1991–2011	0.1*	0.0*	n.p.	0.0*	0.0	0.0	n.p.	0.0
% change over time 1991–2011	10.2*	5.4*	n.p.	14.5*	7.4	0.4	n.p.	12.4
Annual change 1998–2011	0.0	0.0	n.p.	0.0	0.0	0.0	n.p.	0.0
% change over time 1998–2011	0.7	–1.2	n.p.	3.0	–0.7	–2.5	n.p.	0.7
Annual change 2000–2011	–0.1*	0.0	n.p.	–0.1*	–0.1*	0.0	n.p.	–0.1*
% change over time 2000–2011	–6.6*	–2.7	n.p.	–9.6*	–8.9*	–1.5	n.p.	–13.4*
Annual change 2007–2011	0.0	0.0*	n.p.	–0.1	–0.1	0.0*	n.p.	–0.1
% change over time 2007–2011	–1.4	1.2*	n.p.	–4.3	–2.8	2.8*	n.p.	–6.4

(continued)

Table 1.01.3 (continued): Rate (proportion), rate ratio and rate difference between live born low birthweight babies of Indigenous and other mothers, by state/territory 1991–2011

* Represents statistically significant increases or decreases at the $p < 0.05$ level over the period.

(a) Includes non-Indigenous mothers and mothers for whom Indigenous status was not stated.

(b) Provisional data were provided by Victoria for 2009. There is the potential for minor revisions of data in this table.

Notes

1. Excludes Tasmania and the Australian Capital Territory as data from these jurisdictions are not considered stable enough to be included in trend analyses mainly because of small population size and some issues with data quality over the reporting period (Leeds et al. 2007).
2. Data reported by state/territory of birth.

Source: AIHW/NPESU analysis of National Perinatal Data Collection.

Table 1.01.4: Live born low birthweight babies by birth characteristics and maternal Indigenous status, 2011

	Indigenous(a)			Non-Indigenous(a)				
	Number of live born low birthweight babies	**Per cent of live births(b)**	**Per cent of LBW births(c)**	**Number**	**Per cent of live births(b)**	**Per cent of LBW births(c)**	**Rate ratio (live births)(d)**	**Rate difference(e)**
Pre-term	993	65.5	67.0	12,214	56.4	70.8	1.2	9.1
Full-term	488	4.8	32.9	5,046	1.9	29.2	2.5	2.9
Total	*1,482*	*12.6*	*100.0*	*17,260*	*6.0*	*100.0*	*2.1*	*6.6*
Multiple birth	206	63.6	13.9	4,580	52.7	26.5	1.2	10.9
Singleton birth	1,276	11.2	86.1	12,668	4.5	73.4	2.5	6.6
Total	*1,482*	*12.6*	*100.0*	*17,260*	*6.0*	*100.0*	*2.1*	*6.6*
APGAR score 0–6	118	42.8	8.0	1,402	30.8	8.1	1.4	11.9
APGAR score 7–10	1,351	11.8	91.2	15,751	5.6	91.3	2.1	6.2
Total	*1,482*	*12.6*	*100.0*	*17,260*	*6.0*	*100.0*	*2.1*	*6.6*
Neonatal deaths	57	80.3	3.8	596	84.9	3.5	0.9	–4.6
Total	**1,482**	**12.6**	**. .**	**17,260**	**6.0**	**. .**	**2.1**	**6.6**

(a) Excludes not stated response from denominator.

(b) Per cent of live births: Number of live born low birthweight in stratum category divided by total number of all stratum category live births.

(c) Per cent of LBW births: Number of stratum category live born low birthweight divided by total combined live born low birthweight stratum categories.

(d) Rate ratio: Indigenous per cent of live births divided by non-Indigenous per cent of live births.

(e) Rate difference: Indigenous per cent of live births minus non-Indigenous per cent of live births.

Notes

1. Excludes mothers for whom Indigenous status was not stated.
2. APGAR score is a measure used to assess the health of newborn babies immediately after birth. Values range from zero to 10, with a value of seven to 10 considered normal. Lower values indicate that medical attention is necessary.

Source: AIHW/NPESU analysis of National Perinatal Data Collection.

Table 1.01.5: Mean birthweight, ratio and difference between mean birthweight of live born babies of Indigenous and other mothers, 1991–2011

	Mean birthweight (grams)			
Year	Indigenous	Other[(a)]	Ratio	Difference (grams)
1991	3,158	3,367	0.9	–209.3
1992	3,177	3,373	0.9	–196.1
1993	3,180	3,374	0.9	–194.9
1994	3,170	3,375	0.9	–204.8
1995	3,181	3,376	0.9	–194.2
1996	3,163	3,378	0.9	–215.6
1997	3,168	3,375	0.9	–206.3
1998	3,187	3,382	0.9	–195.1
1999	3,169	3,380	0.9	–211.3
2000	3,176	3,384	0.9	–207.4
2001	3,168	3,382	0.9	–214.6
2002	3,165	3,378	0.9	–212.9
2003	3,160	3,380	0.9	–219.7
2004	3,159	3,381	0.9	–222.5
2005	3,155	3,376	0.9	–221.7
2006	3,168	3,377	0.9	–209.4
2007	3,178	3,382	0.9	–203.6
2008	3,196	3,384	0.9	–188.1
2009	3,183	3,381	0.9	–197.7
2010	3,188	3,376	0.9	–187.5
2011	3,189	3,374	0.9	–185.3
Annual change 1991–2011	0.6	0.3*	n.p.	0.3
% change over time 1991–2011	0.4	0.2*	n.p.	–2.8
Annual change 1998–2011	1.3	–0.3	n.p.	1.6
% change over time 1998–2011	0.5	–0.1	n.p.	–9.8
Annual change 2000–2011	2.5*	–0.4	n.p.	2.9*
% change over time 2000–2011	0.9*	–0.1	n.p.	–14.2*
Annual change 2007–2011	1.5	–2.2	n.p.	3.7
% change over time 2007–2011	0.2	–0.3	n.p.	–7.5

* Represents statistically significant increases and decreases at the p < 0.05 level over the period.

(a) Includes non-Indigenous mothers and mothers for whom Indigenous status was not stated.

Note: Excludes Tasmania and the Australian Capital Territory as data from these jurisdictions are not considered stable enough to be included in trend analyses mainly because of small population size and some issues with data quality over the reporting period (AIHW: Leeds et al. 2007).

Source: AIHW/NPESU analysis of National Perinatal Data Collection.

Table 1.01.6: Live born low birthweight babies by maternal characteristics and Indigenous status, 2011

	Indigenous		Non-Indigenous			
	Number	Per cent low birthweight	Number	Per cent low birthweight	Rate ratio[a]	Rate difference[b]
Age of mother						
Less than 20	270	12.4	690	7.9	1.6	4.5
20–24	483	12.7	2,215	6.0	2.1	6.7
25–29	352	12.1	4,552	5.7	2.1	6.4
30–34	213	12.2	5,307	5.7	2.1	6.5
35+	164	18.7	4,405	8.2	2.3	10.5
Quintile of socioeconomic disadvantage[c]						
Quintile 5 (least disadvantaged)	49	10.2	2,865	5.5	1.9	4.7
Quintile 4	110	11.7	3,350	5.8	2.0	5.9
Quintile 3	214	12.2	3,547	6.0	2.0	6.2
Quintile 2	326	12.2	3,592	6.2	2.0	6.0
Quintile 1 (most disadvantaged)	764	13.3	3,823	6.5	2.0	6.8
Parity						
None	487	12.6	8,976	7.2	1.8	5.4
One	327	10.9	4,427	4.5	2.4	6.4
Two	224	11.6	2,186	5.2	2.2	6.4
Three	171	13.9	936	6.7	2.1	7.2
Four or more	261	15.5	704	7.8	2.0	7.7
Remoteness[d]						
Major cities	393	11.3	12,532	6.0	1.9	5.3
Inner regional	285	11.8	2,958	6.1	1.9	5.7
Outer regional	338	12.9	1,406	5.9	2.2	7.0
Sub-total non-remote	*1,017*	*12.0*	*16,896*	*6.0*	*2.0*	*5.9*
Remote	154	13.6	216	5.6	2.4	8.0
Very remote	291	15.0*	65	4.5*	3.4	10.5
Sub-total remote	*446*	*14.5**	*281*	*5.3**	*2.7*	*9.2*
Total	**1,482**	**12.6**	**17,260**	**6.0**	**2.1**	**6.6**

* Represents statistically significant differences at the $p < 0.05$ level.

(a) Rate ratio is Indigenous rate divided by Non-Indigenous rate.

(b) Rate difference is Indigenous rate minus Non-Indigenous rate.

(c) Based on SEIFA Index of Relative Socioeconomic Disadvantage, population-based, using Australian cut-offs.

(d) Reference category for statistical testing: Sub-total non-remote.

Note: Excludes mothers for whom Indigenous status was not stated.

Source: AIHW/NPESU analysis of National Perinatal Data Collection.

Table 1.01.7: Unadjusted burden and gap analysis of low birthweight among live born singleton term babies by selected maternal characteristics and Indigenous status, 2009–2011(a)(b)(c)

	Unadjusted odds ratios (95% confidence interval)		Unadjusted PAF(e)				Unadjusted PIF(f)
	Indigenous	Other(d)	Indigenous		Other(d)		
				Summary		Summary	Summary
Age of mother							
<20	1.07 (0.90, 1.27)	1.50 (1.36, 1.64)*	1.3	5.3	1.6	–0.8	–1.1
20–24	1.06 (0.90, 1.23)	1.16 (1.09, 1.23)*	1.8		2.2		
25–29	REF	REF	REF		REF		
30–34	1.08 (0.90, 1.31)	0.85 (0.81, 0.90)*	1.2		–5.0		
35+	1.13 (0.91, 1.42)	1.00 (0.95, 1.06)	1.2		0.1		
Smoking during pregnancy							
Yes	3.05 (2.67, 3.49)*	2.92 (2.79, 3.04)*	50.7	50.7	18.9	18.9	38.4
No	REF	REF	REF		REF		
Parity							
Primiparas	1.10 (0.98, 1.24)	1.53 (1.47, 1.59)*	3.3	3.3	18.3	18.3	–1.0
Multiparas	REF	REF	REF		REF		
Socioeconomic status(g)							
Quintile 5 (least disadvantaged)	REF	REF	REF	33.3	REF	21.3	11.1
Quintile 4	1.24 (0.79, 1.94)	1.21 (1.13, 1.29)*	1.9		3.9		
Quintile 3	1.23 (0.80, 1.90)	1.21 (1.13, 1.29)*	3.1		3.9		
Quintile 2	1.48 (0.98, 2.23)	1.39 (1.30, 1.48)*	10.6		7.4		
Quintile 1 (most disadvantaged)	1.65 (1.11, 2.47)*	1.51 (1.42, 1.61)*	24.7		9.9		
Remoteness							
Major cities and inner/outer regions	REF	REF	REF		REF		
Remote and very remote regions	1.13 (1.00, 1.29)*	0.89 (0.77, 1.02)	3.4	3.4	–0.2	–0.2	3.1
State(h)							
NSW	REF	REF	REF	–1.4	REF	1.4	–0.7
Vic	1.10 (0.78, 1.54)	1.16 (1.08, 1.24)*	0.3		1.5		
Qld	0.86 (0.74, 1.00)*	0.99 (0.95, 1.05)	–5.0		–0.1		
WA	1.10 (0.92, 1.31)	0.89 (0.83, 0.95)*	0.5		1.0		
SA	1.08 (0.85, 1.38)	1.13 (1.05, 1.21)*	1.4		–1.4		
Tas	0.75 (0.49, 1.15)	1.08 (0.95, 1.22)	–0.6		0.2		
ACT	1.20 (0.63, 2.28)	1.03 (0.90, 1.19)	1.6		0.1		
NT	1.14 (0.95, 1.38)	1.07 (0.91, 1.27)	0.1		0.1		

(continued)

Table 1.01.7 (continued): Unadjusted burden and gap analysis of low birthweight among live born singleton term babies by selected maternal characteristics and Indigenous status, 2009–2011[(a)(b)(c)]

	Unadjusted odds ratios (95% confidence interval)		Unadjusted PAF[(e)]				Unadjusted PIF[(f)]
	Indigenous	Other[(d)]	Indigenous		Other[(d)]		
				Summary		Summary	Summary
Baby gender							
Male	REF	REF	REF		REF		
Female	1.49 (1.33, 1.68)*	1.60 (1.54, 1.67)*	19.2	19.2	22.8	22.8	–0.2

REF Reference group

* Represents statistically significant differences at the p < 0.05 level.

(a) Year is year of birth.

(b) Table exclude births with missing maternal age, smoking status, socioeconomic status, remoteness and baby gender.

(c) Low birth weight (LBW) is defined as birth weight of a live born infant of less than 2,500g.

(d) Include non-Indigenous mothers and mothers for whom Indigenous status was not stated.

(e) Burden (%) = Population Attributable Fraction (PAF).

(f) Gap (%) = Potential impact fraction (PIF).

(g) Based on SEIFA Index of Relative Socioeconomic Disadvantage, population-based, using Australian cut-offs.

(h) Data are by place of usual residence of the mother. Table excludes Australian non-residents, residents of external territories and not stated State/Territory of residence.

Source: AIHW/NPESU analysis of National Perinatal Data Collection.

Table 1.01.8: Adjusted burden and gap analysis of low birthweight among live born singleton term babies by selected maternal characteristics and Indigenous status, 2009–2011(a)(b)(c)

	Adjusted(e) odds ratios (95% confidence interval)		Adjusted PAF(e)(f)				Adjusted PIF(e)(g)
	Indigenous	Other(d)	Indigenous		Other(d)		
				Summary		Summary	Summary
Age of mother							
<20	0.89 (0.73, 1.09)	0.91 (0.83, 1.00)	–2.1	1.2	–0.3	3.5	–8.3
20–24	0.97 (0.83, 1.13)	0.93 (0.87, 0.99)*	–1.1		–1.0		
25–29	REF	REF	REF		REF		
30–34	1.17 (0.97, 1.41)	0.99 (0.94, 1.04)	2.4		–0.4		
35+	1.22 (0.98, 1.52)	1.23 (1.17, 1.31)	1.9		5.0		
Smoking during pregnancy							
Yes	3.10 (2.71, 3.55)*	2.99 (2.86, 3.13)*	51.3	51.3	19.5	19.5	25.7
No	REF	REF	REF		REF		
Parity							
Primiparas	1.34 (1.17, 1.55)*	1.67 (1.60, 1.74)*	10.2	10.2	22.1	22.1	4.8
Multiparas	REF	REF	REF		REF		
Socioeconomic status(h)							
Quintile 5 (least disadvantaged)	REF	REF	REF	29.7	REF	16.0	9.3
Quintile 4	1.25 (0.79, 1.98)	1.17 (1.09, 1.25)*	2.0		7.0		
Quintile 3	1.18 (0.76, 1.85)	1.14 (1.06, 1.22)*	2.4		5.2		
Quintile 2	1.45 (0.94, 2.23)	1.27 (1.18, 1.36)*	9.9		2.6		
Quintile 1 (most disadvantaged)	1.53 (1.00, 2.35)*	1.35 (1.26, 1.45)*	21.2		3.2		
Remoteness							
Major cities and inner/outer regions	REF	REF	REF	–1.1	REF	–0.3	–0.5
Remote and very remote regions	0.96 (0.82, 1.13)	0.85 (0.74, 0.98)*	–1.05		–0.33		
State(i)							
NSW	REF	REF	REF	–1.1	REF	–0.7	–0.1
Vic	1.20 (0.86, 1.69)	1.12 (1.05, 1.20)*	0.6		1.2		
Qld	0.85 (0.73, 0.99)*	0.95 (0.90, 0.99)*	–5.3		–1.4		
WA	1.18 (0.98, 1.43)	0.93 (0.87, 1.00)*	–0.2		0.1		
SA	0.97 (0.76, 1.24)	1.01 (0.94, 1.08)	2.6		–0.9		
Tas	0.70 (0.46, 1.08)	0.90 (0.79, 1.02)	–0.8		–0.3		
ACT	1.48 (0.75, 2.92)	1.17 (1.02, 1.35)*	1.4		0.1		
NT	1.12 (0.90, 1.40)	1.10 (0.92, 1.30)	0.3		0.3		

(continued)

Table 1.01.8 (continued): Adjusted burden and gap analysis of low birthweight among live born singleton term babies by selected maternal characteristics and Indigenous status, 2009–2011(a)(b)(c)

	Adjusted(e) odds ratios (95% confidence interval)		Adjusted PAF(e)(f)				Adjusted PIF(e)(g)
	Indigenous	Other(d)	Indigenous		Other(d)		
				Summary		Summary	Summary
Baby gender							
Male	REF	REF	REF	19.3	REF	22.8	9.6
Female	1.49 (1.33, 1.68)*	1.60 (1.54, 1.67)*	19.3		22.8		

REF Reference group

* Represents statistically significant differences at the $p < 0.05$ level.

(a) Year is year of birth.

(b) Table excludes births with missing maternal age, smoking status, socioeconomic status, remoteness and baby gender.

(c) Low birth weight (LBW) is defined as birth weight of a live born infant of less than 2,500g.

(d) Include non-Indigenous mothers and mothers for whom Indigenous status was not stated.

(e) Adjusted for age and all other factors in table.

(f) Burden (%) = Population Attributable Fraction (PAF).

(g) Gap (%) = Potential impact fraction (PIF).

(h) Based on SEIFA Index of Relative Socioeconomic Disadvantage, population-based, using Australian cut-offs.

(i) Data are by place of usual residence of the mother. Table excludes Australian non-residents, residents of external territories and not stated state/territory of residence.

Source: AIHW/NPESU analysis of National Perinatal Data Collection.

Table 1.01.9: Rate (proportion) of live born low birthweight babies to Indigenous and other mothers, Australia, New Zealand, United States, Canada

Country/collection period	Indigenous population	Reference population
Australia	**Indigenous**	**Other**
2011	12.6	6.0
NZ	**NZ Maoris**	**Other**
2012	6.8	5.8
US	**American Indian or Alaska Native total**(a)	**Other**(b)
2012	7.6	8.0
Canada(c)(d)	**Inuit inhabited regions**	**Canada total**
2004–2008	7.0	6.0

(a) Race and Hispanic origin are reported separately on birth certificates. Persons of Hispanic origin may be of any race. Race categories are consistent with the 1977 Office of Management and Budget (OMB) standards. Forty-one states and the District of Columbia reported multiple-race data in 2012. The multiple-race data for these states were bridged to the single-race categories of the 1977 OMB standards for comparability with other states; see Technical Notes. Multiple-race reporting areas vary for 2011–2012; see Technical Notes.

(b) Includes births to race and origin groups not shown separately, such as white Hispanic and black Hispanic women, and births with origin not stated according to the mother's reported race; see Technical Notes.

(c) Inuit-specific health data are not consistently collected in administrative databases across the country. A method has been developed which allows the use of geographic identifiers. Because a high proportion of residents of 'Inuit inhabited regions' are Inuit (approximately 82%), health indicators for residents of these regions can serve as a proxy for Inuit-specific health indicators. However, because these data also include non-Inuit residents, who tend to have better health outcomes than Inuit living in the same area, caution should be used when interpreting these results. Estimates exclude Inuit living outside Inuit inhabited regions.

(d) Low birthweight rates are adjusted to show only the rate of viable low birthweights. In this table they are calculated as follows: (subtract the number of live births with a birth weight of less than 500 grams from the standard low birth weight birth counts in the same year) and divide by (live birth counts for the same year with a known birth weight greater than 499 grams).

Note: 'Other' includes not stated.

Sources: Australia (AIHW/NPESU analysis of National Perinatal Data Collection); New Zealand (Statistics New Zealand 2015); United States (Hamilton et al. 2014); Canada (Statistics Canada 2015).

Table 1.01.10: Number and proportion of Indigenous babies(a) who had a low, normal and high birthweight, by remoteness, 1 July 2010–30 June 2011

Birth weight	Non-remote(b) %	Remote(c) %	Total %
Low birth weight(d)	12.9	12.5	12.8
Normal birth weight(e)	84.3	85.5	84.7
High birth weight(f)	2.8	2.0	2.5
Total number of Indigenous babies	**1,475**	**710**	**2,185**

(a) Indigenous babies born in the current reporting period to women who were regular clients of the HfL service.

(b) Non-remote Includes Major cities, Inner Regional and Outer Regional areas.

(c) Remote includes Remote and Very remote areas.

(d) Low birth weight is <2,500g.

(e) Normal birth weight is 2,500–4,499g.

(f) High birth weight is 4,500g and over.

Notes

1. Valid data for this indicator were provided by 84 services (10 in Major Cities of Australia, 12 in Inner Regional Australia, 26 in Outer Regional Australia, 11 in Remote Australia and 14 in Very Remote Australia).
2. Services used their own definition of regular client.
3. Data collected from Aboriginal Community Controlled Health Organisations, organisations that are not community controlled, state/territory and local government organisations, non-government organisations, auspiced organisations and Medicare Locals. Data presented in this report are not comparable to numbers published in previous the HFL national publication report numbers.

Source: AIHW Healthy for Life data collection.

Data sources and quality

National Perinatal Data Collection

Births

Birth notification forms are completed for all births of 20 weeks or more gestation, or a birthweight of 400 grams or more. The Perinatal National Minimum Data Set includes all births in Australia in hospitals, birth centres and the community.

Indigenous status question

Indigenous status is a measure of whether a person identifies as being of Aboriginal and Torres Strait Islander origin. A standard data item for Indigenous status is specified in the Perinatal National Minimum Data Set for the mother. Since 2005, all jurisdictions have collected information on Indigenous status of the mother in accordance with the Perinatal National Minimum Data Set (NMDS). Before this, data on Indigenous status was not reported for Tasmania, as the 'not stated' category for Indigenous status was included with the non-Indigenous category. Work is underway to include the Indigenous status of the baby with data released from 2015.

Under-identification

Data presented by Indigenous status are influenced by the quality and completeness of Indigenous identification of mothers which is likely to differ among jurisdictions and comparisons between states and territories should be interpreted with caution. No formal national assessment has been undertaken to determine completeness of the coverage of Indigenous mothers in the Perinatal NMDS. However, the proportion of Indigenous mothers for the period 2001–2010 has been consistent, at 3.6–3.9% of women who gave birth. Approximately 0.3% of mothers who gave birth in 2009 had missing Indigenous status information. Mothers for whom Indigenous status was not stated have been excluded from analyses. No adjustments have been made for under-identification or missing information.

In 2007, the AIHW completed an assessment of the quality of Indigenous status information in perinatal data in each state and territory. This involved a survey that was sent to the midwifery managers across Australia to determine how many hospitals in each jurisdiction obtain Indigenous status information of mothers giving birth from admission records and how many collect this information independently. The assessment also involved analysis of the variability in the number and proportion of mothers recorded as Aboriginal and/or Torres Strait Islander in the perinatal data collection over time and across jurisdictions for the period 1991–2004. The outcomes of this assessment showed that Indigenous status data from New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory are suitable for trends analysis and national reporting. Perinatal data from Tasmania, although improving, were deemed to be of insufficient quality. Although the most recent data in the Australian Capital Territory were of publishable quality, the data were not yet of sufficient stability to support trends analysis (Leeds et al. 2007).

All jurisdictions are working towards improving the quality of Indigenous status in perinatal data collections. States and territories have agreed to improve Indigenous data collection procedures in key data collections including implementation of the Best Practice Guidelines for the collection of Indigenous status in health data sets.

State and territory data

Analysis by state and territory is based on the usual residence of the mother unless otherwise stated. Data excludes Australian non-residents of external territories and where the state/territory of residence was not stated.

Numbers are small in jurisdictions such as ACT and Tasmania and therefore need to be interpreted with caution.

Antenatal care data

Currently, data on antenatal care is not available from all jurisdictions. Data reported for 2011 on number of women who gave birth, who attended at least 1antenatal visit in the first trimester, and for the number of antenatal visits are available for New South Wales, Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory only.

Proportions of records missing antenatal care information on whether the first visit was in the first trimester are very different for women who resided in New South Wales (3%), Victoria (1.2%), Queensland (1.2%), the Australian Capital Territory (0.2%), and the Northern Territory (1%) compared with South Australia (7.1%), Western Australia (11.8%) and Tasmania (22%). Improvements in data validation in the Northern Territory, including validation against date of first of ultrasound examinations attended, has led to improved data quality and a decrease in the proportion of records missing antenatal care information, since 2007. The timing of the first visits for women missing data may be distributed differently to those whose data have been reported. There are also differences in how the jurisdictions define antenatal visits.

Data development

AIHW is working with the states and territories in the development of an enhanced Perinatal NMDS to include nationally consistent data items on antenatal care, smoking and alcohol use during pregnancy, and Indigenous status of the baby. Nationally consistent data items on smoking during pregnancy, gestational age at first antenatal visit, Indigenous status of the baby have been added to the Perinatal NMDS (from 1 July 2009, 1 July 2010, and 1 July 2012 respectively). A data item on number of antenatal visits was included in the Perinatal NMDS from 1 July 2013, although Victoria was not able to commence collection until 1 January 2015.

Collection of data on alcohol use in pregnancy is being developed.

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/597483>.

Healthy for Life data collection

For the July 2010 to June 2011 reporting period, 85 services submitted data as part of the Healthy for Life (HfL) Program.

Services started submitting their data through an electronic interface (OSCAR) for the February 2008 reporting period. This has improved the quality of data submitted.

Not all of the services were able to provide data for all of the essential indicators and service profile questions included in the HfL data collection. The number of services that were able to provide data varies across the qualitative and quantitative indicators.

There has been an upward trend in the proportion of services that reported on each of the indicators over time, particularly compared with the first reporting period ending June 2007.

In general, the data quality improved noticeably between the periods ending in June 2008 and June 2009. The overall level of data quality remained similar in the period ending in June 2010, while further improvements occurred in the period ending in June 2011. In the period ending in June 2011, the most common data quality issues were related to missing data (20% of services) and data out of the expected range (11% of services).

The Healthy for Life data collection was discontinued at the end of June 2011.

List of symbols used in tables

. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 2 of 68

Detailed analyses

1.02 Top reasons for hospitalisation

This measure reports on the leading causes of hospitalisation (using disease chapters in the International Classification of Diseases and Related Health Problems 10th Revision, Australian Modification (ICD–10 AM)) for Aboriginal and Torres Strait Islander Australians compared with non-Indigenous Australians.

Introduction

This is no. 2 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data source

National Hospital Morbidity Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Hospitalisation rates are based on the number of hospital episodes rather than on the number of individual people who are hospitalised. A person who has frequent hospitalisations for the same disease is counted multiple times in the hospitalisation rate for that disease. For this reason, hospitalisations for dialysis (treatment for end-stage kidney disease, generally undertaken 3 times per week) are often excluded from analyses looking at overall hospitalisations, or considered separately, as this is by far the most common reason for hospitalisation in Australia. This is noted below and in other measures where relevant.

At the time this report was compiled, data on the rate of hospitalisations for Indigenous Australians were available for July 1998 to June 2013 for Queensland, Western Australia, South Australia and the Northern Territory. These jurisdictions were considered to have adequate levels of Indigenous identification in hospital separations data over this period. For the period July 2004 to June 2013, data for New South Wales and Victoria are also available. From 2010–11 onwards, data for all states and territories are considered of sufficient quality for reporting by Indigenous status (AIHW 2013).

Time series analyses may be affected by changes in the quality of Indigenous identification over time.

For more information about hospitalisations, see measures 1.10, 1.22 and 3.07. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Total hospitalisations, see tables 1.02.1–1.02.6
- Hospitalisations by principal and additional diagnosis, see tables 1.02.7–9.

Principal diagnosis is the diagnosis that is established after study to be chiefly responsible for occasioning an episode of admitted patient care, an episode of residential care or an attendance at a health care establishment.

Additional diagnosis is a condition or complaint either coexisting with the principal diagnosis or arising during the episode of admitted patient care, episode of residential care or attendance at a health care establishment.

Total hospitalisations

Current period

During the period July 2011 to June 2013:

- The hospitalisation rate for Indigenous Australians was 331 per 1,000 population, a total of about 453,000 hospitalisations (after being adjusted for estimated Indigenous under-identification).
    - After adjusting for age and Indigenous under-identification, Indigenous Australians were hospitalised at 1.3 times the rate of non-Indigenous Australians. The rate

difference between Indigenous and non-Indigenous Australians was 94 hospitalisations per 1,000 over the 2-year period (Table 1.02.1).

- Across all age groups except those aged 65+, Indigenous Australians have higher hospitalisation rates than non-Indigenous Australians. This is the case for males, females and all persons (Table 1.02.2).
- *Remote* and *Very remote* regions had the largest rate differences between Indigenous and non-Indigenous Australian hospitalisation rates (304 per 1,000 and 191 per 1,000 respectively). The rate differences in *Major cities* and *Inner regional* areas were close to zero (Table 1.02.4).

Trend

- From July 1998 to June 2013, the rate of hospitalisations of Indigenous Australians was available for Queensland, Western Australia, South Australia and the Northern Territory. For these 4 jurisdictions combined, the rate increased from 389 per 1,000 to 441 per 1,000 (a 14% increase).
  - The rate difference between hospitalisations for Indigenous and non-Indigenous Australians did not change over the period (Table 1.02.5, Figure 1.02.1).
- For the period July 2004 to June 2013, data for New South Wales and Victoria were also available. For this period, there was a 27% increase in hospitalisation rates of Indigenous Australians, from 317 per 1,000 to 404 per 1,000 in the 6 jurisdictions combined (Table 1.02.6).
- Non-Indigenous Australian hospitalisation rates also increased in the period July 1998 to June 2013 (22%) and the period July 2004 to June 2013 (11%). The rate difference between Indigenous and non-Indigenous Australians increased by 311% over the period July 2004 to June 2013 (tables 1.02.5–6, Figure 1.02.2).
  - The rate difference between Indigenous and non-Indigenous Australians increased more substantially for males than for females (tables 1.02.5–6).

Hospitalisations by principal diagnosis

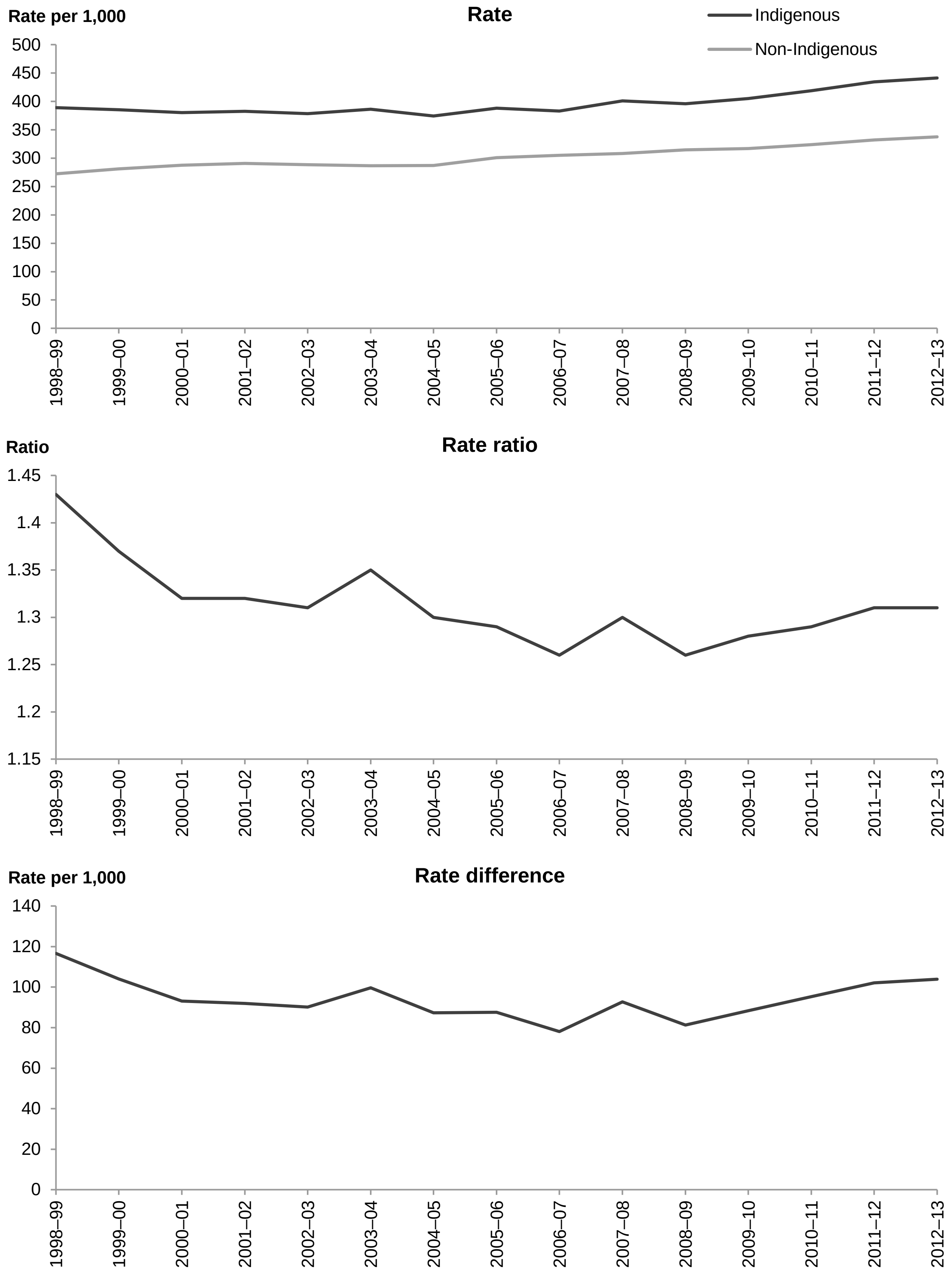
Current period

During the period July 2011 to June 2013:

- Care involving dialysis represented 44% of the total hospitalisations of Indigenous Australians, compared to 12% of hospitalisations for non-Indigenous Australians.
- The second largest cause of hospitalisations for Indigenous Australians was injury and poisoning (7%), followed by pregnancy and childbirth (6%), diseases of the respiratory system (6%) and diseases of the digestive system (5%).
- Indigenous Australians had higher rates of hospitalisation than non-Indigenous Australians for all major principal diagnosis groups other than 'diseases of the digestive system' and 'other'. The largest rate differences were for diseases of the respiratory system (23 per 1,000), injury and poisoning (20 per 1,000) and pregnancy and childbirth (14 per 1,000) (Table 1.02.7).

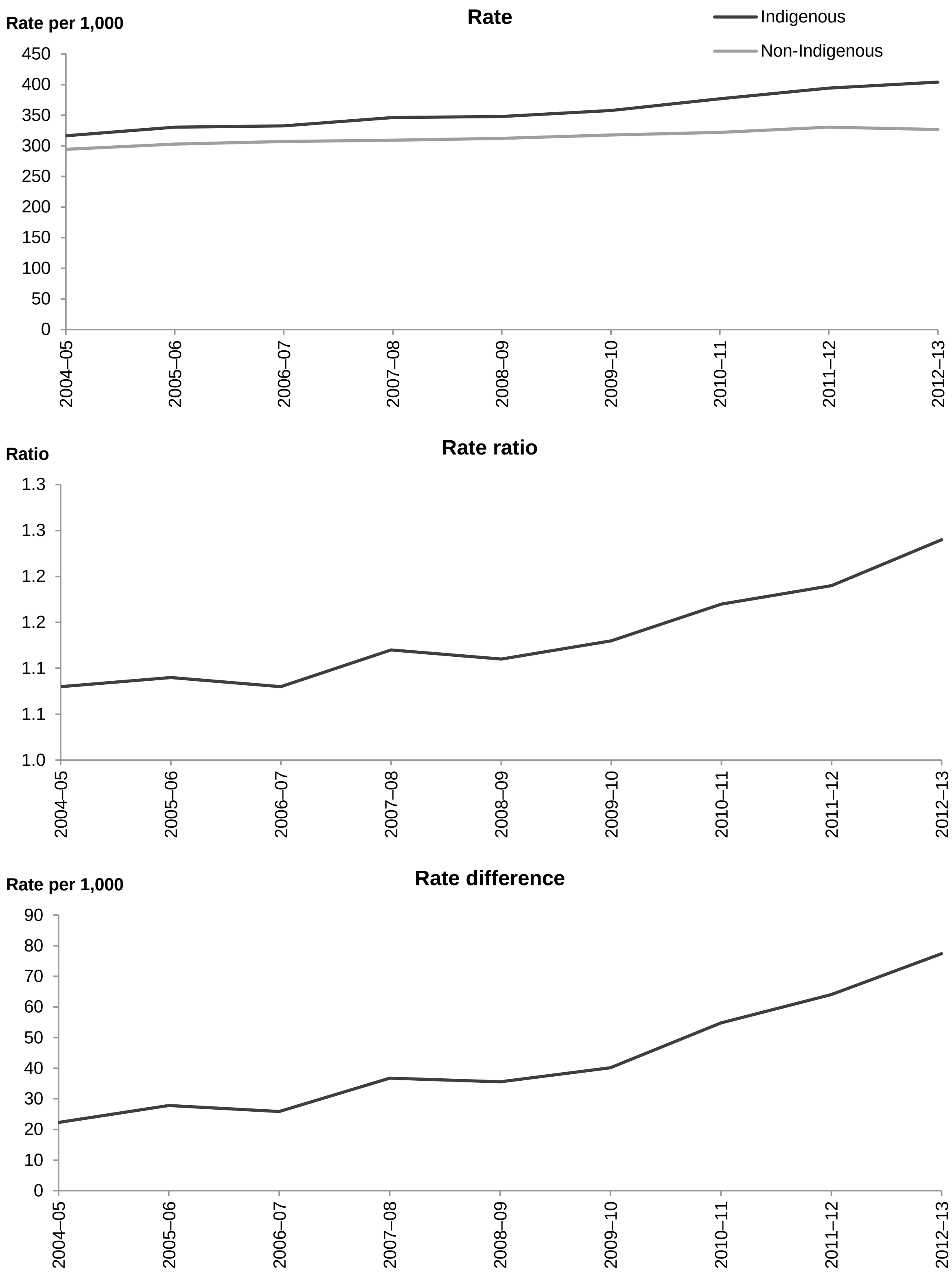
Trend

- Indigenous hospitalisation rates increased from July 2004 to June 2013 for all principal diagnoses.
  - The rate difference decreased for diseases of the digestive system and diseases of the genitourinary system, but increased for all other principal diagnosis groups.
  - Data for endocrine, nutritional and metabolic diseases are not comparable over time due to changes in ICD-10-AM coding for diabetes (Table 1.02.9).



Source: Table 1.02.5.

Figure 1.02.1: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), Qld, WA, SA and NT, 1998–99 to 2012–13



Source: Table 1.02.6

Figure 1.02.2: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13

Table 1.02.1: Hospitalisations (excluding dialysis), by Indigenous status, sex and jurisdiction, 2011–12 to 2012–13[a][b][c]

	Indigenous			Non-Indigenous					
	Number	Crude rate per 1,000	ASR Rate per 1,000[d]	Number	Crude rate per 1,000	ASR Rate per 1,000[d]	Indigenous status not stated	ASR rate ratio[e]	ASR rate difference[f]
NSW									
Males	49,735	234.5	318.6	2,170,756	308.1	291.7	41,839	1.1	26.9
Females	63,412	297.9	368.7	2,573,493	360.1	330.4	48,723	1.1	38.3
Persons[g]	113,148	266.2	343.2	4,744,272	334.3	310.2	90,562	1.1	33.0
Vic									
Males	10,128	209.2	307.8	1,827,319	330.5	320.3	17,198	0.96	–12.5
Females	14,023	288.5	374.8	2,234,012	395.8	368.6	20,847	1.0	6.2
Persons[g]	24,152	248.9	341.0	4,061,371	363.5	343.1	38,045	1.0	–2.1
Qld									
Males	47,999	249.0	366.8	1,435,394	328.8	321.8	60,336	1.1	45.1
Females	64,202	330.4	420.9	1683261	384.0	366.3	69,155	1.1	54.6
Persons[g]	112,201	289.9	392.4	3118660	356.4	343	129,491	1.1	49.4
WA									
Males	30,622	342.5	467.5	761529	321.4	327	179	1.4	140.5
Females	39,060	430.5	523.5	890440	383.5	368.5	141	1.4	155.0
Persons[g]	69,682	386.8	493.2	1651969	352.1	345.4	320	1.4	147.8
SA									
Males	11,168	295.1	397.3	513,413	320.4	292.8	35,657	1.4	104.5
Females	14,400	373.7	449.9	604454	370.2	332	34,356	1.4	118.0
Persons[g]	25,568	334.8	422.9	1117893	345.5	310.8	70,013	1.4	112.1

(continued)

Table 1.02.1 (continued): Hospitalisations (excluding dialysis), by Indigenous status, sex and jurisdiction, 2011–12 to 2012–13[(a)(b)(c)]

	Indigenous			Non-Indigenous					
	Number	Crude rate per 1,000	ASR Rate per 1,000[(d)]	Number	Crude rate per 1,000	ASR Rate per 1,000[(d)]	Indigenous status not stated	ASR rate ratio[(e)]	ASR rate difference[(f)]
Tas									
Males	n.p.	125.9	177.5	n.p.	287.2	251.3	8,723	0.7	–73.8
Females	n.p.	185.6	236.1	n.p.	335.2	303.5	14,518	0.8	–67.3
Persons[(g)]	n.p.	155.7	207.7	n.p.	311.3	277	23,244	0.7	–69.4
NT									
Males	n.p.	353.9	450.0	n.p.	218.7	250.7	7,330	1.8	199.3
Females	n.p.	489.8	561.6	n.p.	248.7	265.3	6,914	2.1	296.3
Persons[(g)]	n.p.	421.6	505.7	n.p.	232.7	257.7	14,244	2.0	248.0
ACT									
Males	n.p.	208.8	310.4	n.p.	217.0	231.5	2,394	1.3	78.9
Females	n.p.	220.6	298.4	n.p.	268.6	265.4	3,412	1.1	33.0
Persons[(g)]	n.p.	214.5	302.8	n.p.	242.9	247.9	5,806	1.2	54.9
Australia[(h)]									
Males	**179,740**	**263.4**	**363.8**	**6,996,039**	**318.8**	**307.6**	**176,898**	**1.2**	**56.2**
Females	**235,807**	**343.8**	**423.9**	**8,313,937**	**375.4**	**350.1**	**201,740**	**1.2**	**73.7**
Persons[(g)]	**415,549**	**303.7**	**393.1**	**15,310,084**	**347.2**	**327.6**	**378,653**	**1.2**	**65.5**
Adjusted Australia[(h)(i)]									
Males	**195,917**	**287.1**	**396.5**	**7,156,760**	**326.1**	**314.5**	**. .**	**1.3**	**82.0**
Females	**257,030**	**374.7**	**462.0**	**8,494,454**	**383.6**	**357.6**	**. .**	**1.3**	**104.5**
Persons[(g)]	**452,948**	**331.0**	**428.5**	**15,651,338**	**355.0**	**334.8**	**. .**	**1.3**	**93.7**

(continued)

Table 1.02.1 (continued): Hospitalisations (excluding dialysis), by Indigenous status, sex and jurisdiction, 2011–12 to 2012–13(a)(b)(c)

(a) Data include public and private hospitals in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Age standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age standardised by 5 year age groups to 75+. Age standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age standardised by 5 year age group to 65+. As different age-groupings were used, rates for Tasmania and the Australian Capital Territory cannot be compared with the rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous.

(f) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous.

(g) Persons data include sex not stated and indeterminate.

(h) Data includes public and private hospitals in all jurisdictions as well as Other Territories and Residence State not applicable (e.g. overseas, at sea, no fixed address) data.

(i) There are missing hospitalisations with Indigenous status not-stated. For Indigenous Australians, the hospitalisation numbers and rates have been adjusted for Indigenous under-identification using a national adjustment factor of 1.09. By applying this factor, the number of Indigenous hospitalisations was increased by 9% and these additional hospitalisations then subtracted from the number of hospitalisations with Indigenous status not-stated. The rest of the hospitalisations with Indigenous status 'not stated' were then added to the non-Indigenous hospitalisations. For further information see Indigenous identification in hospitals separations data (AIHW 2013).

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.2: Age-specific hospitalisation rates (excluding dialysis) (per 1,000 population), by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b]

	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65+	All ages[c]	
									Crude	Age std.[d]
Males										
Indigenous	324.1	106.1	142.7	227.5	348.8	459.5	543.3	793.7	263.4	363.8
Non-Indigenous	263.8	96.5	130.6	137.3	191.8	281.0	473.4	980.2	318.8	307.6
Rate ratio[e]	1.2	1.1	1.1	1.7	1.8	1.6	1.1	0.8	0.8	1.2
Rate difference[f]	60.4	9.6	12.1	90.2	157.0	178.5	69.9	–186.5	–55.4	56.2
Females										
Indigenous	263.5	91.7	352.8	467.3	424.0	445.9	546.6	752.5	343.8	423.9
Non-Indigenous	201.6	79.6	225.4	358.5	331.2	325.3	449.2	837.4	375.4	350.1
Rate ratio[e]	1.3	1.2	1.6	1.3	1.3	1.4	1.2	0.9	0.9	1.2
Rate difference[f]	61.9	12.2	127.4	108.8	92.8	120.7	97.4	–84.9	–31.7	73.7
Persons[g]										
Indigenous	294.4	99.0	245.0	348.4	387.8	452.5	545.0	770.8	303.7	393.1
Non-Indigenous	233.6	88.3	176.9	247.0	261.9	303.3	461.2	903.4	347.2	327.6
Rate ratio[e]	1.3	1.1	1.4	1.4	1.5	1.5	1.2	0.9	0.9	1.2
Rate difference[f]	60.9	10.8	68.1	101.5	125.9	149.1	83.8	–132.5	–43.5	65.5

(a) Data includes public and private hospitals in all jurisdictions.

(b) Financial year reporting.

(c) All age data includes age not stated.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio Indigenous: non-Indigenous Australians.

(f) Rate difference Indigenous minus non-Indigenous Australians.

(g) Persons data include sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.3: Adjusted hospitalisations (excluding dialysis), by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b][c][d]

	Indigenous		Non-Indigenous			
	Number	No. per 1,000[e]	Number	No. per 1,000[e]	Ratio[f]	Difference[g]
Australia						
Males	179,740	363.8	6,996,039	307.6	1.2	56.2
Females	235,807	423.9	8,313,937	350.1	1.2	73.7
Persons[h]	415,549	393.1	15,310,084	327.6	1.2	65.5
Adjusted Australia[i]						
Males	195,917	396.5	7,156,760	314.5	1.3	82.0
Females	257,030	462.0	8,494,454	357.6	1.3	104.5
Persons[h]	452,948	428.5	15,651,338	334.8	1.3	93.7

(a) Data includes public and private hospitals in all jurisdictions.

(b) Financial year reporting.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Includes all separations in all jurisdictions as well as Other Territories and Residence State not applicable (for example, overseas, at sea, no fixed address).

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio Indigenous: non-Indigenous.

(g) Rate difference Indigenous minus non-Indigenous.

(h) Persons data include sex not stated and indeterminate.

(i) There are 381,653 (176,898 males, 201,740 females, 15 sex missing) hospitalisations with Indigenous status not-stated. For Indigenous Australians, the hospitalisation numbers and rates have been adjusted for Indigenous under-identification using a national adjustment factor of 1.09. This factor was derived from a study undertaken by the AIHW in 2011 & 2012 that assessed the level of Indigenous under-identification in hospital data in all states and territories by comparing information gathered from face-to face interviews in public hospitals with results from hospital records. By applying this factor, the number of Indigenous hospitalisations was increased by 9% and these additional hospitalisations then subtracted from the number of hospitalisations with Indigenous status not-stated. The rest of the hospitalisations with Indigenous status 'not stated' were then added to the non-Indigenous hospitalisations. For further information see Indigenous identification in hospitals separations data (AIHW 2013).

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.4: Hospitalisations (excluding dialysis) by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[(a)(b)]

	Indigenous		Non-Indigenous			
	Number	No. per 1,000(c)	Number	No. per 1,000(c)	Ratio(d)	Difference(e)
Major cities	112,448	318.6	10,569,063	323.5	1.0	–4.9
Inner regional	77,974	346.4	3,088,214	344.0	1.0	2.4
Outer regional(f)	95,307	411.8	1,353,168	325.9	1.3	85.9
Remote(g)	53,783	622.3	172,048	318.8	2.0	303.5
Very remote	73,305	470.6	59,949	279.8	1.7	190.9
Total(h)	**415,549**	**393.1**	**15,310,084**	**327.6**	**1.2**	**65.5**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2010).

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous.

(e) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS' 2011 Australian Standard Geographical Classification (ASGC) and Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.5a: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), Qld, WA, SA and NT, 1998–99 to 2012–13(a)(b)

	Indigenous separations			Non-Indigenous separations		
	Males	**Females**	**Persons**(c)	**Males**	**Females**	**Persons**(c)
1998–99	36,701	49,015	85,716	815,922	970,129	1,786,064
1999–00	36,972	49,399	86,373	859,779	1,016,118	1,875,915
2000–01	37,259	50,845	88,106	894,175	1,057,403	1,951,590
2001–02	38,486	51,835	90,328	922,319	1,092,752	2,015,092
2002–03	38,325	51,982	90,310	930,197	1,111,116	2,041,335
2003–04	39,820	53,444	93,264	946,455	1,126,695	2,073,151
2004–05	39,710	54,425	94,136	970,433	1,148,754	2,119,191
2005–06	42,032	56,928	98,960	1,040,185	1,232,620	2,272,808
2006–07	41,999	58,958	100,957	1,084,409	1,279,174	2,363,591
2007–08	45,514	61,210	106,724	1,131,855	1,319,876	2,451,744
2008–09	46,504	62,760	109,266	1,178,279	1,391,379	2,569,670
2009–10	49,063	65,563	114,626	1,217,146	1,437,337	2,654,499
2010–11	52,695	70,577	123,272	1,282,471	1,493,308	2,775,788
2011–12	56,263	74,240	130,503	1,344,150	1,572,758	2,916,928
2012–13	58,117	77,254	135,371	1,399,459	1,638,140	3,037,610
Annual change(d)	1,512.0	1,973.9	3,485.7	40,502.8	46,183.4	86,686.1
Per cent change over period(e)	63.4	60.9	61.9	72.3	69.1	70.6

(a) Data exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data include sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Separations with a principal diagnosis of dialysis excluded.
4. Excludes separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 & 10 for 2001 on ward (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.5b: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	**Females**	**Persons**[c]	**Males**	**Females**	**Persons**[c]
1998–99	342.3	436.0	389.0	260.8	287.5	272.3
1999–00	342.7	427.1	385.3	270.0	296.2	281.3
2000–01	337.9	421.5	380.4	275.0	302.9	287.3
2001–02	341.4	422.2	382.7	277.1	307.4	290.8
2002–03	338.4	417.2	378.5	273.1	306.7	288.4
2003–04	353.9	419.1	386.5	271.4	305.1	286.8
2004–05	339.7	409.0	374.3	271.5	305.2	286.9
2005–06	356.1	421.0	388.3	283.5	321.0	300.7
2006–07	341.8	423.7	383.1	287.5	325.7	305.1
2007–08	368.1	434.1	400.8	291.7	327.6	308.1
2008–09	362.0	430.1	395.8	295.8	336.5	314.6
2009–10	374.9	437.4	405.2	297.8	339.1	316.9
2010–11	385.5	454.3	419.0	306.4	344.5	323.8
2011–12	407.5	464.7	434.3	313.1	354.5	332.2
2012–13	405.8	478.0	441.3	317.4	360.4	337.4
Annual change[d]	4.7	3.0	3.7	3.6	4.8	4.2
Per cent change over period[e]	20.0	10.0	13.9	19.5	23.5	21.8

(a) Data exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data include sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Separations with a principal diagnosis of dialysis excluded.
4. Excludes separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 & 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.5c: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), Qld, WA, SA and NT, 1998–99 to 2012–13(a)(b)

	Rate ratio(c)			Rate difference(d)		
	Males	**Females**	**Persons(e)**	**Males**	**Females**	**Persons(e)**
1998–99	1.3	1.5	1.4	81.5	148.5	116.6
1999–00	1.3	1.4	1.4	72.7	130.8	104.0
2000–01	1.2	1.4	1.3	63.0	118.6	93.1
2001–02	1.2	1.4	1.3	64.3	114.8	91.9
2002–03	1.2	1.4	1.3	65.3	110.5	90.2
2003–04	1.3	1.4	1.3	82.5	114.0	99.7
2004–05	1.3	1.3	1.3	68.2	103.8	87.4
2005–06	1.3	1.3	1.3	72.6	100.0	87.6
2006–07	1.2	1.3	1.3	54.3	98.1	78.0
2007–08	1.3	1.3	1.3	76.4	106.5	92.7
2008–09	1.2	1.3	1.3	66.2	93.6	81.2
2009–10	1.3	1.3	1.3	77.1	98.3	88.4
2010–11	1.3	1.3	1.3	79.1	109.9	95.3
2011–12	1.3	1.3	1.3	94.4	110.2	102.1
2012–13	1.3	1.3	1.3	88.4	117.6	103.9
Annual change(f)	n.a.	n.a.	n.a.	1.0	–1.9	–0.6
Per cent change over period(g)	n.a.	n.a.	n.a.	21.6	–20.9	–7.9

(a) Data exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(d) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(e) Persons data include sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Separations with a principal diagnosis of dialysis excluded.
4. Excludes separations with episode types 5.3 and 7 for 1998–99 and 1999–00 and separations with care types 7.3, 9 & 10 for 2001 on ward (Newborn – unqualified days only; organ procurement and hospital boarder) and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.6: Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a][b]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[c]	% change over period[d]
Indigenous separations											
Males	57,142	61,402	62,297	66,729	69,199	73,338	79,158	84,943	89,300	3,993.1	57.5
Females	77,170	81,519	85,560	89,115	92,269	96,646	104,547	112,043	116,886	4,932.4	52.4
Persons[e]	134,317	142,922	147,857	155,844	161,470	169,984	183,706	196,987	206,187	8,925.2	54.6
Non-Indigenous Australian separations											
Males	2,558,488	2,674,107	2,771,236	2,868,347	2,958,016	3,076,238	3,207,154	3,352,497	3,389,127	107,290.9	33.6
Females	3,080,242	3,225,292	3,333,753	3,429,500	3,547,414	3,691,869	3,798,674	3,984,761	4,033,602	121,401.0	31.5
Persons[e]	5,638,787	5,899,426	6,105,015	6,297,882	6,505,466	6,768,189	7,005,877	7,337,314	7,422,767	228,693.6	32.4
Indigenous rate (separations per 1,000)											
Males	287.2	303.0	296.9	314.6	316.6	329.6	345.9	366.3	373.3	10.8	30.5
Females	345.6	358.1	367.6	377.4	378.9	386.9	408.5	424.7	436.6	10.9	25.4
Persons[e]	316.6	330.6	332.8	346.2	347.9	357.8	376.8	394.5	404.3	10.7	27.3
Non-Indigenous Australian rate (separations per 1,000)											
Males	278.4	285.2	288.9	291.7	293.6	298.0	303.9	310.6	306.5	3.7	10.7
Females	313.1	323.0	327.8	330.1	333.9	340.0	342.9	353.0	349.7	4.6	11.7
Persons[e]	294.3	302.7	307.0	309.5	312.3	317.7	322.0	330.5	326.9	4.2	11.3
Rate ratio[f]											
Males	1.0	1.1	1.0	1.1	1.1	1.1	1.1	1.2	1.2	n.a.	n.a.
Females	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	n.a.	n.a.
Persons[e]	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	n.a.	n.a.

(continued)

Table 1.02.6 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences (excluding dialysis), NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a][b]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[c]	Per cent change over period[d]
Rate difference[g]											
Males	8.9	17.8	8.0	22.9	23.0	31.6	42.1	55.7	66.9	7.0	n.p[h].
Females	32.6	35.1	39.7	47.3	45.0	46.9	65.6	71.8	86.8	6.3	186.2
Persons[e]	22.3	27.9	25.8	36.7	35.6	40.1	54.8	64.1	77.5	6.5	311.4

(a) Data exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(e) Persons data include sex not stated and indeterminate.

(f) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(g) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(h) Per cent change more than 1,000 per cent.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.7: Hospitalisations, by principal diagnosis and Indigenous status, Australia, 2011–12 to 2012–13[(a)]

	Number		Per cent		No. per 1,000[(b)]			
Principal diagnosis	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Rate ratio**[(c)]	**Rate difference**[(d)]
Injury & poisoning & certain other consequences of external causes	54,079	1,127,633	7.2	6.5	45.0	24.8	1.8	20.2
Pregnancy, childbirth and the puerperium[(e)]	44,331	927,595	5.9	5.3	58.1	43.9	1.3	14.2
Diseases of the respiratory system	42,209	751,829	5.6	4.3	39.4	16.5	2.4	23.0
Diseases of the digestive system	37,612	1,763,402	5.0	10.1	36.1	38.0	0.9	–2.0
Symptoms, signs and abnormal clinical and laboratory findings	36,054	1,253,580	4.8	7.2	37.1	26.6	1.4	10.5
Mental and behavioural disorders	31,402	637,976	4.2	3.6	27.7	14.2	2.0	13.5
Diseases of the circulatory system	22,580	1,001,879	3.0	5.7	31.3	20.4	1.5	10.9
Diseases of the genitourinary system	19,735	831,528	2.6	4.8	20.7	18.0	1.2	2.7
Diseases of the skin & subcutaneous tissue	16,304	285,513	2.2	1.6	13.8	6.2	2.2	7.6
Certain infectious and parasitic diseases	12,591	266,122	1.7	1.5	10.2	5.8	1.7	4.4
Endocrine, nutritional and metabolic diseases	11,066	248,967	1.5	1.4	12.3	5.4	2.3	7.0
Other[(f)]	87,586	6,214,060	11.7	35.5	90.5	129.9	0.7	–39.4
Subtotal	*415,549*	*15,310,084*	*55.3*	*87.6*	*393.1*	*327.6*	*1.2*	*65.5*
Care involving dialysis	334,265	2,155,803	44.5	12.3	431.9	43.8	9.9	388.1
Total[(g)]	**751,698**	**17,479,869**	**100.0**	**100.0**	**826.6**	**371.7**	**2.2**	**454.9**

(continued)

Table 1.02.7 (continued): Hospitalisations, by principal diagnosis and Indigenous status, Australia, 2011–12 to 2012–13(a)

(a) Data include public and private hospital in all jurisdictions.

(b) Directly age-standardised using the Australian 2001 standard population.

(c) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous.

(d) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous.

(e) Rates and rate ratios are for females only.

(f) Includes: diseases of the musculoskeletal system and connective tissue; neoplasms; diseases of the nervous system; certain conditions originating in the perinatal period; diseases of the ear and mastoid process; diseases of the eye and adnexa; diseases of the blood and blood-forming organs and certain disorders involving the immune system; congenital malformations, deformations and chromosomal abnormalities; and factors influencing health status and contact with health services (except dialysis).

(g) Includes hospitalisations for which no principal diagnosis was recorded.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.8: Hospitalisations of Indigenous persons: principal diagnosis chapter by additional diagnosis chapter of hospitalisation, Australia, 2011–12 to 2012–13(a)(b)

	Principal diagnosis														
Additional diagnosis of hospitalisation	**(S00–T98)**	**(O00–O99)**	**(J00–J99)**	**(K00–K93)**	**(R00–R99)**	**(F00–F99)**	**(I00–I99)**	**(N00–N99)**	**(L00–L99)**	**(A00–B99)**	**(E00–E90)**	**(Z49)**	**Other**(c)	***Total (excl. dialysis)***	**Total**
	Per cent(c)														
Injury & poisoning (S00–T98)	43.3	0.8	2.4	2.9	2.8	7.1	5.2	4.0	14.0	3.8	6.1	0.1	6.0	9.6	5.3
Pregnancy, childbirth (O00–O99)	0.2	66.2	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.1	0.2	0.0	0.3	7.2	4.0
Respiratory diseases (J00–J99)	2.8	1.7	19.8	3.5	3.8	2.6	11.9	4.3	2.8	9.7	8.4	0.0	4.7	5.9	3.3
Digestive diseases (K00–K93)	3.3	2.1	4.1	25.4	7.9	3.9	6.8	5.2	2.6	8.2	10.3	0.0	5.6	6.8	3.8
Symptoms, signs and abnormal findings (R00–R99)	10.4	8.3	12.9	10.7	16.9	18.0	17.2	12.0	8.0	17.4	17.9	0.0	10.7	12.4	6.9
Mental and behavioural disorders (F00–F99)	23.9	3.4	11.5	17.8	15.3	51.5	11.5	5.8	6.9	8.1	12.2	0.0	6.9	14.7	8.1
Diseases of the circulatory system (I00–I99)	6.8	1.7	12.3	9.8	11.1	2.9	56.5	14.8	8.1	11.9	35.1	0.9	8.6	11.6	6.8
Genitourinary diseases (N00–N99)	6.0	4.4	8.2	6.4	8.2	2.5	17.3	26.2	7.2	18.2	37.9	14.6	6.8	9.0	11.5
Skin diseases (L00–L99)	4.8	0.8	3.2	1.9	1.5	1.6	3.9	3.3	18.8	8.6	10.2	0.0	3.8	3.9	2.2
Infectious and parasitic diseases (A00–B99)	9.9	5.9	14.7	7.9	5.8	3.3	8.0	23.7	47.3	19.5	17.7	0.0	7.1	10.8	6.0
Endocrine, nutritional & metabolic (E00–E90)	10.7	4.4	21.4	16.5	17.8	8.6	37.2	24.7	18.1	36.6	55.3	4.9	13.6	17.1	11.6
Other(d)	43.6	77.4	46.5	50.0	51.0	59.1	71.4	52.2	53.6	42.6	68.9	1.2	60.0	56.3	31.7
Total number(e)	**54,079**	**44,331**	**42,209**	**37,612**	**36,054**	**31,402**	**22,580**	**19,735**	**16,304**	**12,591**	**11,066**	**334,265**	**87,586**	**415,549**	**749,814**

(continued)

Table 1.02.8 (continued): Hospitalisations of Indigenous persons: principal diagnosis chapter by additional diagnosis chapter of hospitalisation, Australia, 2011–12 to 2012–13[(a)(b)]

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Percentage is the total number of each additional diagnosis divided by the total of principal diagnosis in each column.

(d) Includes: diseases of the musculoskeletal system and connective tissue; neoplasms; diseases of the nervous system; certain conditions originating in the perinatal period; diseases of the ear and mastoid process; diseases of the eye and adnexa; diseases of the blood and blood-forming organs and certain disorders involving the immune system; congenital malformations, deformations and chromosomal abnormalities; and factors influencing health status and contact with health services (except dialysis).

(e) Total number of hospitalisations for each principal diagnosis.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Sum of components may exceed 100% as more than one additional diagnosis can be reported for each hospitalisation.
3. Excludes separations with care types 7.3, 9 & 10 (newborn – unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.02.9: Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)]

Principal diagnosis	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(b)]	Per cent change[(c)]
	Indigenous no. per 1,000[(d)]										
Injury & poisoning & certain other consequences of external causes	35.9	37.4	37.9	37.7	39.8	41.2	43.9	45.6	46.7	1.4	31.7
Pregnancy, childbirth and the puerperium	54.2	56.7	58.8	58.8	58.3	57.8	58.4	59.5	59.0	0.4	6.2
Diseases of the respiratory system	35.8	36.8	33.7	36.7	36.7	37.5	39.9	41.5	39.6	0.7	16.3
Diseases of the digestive system	29.8	31.0	31.2	33.0	30.7	31.5	34.5	35.8	37.2	0.8	22.3
Symptoms, signs and abnormal clinical and laboratory findings	25.7	26.9	27.5	29.0	29.9	32.2	35.0	37.2	38.5	1.7	54.0
Mental and behavioural disorders	20.7	20.8	21.3	22.1	22.1	22.6	25.4	27.2	28.8	1.0	41.5
Diseases of the circulatory system	28.0	29.1	28.3	29.8	29.8	28.7	29.6	31.8	31.6	0.4	11.6
Diseases of the genitourinary system	16.1	16.5	16.2	16.0	16.8	17.7	19.9	20.1	21.9	0.7	37.9
Diseases of the skin & subcutaneous tissue	10.8	11.1	11.1	11.9	11.1	11.6	13.6	14.2	14.1	0.5	35.3
Certain infectious and parasitic diseases	5.3	6.1	5.6	6.1	7.0	8.0	7.9	7.9	8.5	0.4	63.1
Endocrine, nutritional and metabolic diseases	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Other[(e)]	66.9	70.1	73.8	77.3	77.3	80.4	85.7	91.2	94.9	3.4	40.7
Subtotal	*316.6*	*330.6*	*332.8*	*346.2*	*347.9*	*357.8*	*376.8*	*394.5*	*404.3*	*10.7*	*27.3*
Dialysis	314.9	344.6	357.6	374.5	382.4	392.7	411.1	446.3	455.9	16.6	41.4
Total (includes not stated)[(f)]	**631.7**	**675.4**	**690.5**	**720.7**	**730.4**	**750.5**	**788.1**	**841.6**	**861.0**	**27.3**	**34.5**

(continued)

Table 1.02.9 (continued): Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13(a)

Principal diagnosis	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change(b)	Per cent change(c)
	Non-Indigenous no. per 1,000(d)										
Injury & poisoning & certain other consequences of external causes	22.0	22.7	23.2	23.3	23.8	24.0	24.6	25.1	24.4	0.3	12.2
Pregnancy, childbirth and the puerperium	44.9	46.6	47.6	46.8	45.6	44.5	43.4	44.2	43.8	–0.4	–6.4
Diseases of the respiratory system	15.6	15.8	15.2	16.3	16.3	16.2	16.6	16.8	16.3	0.1	6.9
Diseases of the digestive system	38.2	38.9	39.4	39.1	37.5	37.9	38.0	38.5	37.8	–0.1	–2.3
Symptoms, signs and abnormal clinical and laboratory findings	20.4	21.4	22.7	23.0	23.8	24.9	26.4	27.2	26.5	0.8	32.7
Mental and behavioural disorders	13.9	13.8	13.9	13.8	14.2	14.7	13.7	14.0	14.2	0.0	2.5
Diseases of the circulatory system	20.8	21.1	21.0	20.7	20.2	20.0	20.8	20.9	20.1	–0.1	–2.9
Diseases of the genitourinary system	17.0	17.4	17.1	16.9	17.0	17.3	17.8	18.2	17.9	0.1	6.1
Diseases of the skin & subcutaneous tissue	5.6	5.7	5.6	5.7	5.7	5.8	6.2	6.3	6.1	0.1	13.2
Certain infectious and parasitic diseases	2.6	3.0	3.0	2.6	3.8	4.2	4.3	4.4	4.4	0.3	82.2
Endocrine, nutritional and metabolic diseases	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Other(e)	110.3	113.8	115.8	118.0	120.4	123.5	127.1	132.0	132.0	2.8	20.5
Subtotal	*294.3*	*302.7*	*307.0*	*309.5*	*312.3*	*317.7*	*322.0*	*330.5*	*326.9*	*4.2*	*11.3*
Dialysis	35.0	37.7	38.6	39.5	40.4	42.3	43.5	44.2	43.9	1.1	25.0
Total (includes not stated)(f)	**329.5**	**340.5**	**345.9**	**349.1**	**352.9**	**360.2**	**365.7**	**374.8**	**370.9**	**5.3**	**12.8**

(continued)

Table 1.02.9 (continued): Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)]

Principal diagnosis	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(b)]	Per cent change[(c)]
					Ratio[(g)]						
Injury & poisoning & certain other consequences of external causes	1.6	1.6	1.6	1.6	1.7	1.7	1.8	1.8	1.9	n.a.	n.a.
Pregnancy, childbirth and the puerperium	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	n.a.	n.a.
Diseases of the respiratory system	2.3	2.3	2.2	2.2	2.3	2.3	2.4	2.5	2.4	n.a.	n.a.
Diseases of the digestive system	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	n.a.	n.a.
Symptoms, signs and abnormal clinical and laboratory findings	1.3	1.3	1.2	1.3	1.3	1.3	1.3	1.4	1.5	n.a.	n.a.
Mental and behavioural disorders	1.5	1.5	1.5	1.6	1.6	1.5	1.9	1.9	2.0	n.a.	n.a.
Diseases of the circulatory system	1.3	1.4	1.3	1.4	1.5	1.4	1.4	1.5	1.6	n.a.	n.a.
Diseases of the genitourinary system	0.9	1.0	0.9	0.9	1.0	1.0	1.1	1.1	1.2	n.a.	n.a.
Diseases of the skin & subcutaneous tissue	1.9	2.0	2.0	2.1	1.9	2.0	2.2	2.3	2.3	n.a.	n.a.
Certain infectious and parasitic diseases	2.0	2.1	1.8	2.3	1.8	1.9	1.8	1.8	1.9	n.a.	n.a.
Endocrine, nutritional and metabolic diseases	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.a.	n.a.
Other[(e)]	0.6	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	n.a.	n.a.
Subtotal	*1.1*	*1.1*	*1.1*	*1.1*	*1.1*	*1.1*	*1.2*	*1.2*	*1.2*	*n.a.*	*n.a.*
Dialysis	9.0	9.1	9.3	9.5	9.5	9.3	9.5	10.1	10.4	n.a.	n.a.
Total (includes not stated)[(f)]	**1.9**	**2.0**	**2.0**	**2.1**	**2.1**	**2.1**	**2.2**	**2.2**	**2.3**	**n.a.**	**n.a.**

(continued)

Table 1.02.9 (continued): Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)]

Principal diagnosis	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(b)]	Per cent change[(c)]
						Difference[(h)]					
Injury & poisoning & certain other consequences of external causes	13.9	14.7	14.7	14.3	15.9	17.3	19.3	20.4	22.3	1.0	65.7
Pregnancy, childbirth and the puerperium	9.3	10.1	11.2	11.9	12.6	13.3	15.0	15.3	15.3	0.8	68.1
Diseases of the respiratory system	20.2	21.0	18.5	20.4	20.4	21.3	23.4	24.8	23.3	0.6	23.9
Diseases of the digestive system	–8.4	–7.9	–8.3	–6.1	–6.8	–6.4	–3.4	–2.7	–0.6	0.9	–79.8
Symptoms, signs and abnormal clinical and laboratory findings	5.3	5.5	4.8	6.0	6.0	7.3	8.6	10.0	12.0	0.8	163.8
Mental and behavioural disorders	6.8	7.0	7.5	8.3	8.0	7.9	11.7	13.2	14.6	1.0	138.0
Diseases of the circulatory system	7.2	8.0	7.3	9.0	9.6	8.7	8.8	10.9	11.6	0.5	54.6
Diseases of the genitourinary system	–0.9	–0.8	–0.9	–0.9	–0.2	0.4	2.1	2.0	4.0	0.6	–256.9
Diseases of the skin & subcutaneous tissue	5.3	5.4	5.5	6.2	5.4	5.8	7.4	7.9	8.0	0.4	60.1
Certain infectious and parasitic diseases	2.7	3.1	2.5	3.5	3.1	3.8	3.6	3.5	4.1	0.2	45.2
Endocrine, nutritional and metabolic diseases	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Other[(e)]	–43.4	–43.7	–42.1	–40.8	–43.1	–43.1	–41.3	–40.8	–37.1	0.6	–10.1
Subtotal	*22.3*	*27.9*	*25.8*	*36.7*	*35.6*	*40.1*	*54.8*	*64.1*	*77.5*	*6.5*	*311.4*
Dialysis	279.8	306.9	319.0	335.1	342.0	350.3	367.7	402.1	412.0	15.4	43.5
Total (includes not stated)[(f)]	**302.3**	**334.8**	**344.6**	**371.7**	**377.4**	**390.3**	**422.4**	**466.8**	**490.1**	**22.0**	**58.6**

(continued)

Table 1.02.9 (continued): Hospitalisations, by principal diagnosis and Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13(a)

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory. Data are reported by place of residence of the patient.

(b) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(c) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Includes: diseases of the musculoskeletal system and connective tissue; neoplasms; diseases of the nervous system; certain conditions originating in the perinatal period; diseases of the ear and mastoid process; diseases of the eye and adnexa; diseases of the blood and blood-forming organs and certain disorders involving the immune system; congenital malformations, deformations and chromosomal abnormalities; and factors influencing health status and contact with health services (except dialysis).

(f) Includes hospitalisations for which no principal diagnosis was recorded.

(g) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous.

(h) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 & 10 (newborn – unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions.

Source: AIHW analysis of National Hospital Morbidity Database.

Data sources and quality

National Hospital Morbidity Database (NHMD)

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

List of symbols used in tables

. .	not applicable
n.a.	not available
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

List of tables

List of figures

References

AIHW (Australian Institute of Health and Welfare) 2010. Indigenous identification in hospital separations data: quality report. Health services series no. 35. Cat. no. HSE 85. Canberra: AIHW.

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Other related information

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 3 of 68

Detailed analyses

1.03 Injury and poisoning

This measure reports on injury and poisoning among Aboriginal and Torres Strait Islander and non-Indigenous Australians.

Introduction

This is no. 3 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report is available from the AIHW website

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- National Mortality Database
- Australian Aboriginal and Torres Strait Islander Health Survey
- National Hospital Morbidity Database
- Bettering the Evaluation and Care of Health survey.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Injury data can be viewed in terms of the damage sustained to the body (for example, broken bones, head injuries) or by the external cause of the injury (for example, falls, poisoning and drowning), both of which are recorded by hospitals on admission and in death records.

In death records, coding rules indicate that the event causing the injury or poisoning leading to death should be recorded as the underlying cause of death. These are referred to as 'external causes'. For ease of reading, in this report, the phrase 'deaths due to injury and poisoning' is used to mean deaths with an underlying cause of an external cause of injury or poisoning.

Time series analyses may be affected by changes in the quality of Indigenous identification over time.

See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Mortality due to injury and poisoning, see tables 1.03.1–3
- Self-reported injury, see tables 1.03.4–7
- Hospitalisations with a principal diagnosis of injury and poisoning, see tables 1.03.8–17
- General practice encounters, see Table 1.03.18.

Mortality

Current period

In the period 2008 to 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There were 1,766 deaths due to injury and poisoning for Indigenous Australians, a rate of 75 deaths per 100,000. This was twice the rate for non-Indigenous Australians which was 38 per 100,000 (Table 1.23.10).
- For Indigenous Australians, intentional self-harm (suicide) was the most common external cause of death, accounting for 5% of total deaths (Table 1.03.1). Indigenous Australians died from intentional self-harm at 2 times the rate of non-Indigenous Australians (Table 1.23.10).
- The rate of death due to assault for Indigenous Australians (8 per 100,000) was 7 times as high as for non-Indigenous Australians (1 per 100,000) (Table 1.23.10).

Trend

Between 1998 and 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- Although mortality rates due to injury and poisoning declined significantly for non-Indigenous Australians (by 11%), there was no significant change in the rate for Indigenous Australians and no significant change in the gap (Table 1.23.19).

Between 2006 and 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There were no significant changes in the mortality rate due to injury and poisoning for either Indigenous or non-Indigenous Australians, and no significant change in the gap (Table 1.23.19).

Self-reported Injury

Current period

In 2012–13:

- 19% of Indigenous Australians reported an injury in the 4 weeks before being surveyed. The proportion reporting an injury was highest in those aged 0–14 (23%) and 15–24 (21%) (Table 1.03.5).
- Among Indigenous Australians who were injured, the most common events causing injury were falls (45%) and hitting or being hit by something (19%) (Table 1.03.4).

Hospitalisations with principal diagnosis of injury and poisoning

Hospitalisations for injury reflect hospital admissions for the condition rather than the extent of the problem in the community. Attendances at emergency departments are not generally included unless the person was formally admitted to the hospital, however reporting practices relating to emergency department attendances vary by jurisdiction and over time. For more information see *Australian hospital statistics 2012–13* (AIHW 2014).

Current period

In 2011–12 to 2012–13:

- There were 54,079 hospitalisations for injury and poisoning for Indigenous Australians, a rate of 45 per 1,000. After adjusting for age, the rate for Indigenous Australians was 1.8 times as high as for non-Indigenous Australians. The gap was 20 per 1,000 (Table 1.03.9)
  - *Remote* and *Very remote* areas had the highest rates of hospitalisation of Indigenous Australians due to injury and poisoning (88 and 68 per 1,000, respectively), compared with 33 per 1,000 in *Major cities* and *Inner regional* areas. The gap was greatest in *Remote* areas (55 per 1,000) and smallest in *Inner regional* areas (5 per 1,000) (Table 1.03.10).
- For Indigenous Australians, hospitalisations due to injury and poisoning had the highest rates in early adult age groups: 57 per 1,000 for those aged 25–34 and 58 per 1,000 for those aged 35–44. For non-Indigenous Australians, rates were highest for those aged 65 and over (57 per 1,000) (Table 1.03.8).

- Assault was the leading cause of hospitalisation for injury and poisoning among Indigenous Australians. The rate of hospitalisations for Indigenous Australians (10 per 1,000) was 13 times the non-Indigenous rate, a gap of 9 per 1,000 hospitalisations.
  - After adjusting for age, the hospitalisation rates for injuries caused by assault were 8 times as high for Indigenous men and 32 times as high for Indigenous women compared with non-Indigenous men and women (Table 1.03.14).

Trend

Between 1998–99 and 2012–13 in Queensland, Western Australia, South Australia and the Northern Territory combined:

- The rate of hospitalisation due to injury and poisoning for Indigenous Australians increased by 15%, from 49 per 1,000 to 55 per 1,000. Hospitalisation rates also increased for non-Indigenous Australians, at a slightly slower pace. The gap between Indigenous and non-Indigenous Australians was stable for most of the period but began to widen in the most recent years (Table 1.03.11).
- The rate of hospitalisation for Indigenous Australians for injuries caused by assault was stable at around 13 per 1,000 over the period, but the rate for non-Indigenous Australians increased slightly. There was little change in the gap (Table 1.03.16).

Between 2004–05 and 2012–13 in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The rate of hospitalisation due to injury and poisoning for Indigenous Australians increased by 32%, from 36 to 47 per 1,000. Rates for non-Indigenous Australians also increased over this period but at a slower rate. The gap between Indigenous and non-Indigenous Australians widened by 66% (Table 1.03.12).
- The rate of hospitalisations for injury and poisoning due to assault for Indigenous Australians increased by 10%, from 9 per 1,000 to 10 per 1,000. The rate difference between Indigenous and non-Indigenous Australians hospitalised also increased by 13% (Table 1.03.17, Figure 1.03.2).

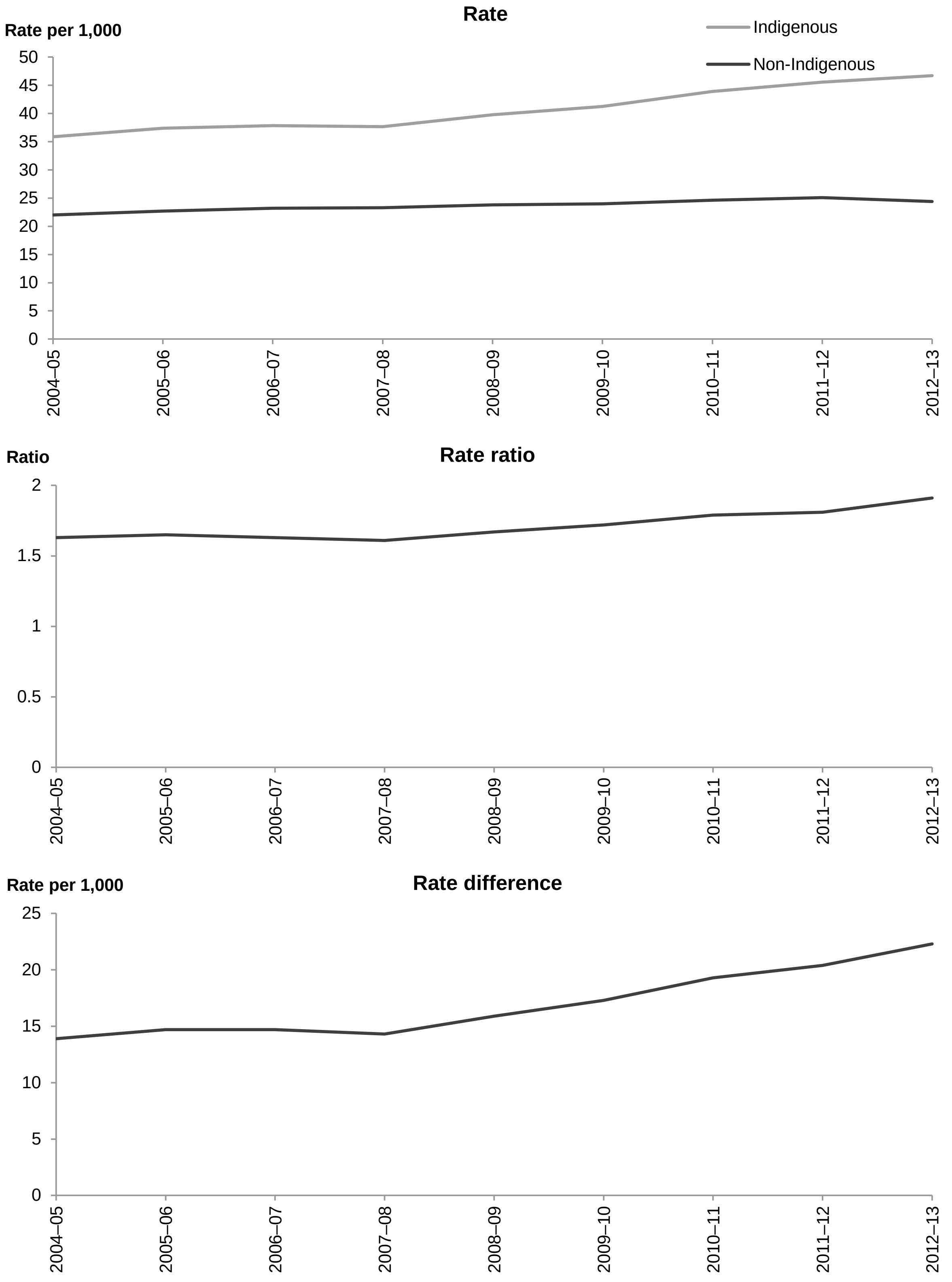
General practitioner encounters

Current period

Note: More than 1 injury–related problem can be managed in an encounter with a GP.

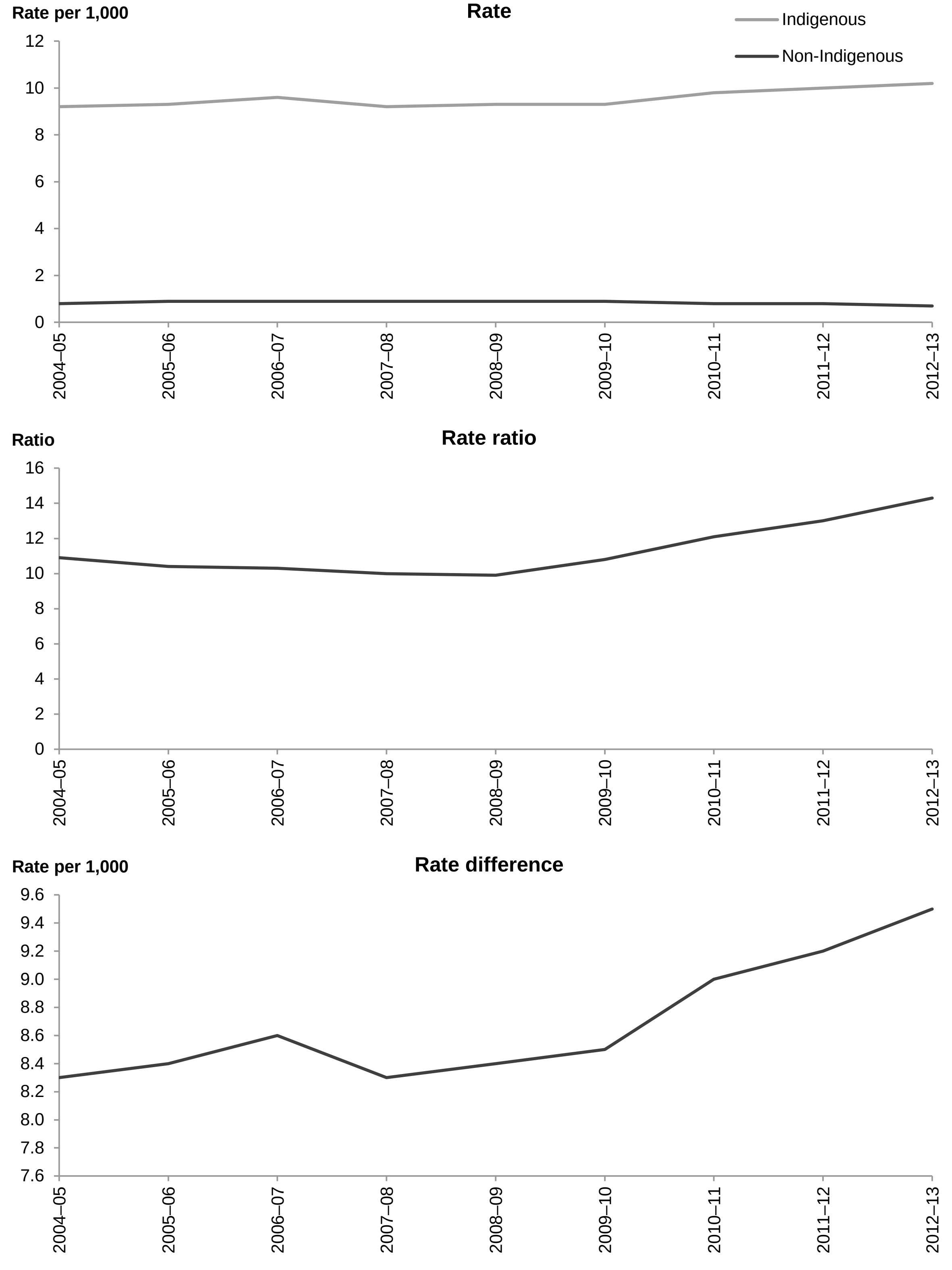
Over the 5 years April 2008–March 2009 to April 2012–March 2013:

- The rate of injuries managed per 1,000 GP encounters for Indigenous Australians was 73 per 1,000 encounters. After adjusting for age differences, the rate was similar between encounters for Indigenous and non-Indigenous Australians (66 per 1,000 and 65 per 1,000 encounters respectively).
- Injuries accounted for 5% of all problems managed by GPs for Indigenous patients (Table 1.03.18).



Source: Table 1.03.12.

Figure 1.03.1: Age-standardised hospitalisation rates, rate ratios and rate differences for injury and poisoning, NSW, Vic, Qld, WA, SA and NT combined, 2004–05 to 2012–13



Source: Table 1.03.17

Figure 1.03.2: Age-standardised hospitalisation rates, rate ratios and rate differences between Indigenous and non-Indigenous Australians for injury and poisoning and a first reported external cause of assault, NSW, Vic, Qld, WA, SA and NT combined, 2004–05 to 2012–13

Table 1.03.1: Selected multiple causes of death, by Indigenous status and sex, external causes (injury and poisoning), NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indigenous	Non-Indigenous
	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Crude mean no. of causes(h)	Crude mean no. of causes(h)
Males														
Intentional self-harm (X60–X84, Y870)	408	6.4	2.7	6,160	2.4	2.4	408	6.4	2.7	6,173	2.4	2.4	2.8	2.8
Accidents														
Transport accidents (V01–V99)	305	4.8	2.1	3,961	1.6	1.5	308	4.8	2.1	4,046	1.6	1.6	3.0	2.8
Accidental drowning or accidental threats to breathing (W65–W84)	56	0.9	0.5	1,029	0.4	0.4	105	1.7	1.1	2,958	1.2	1.2	3.1	3.4
Accidental poisoning by and exposure to noxious substances (X40–X49)	125	2.0	0.9	2,209	0.9	0.9	192	3.0	1.5	2,601	1.0	1.0	4.1	3.9

(continued)

Table 1.03.1 (continued): Selected multiple causes of death, by Indigenous status and sex, external causes (injury and poisoning), NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indigenous	Non-Indigenous
	Deaths	% of total deaths	Age-std.[g] % of total deaths	Deaths	% of total deaths	Age-std.[g] % of total deaths	Deaths	% of total deaths	Age-std.[g] % of total deaths	Deaths	% of total deaths	Age-std.[g] % of total deaths	Crude mean no. of causes[h]	Crude mean no. of causes[h]
Exposure to electric current/smoke/fire/ animals/nature (W85–W99, X00–X39)	31	0.5	0.3	366	0.1	0.1	33	0.5	0.3	455	0.2	0.2	3.0	3.1
Accidental falls (W00–W19)	49	0.8	0.7	2,455	1.0	1.0	60	0.9	0.9	3,216	1.3	1.3	4.2	4.4
Exposure to inanimate mechanical forces (W20–W49)	15	0.2	n.p.	265	0.1	0.1	16	0.3	n.p.	281	0.1	0.1	3.2	2.9
Other external causes of accidental injury (W50–W64, X50–X59)	17	0.3	n.p.	1,292	0.5	0.5	42	0.7	0.7	3,090	1.2	1.3	3.5	5.1
Assault (X85–Y09, Y871)	114	1.8	0.8	521	0.2	0.2	114	1.8	0.8	527	0.2	0.2	3.0	2.7
Complications of medical or surgical care (Y40–Y84)	10	0.2	n.p.	436	0.2	0.2	117	1.8	1.7	5,434	2.1	2.1	5.0	5.1
Other external causes[i]	63	1.0	0.5	1,052	0.4	0.4	96	1.5	1.0	1,747	0.7	0.7	3.4	3.6

(continued)

Table 1.03.1 (continued): Selected multiple causes of death, by Indigenous status and sex, external causes (injury and poisoning), NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f]

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indigenous	Non-Indigenous
	Deaths	% of total deaths	Age-std.[g] % of total deaths	Deaths	% of total deaths	Age-std.[g] % of total deaths	Deaths	% of total deaths	Age-std.[g] % of total deaths	Deaths	% of total deaths	Age-std.[g] % of total deaths	Crude mean no. of causes[h]	Crude mean no. of causes[h]
							Males							
Total external causes	1,193	18.8	9.1	19,746	7.7	7.7	1,417	22.3	12.5	29,390	11.5	11.5	3.1	3.4
All causes	**6,361**	**100.0**	**100.0**	**254,922**	**100.0**	**100.0**	**6,361**	**100.0**	**100.0**	**254,922**	**100.0**	**100.0**	**3.3**	**3.2**
							Females							
Intentional self-harm (X60–X84, Y870)	153	2.9	1.2	1,868	0.8	0.9	153	2.9	1.2	1,875	0.8	0.9	2.9	3.0
Accidents														
Transport accidents (V01–V99)	147	2.8	1.2	1,321	0.5	0.7	148	2.8	1.3	1,344	0.6	0.7	2.9	2.6
Accidental drowning or accidental threats to breathing (W65–W84)	22	0.4	0.2	488	0.2	0.2	60	1.1	0.8	2,042	0.8	0.9	2.2	3.8

(continued)

Table 1.03.1 (continued): Selected multiple causes of death, by Indigenous status and sex, external causes (injury and poisoning), NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indigenous	Non-Indigenous
	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Crude mean no. of causes(h)	Crude mean no. of causes(h)
Accidental poisoning by and exposure to noxious substances (X40–X49)	71	1.4	0.7	1,014	0.4	0.5	106	2.0	1.0	1,222	0.5	0.6	4.4	4.4
Exposure to electric current/smoke/fire/ animals/nature (W85–W99, X00–X39)	15	0.3	n.p.	172	0.1	0.1	17	0.3	n.p.	239	0.1	0.1	3.1	3.3
Accidental falls (W00–W19)	21	0.4	0.5	2,412	1.0	1.0	32	0.6	0.8	3,436	1.4	1.4	5.3	4.6
Exposure to inanimate mechanical forces (W20–W49)	5	0.1	n.p.	32	—	—	5	0.1	n.p.	35	—	—	3.6	3.5
Other external causes of accidental injury (W50–W64, X50–X59)	24	0.5	0.5	1,783	0.7	0.7	51	1.0	1.2	4,661	1.9	1.9	5.1	5.1
Assault (X85–Y09, Y871)	75	1.4	0.7	268	0.1	0.1	76	1.4	0.7	274	0.1	0.1	3.3	2.8

(continued)

Table 1.03.1 (continued): Selected multiple causes of death, by Indigenous status and sex, external causes (injury and poisoning), NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f]

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indigenous	Non-Indigenous
	Deaths	% of total deaths	Age-std.[g] % of total deaths	Deaths	% of total deaths	Age-std.[g] % of total deaths	Deaths	% of total deaths	Age-std.[g] % of total deaths	Deaths	% of total deaths	Age-std.[g] % of total deaths	Crude mean no. of causes[h]	Crude mean no. of causes[h]
Complications of medical or surgical care (Y40–Y84)	10	0.2	n.p.	433	0.2	0.2	117	2.2	2.0	4,473	1.9	1.9	6.2	5.1
Other external causes[i]	30	0.6	0.3	493	0.2	0.2	39	0.7	0.5	934	0.4	0.4	3.9	4.1
Total external causes	573	10.9	5.7	10,284	4.3	4.6	764	14.5	9.3	19,515	8.1	8.5	3.4	4.0
All causes	**5,251**	**100.0**	**100.0**	**240,860**	**100.0**	**100.0**	**5,251**	**100.0**	**100.0**	**240,860**	**100.0**	**100.0**	**3.4**	**3.2**
Persons														
Intentional self-harm (X60–X84, Y870)	561	4.8	2.0	8,028	1.6	1.7	561	4.8	2.0	8,048	1.6	1.8	2.8	2.8
Accidents														
Transport accidents (V01–V99)	452	3.9	1.7	5,282	1.1	1.2	456	3.9	1.8	5,390	1.1	1.2	2.9	2.7
Accidental drowning or accidental threats to breathing (W65–W84)	78	0.7	0.3	1,517	0.3	0.3	165	1.4	1.0	5,000	1.0	1.0	2.8	3.5

(continued)

Table 1.03.1 (continued): Selected multiple causes of death, by Indigenous status and sex, external causes (injury and poisoning), NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indigenous	Non-Indigenous
	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Crude mean no. of causes(h)	Crude mean no. of causes(h)
Accidental poisoning by and exposure to noxious substances (X40–X49)	196	1.7	0.8	3,223	0.7	0.7	298	2.6	1.3	3,823	0.8	0.8	4.2	4.0
Exposure to electric current/smoke/fire/ animals/nature (W85–W99, X00–X39)	46	0.4	0.2	538	0.1	0.1	50	0.4	0.2	694	0.1	0.1	3.1	3.2
Accidental falls (W00–W19)	70	0.6	0.6	4,867	1.0	1.0	92	0.8	0.8	6,652	1.3	1.3	4.5	4.5
Exposure to inanimate mechanical forces (W20–W49)	20	0.2	0.1	297	0.1	0.1	21	0.2	0.1	316	0.1	0.1	3.3	3.0
Other external causes of accidental injury (W50–W64, X50–X59)	41	0.4	0.4	3,075	0.6	0.6	93	0.8	1.0	7,751	1.6	1.6	4.4	5.1
Assault (X85–Y09, Y871)	189	1.6	0.8	789	0.2	0.2	190	1.6	0.8	801	0.2	0.2	3.1	2.7

(continued)

Table 1.03.1 (continued): Selected multiple causes of death, by Indigenous status and sex, external causes (injury and poisoning), NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indigenous	Non-Indigenous
	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Deaths	% of total deaths	Age-std.(g) % of total deaths	Crude mean no. of causes(h)	Crude mean no. of causes(h)
Complications of medical or surgical care (Y40–Y84)	20	0.2	0.2	869	0.2	0.2	234	2.0	1.9	9,907	2.0	2.0	5.6	5.1
Other external causes(i)	93	0.8	0.2	1,545	0.3	0.3	135	1.2	0.7	2,681	0.5	0.6	3.5	3.8
Total external causes	1,766	15.2	7.6	30,030	6.1	6.4	2,181	18.8	11.1	48,905	9.9	10.2	3.2	3.6
All causes	**11,612**	**100.0**	**100.0**	**495,782**	**100.0**	**100.0**	**11,612**	**100.0**	**100.0**	**495,782**	**100.0**	**100.0**	**3.4**	**3.2**

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008 (final), 2009 (final), 2010 (final), 2011 (revised) and 2012 (preliminary). For further information see Explanatory notes 29–33 and Technical note, Causes of death revisions, 2010 and 2011 in Causes of death, Australia, 2012 (cat. no. 3303.0).

(g) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(h) Mean number of causes is calculated based on the average number of causes of death present for a death with the selected underlying cause of death. This data item provides insight into co-morbidity.

(i) Includes event of undetermined intent; legal intervention and operations of war; sequelae of external cause of mortality; supplementary factors related to causes of mortality not classified elsewhere.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.03.2: Mode of transport for transport-related fatal injury by Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2005–06 to 2009–10

	Indigenous			Non-indigenous				
Mode of transport	**Count**	**Per cent**	**Rate**(a)	**Count**	**Per cent**	**Rate**(a)	**Rate ratio**(b)	**Rate difference**(c)
Car occupant(d)	274	59.8	11.9	3,682	49.3	3.6	3.3	8.3
traffic(e)	262	57.2	11.5	3,571	47.8	3.5	3.3	8.0
non-traffic(f)	11	2.4	0.4	97	1.3	0.1	4.2	0.3
Motorcyclist	17	3.7	0.7	1,169	15.7	1.2	0.6	–0.5
traffic(e)	14	3.1	0.6	1,062	14.2	1.1	0.5	–0.5
non-traffic(f)	n.p.	n.p.	n.p.	106	1.4	0.1	n.p.	n.p.
Pedal cyclist	n.p.	n.p.	n.p.	177	2.4	0.2	n.p.	n.p.
traffic(e)	n.p.	n.p.	n.p.	157	2.1	0.2	n.p.	n.p.
non-traffic(f)	0	0.0	0.0	19	0.3	0.0	0.0	0.0
Pedestrian	117	25.5	5.4	1,053	14.1	1.0	5.2	4.4
traffic(e)	106	23.1	4.9	863	11.6	0.8	5.8	4.1
non-traffic(f)	9	2.0	0.4	170	2.3	0.2	2.5	0.2
Occupant of pick-up truck or van	13	2.8	0.5	300	4.0	0.3	1.6	0.2
Occupant of heavy transport vehicle	n.p.	n.p.	n.p.	210	2.8	0.2	n.p.	n.p.
Bus occupant	n.p.	n.p.	n.p.	20	0.3	0.0	n.p.	n.p.
Animal rider or occupant of animal-drawn vehicle	n.p.	n.p.	n.p.	30	0.4	0.3	n.p.	n.p.
Occupant of special all-terrain or off-road vehicle	n.p.	n.p.	n.p.	57	0.8	0.1	n.p.	n.p.
Occupant of 3-wheeled motor vehicle	0	0.0	0.0	17	0.2	0.0	0.0	0.0
Occupant of tram	0	0.0	0.0	0	0.0	0.0	0.0	0.0
Occupant of train	0	0.0	0.0	18	0.2	0.0	0.0	0.0
Occupant of special industrial vehicle	0	0.0	0.0	28	0.4	0.0	0.0	0.0

(continued)

Table 1.03.2 (continued): Mode of transport for transport-related fatal injury by Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2005–06 to 2009–10

	Indigenous			Non-indigenous				
Mode of transport	**Count**	**Per cent**	**Rate**(a)	**Count**	**Per cent**	**Rate**(a)	**Rate ratio**(b)	**Rate difference**(c)
Occupant of special agricultural vehicle	n.p.	n.p.	n.p.	54	0.7	0.1	n.p.	n.p.
Occupant of special construction vehicle	n.p.	n.p.	n.p.	28	0.4	0.0	n.p.	n.p.
Occupant of watercraft	7	1.5	0.3	173	2.3	0.2	1.9	0.1
Occupant of aircraft	n.p.	n.p.	n.p.	189	2.5	0.2	n.p.	n.p.
Other and unspecified	13	2.8	0.6	259	3.5	0.3	2.5	0.3
Total(g)	**458**	**100.0**	**20.1**	**7,464**	**100.0**	**7.4**	**2.7**	**12.7**

n.p. not publishable because of small numbers, confidentiality or other concerns about the quality of the data.

(a) Per 100,000 population per year, adjusted by direct standardisation to the Australian population in June 2001.

(b) Ratio of age-standardised rate for persons specified as Indigenous to the equivalent rate for all other persons (specified as non-Indigenous plus Indigenous status not stated).

(c) Difference between age-standardised rate for persons specified as Indigenous to the equivalent rate for all other persons (that is, non-Indigenous or not stated).

(d) 'Mode of transport' is how a person was being conveyed when injured. Mode is a type of vehicle or being a pedestrian.

(e) 'Traffic' refers to cases in which injury was due to a vehicle accident that occurred on a public road, entirely or partly.

(f) 'Non-traffic' refers to cases in which injury was due to a vehicle accident that occurred entirely in any place other than a public road.

(g) Cases that were not specified as traffic or non-traffic are included in the total for each mode of transport. Hence the sum of traffic and non-traffic cases may be less than the total for a mode.

Source: Henley & Harrison, 2013.

Table 1.03.3: Age-specific and age-standardised rates due to fatal and serious land transport injury, NSW, Vic, Qld, WA, SA and NT, 2005–06 to 2009–10

Indicator	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65+	All ages crude	Age std.[(a)]
Fatal injury																
Indigenous males	8.7	4.4	4.4	35.2	38.6	34.5	53.4	42.6	32.2	34.8	18.6	17.0	n.p.	26.1	24.2	27.1
Other Australian males	2.0	1.4	2.1	16.6	20.4	15.6	14.1	11.9	10.7	9.9	9.5	8.4	7.9	12.7	10.6	10.5
Indigenous females	5.2	n.p.	3.3	11.0	10.9	14.0	21.8	20.2	20.6	22.9	9.6	n.p.	n.p.	10.8	11.2	12.8
Other Australian females	1.4	1.1	1.2	6.9	5.4	3.8	3.0	2.4	2.4	3.1	3.8	3.5	3.7	6.2	3.7	3.6
Rate ratio: Indigenous:other Australian	**4.0**	**2.9**	**2.4**	**2.0**	**1.9**	**2.5**	**4.4**	**4.3**	**4.0**	**4.4**	**2.1**	**2.3**	**2.7**	**1.9**	**2.5**	**2.8**
Serious injury																
Indigenous males	157.2	255.0	562.1	694.6	600.8	606.3	621.9	507.9	512.8	415.4	303.4	292.0	224.1	206.3	451.6	425.0
Other Australian males	73.2	196.8	464.8	677.7	574.1	442.2	396.6	374.6	330.2	287.9	247.9	206.8	178.9	182.2	330.3	330.6
Indigenous females	102.5	131.1	166.8	302.2	277.6	278.5	237.8	266.2	236.9	179.9	188.2	150.5	167.6	124.9	202.4	199.7
Other Australian females	43.5	118.0	167.9	272.5	224.2	171.9	141.9	136.5	127.8	125.4	124.2	118.5	111.9	155.8	147.7	147.8
Rate ratio: Indigenous:other Australian	**2.2**	**1.2**	**1.2**	**1.0**	**1.1**	**1.4**	**1.6**	**1.5**	**1.6**	**1.4**	**1.3**	**1.3**	**1.3**	**1.0**	**1.4**	**1.3**

n.p. not publishable because of small numbers, confidentiality or other concerns about the quality of the data.

(a) Per 100,000 population per year, adjusted by direct standardisation to the Australian population in June 2001.

Source: Henley & Harrison 2013.

Table 1.03.4: Indigenous persons reporting an injury in the last 4 weeks(a), by type of event, action taken and long-term result, by sex, remoteness and age, 2012–13

	Age						Sex		Remoteness		Total	
	0–14	15–24	25–34	35–44	45–54	55+	Males	Females	Non-remote	Remote		
						Per cent(b)					Number	Per cent(c)
Whether had any accidents/been hurt in last 4 weeks												
Yes	23.2	21.2	18.0	12.5	14.6	11.1	20.1	17.7	20.2	14.0	120,648	18.9
No(d)	76.8	78.8	82.0	87.5	85.4	88.9	79.9	82.3	79.8	86.0	517,676	81.1
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*638,324*	*100.0*
Total number	*229,383*	*127,722*	*86,720*	*77,855*	*60,002*	*56,642*	*317,958*	*320,366*	*502,291*	*136,033*	*638,324*	*638,324*
Type of events causing injury in last 4 weeks(e)												
Falls both high and low(f)	64.0	21.3	27.3	29.0	38.1	59.6	41.2	48.8	45.0	43.5	53,986	44.7
Hitting something or being hit by something	18.8	18.7	17.4	23.8	13.0†	33.6	18.7	20.1	19.9	16.6	23,333	19.3
Attacked by another person/fighting	8.4	8.7†	9.0†	15.5†	9.0‡	1.6‡	9.7	7.8	8.9	8.4†	10,605	8.8
Burns by fire/heat and chemicals	2.9†	8.7†	6.1†	8.9†	4.8†	3.3‡	4.9†	5.7	5.3	5.4†	6,373	5.3
Bite or sting	5.5	2.8†	2.1‡	2.4†	3.7‡	5.1‡	3.2	5.1	3.9	5.1†	4,904	4.1
Cut with knife/tool/other implement	4.3	16.7	18.1	18.3†	17.7†	12.2†	13.4	9.1	11.5	11.0	13,737	11.4
Injured while playing sport	14.8	26.2	22.2	8.8†	n.p.	n.p.	21.4	10.5	16.1	16.8	19,607	16.3
Other(g)	3.7†	12.4	12.9†	17.9	19.5†	7.2‡	9.5	9.1	9.6	8.0	11,234	9.3
Total (persons with injury in last 4 weeks)	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*120,648*	*100.0*
Action taken for injury sustained in last 4 weeks												
Went to community clinic or hospital	9.6	23.1	29.0	27.3	18.1†	17.4†	19.1	15.9	14.7	33.0	21,204	17.6
Treated the injury at home	15.4	17.0	14.0	11.5†	17.1†	15.2†	15.5	15.1	15.7	13.4	18,530	15.4
Other	11.8	14.8	15.9	13.1†	8.3†	8.7†	10.3	15.4	13.3	9.5†	15,343	12.7

(continued)

Table 1.03.4 (continued): Indigenous persons reporting an injury in the last 4 weeks[(a)], by type of event, action taken and long-term result, by sex, remoteness and age, 2012–13

	Age						Sex		Remoteness		Total	
	0–14	**15–24**	**25–34**	**35–44**	**45–54**	**55+**	**Males**	**Females**	**Non-remote**	**Remote**	**Total**	
						Per cent[(b)]					**Number**	**Per cent[(c)]**
Subtotal—action taken	*36.8*	*54.9*	*58.9*	*52.0*	*43.6*	*41.2*	*44.9*	*46.5*	*43.7*	*55.9*	*55,077*	*45.7*
No action taken	63.2	45.1	41.1	48.0	56.4	58.8	55.1	53.5	56.3	44.1	65,571	54.3
Total (persons with injury in last 4 weeks)	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*120,648*	*100.0*
Total number	*53,142*	*27,094*	*15,624*	*9,724*	*8,773*	*6,291*	*63,968*	*56,680*	*101,638*	*19,009*	*120,648*	*120,648*
Type of injuries sustained (most recent event)[(e)]												
Fractures	1.6†	7.8†	9.3†	9.9†	4.9‡	7.8‡	6.4	5.4†	5.8	6.5†	3,128	6.0
Dislocations, sprains, strains, torn muscles/ligaments	6.7†	33.3	40.0	19.6†	21.4†	18.2†	25.6	18.9	22.8	20.6	11,773	22.4
Open wounds/cuts	44.8	28.3	22.1	36.7	48.1	26.7†	34.9	35.2	33.7	40.9	18,413	35.1
Bruising	37.0	19.5†	26.1	20.8†	14.8†	40.4	19.9	35.8	27.8	26.1	14,432	27.5
Burns and scalds	4.7†	6.4†	3.6‡	4.5‡	n.p.	n.p.	2.8†	7.3	5.0	4.6†	2,587	4.9
Other[(h)]	18.9	12.3†	11.5†	22.1†	6.9‡	18.9†	17.0	13.4	16.3	11.0	8,051	15.3
Total (persons who took action for an injury in last 4 weeks)	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*52,525*	*100.0*
Whether went to hospital for treatment (most recent injury)												
Went to hospital and stayed overnight	2.1†	3.7†	3.4‡	7.5‡	9.6‡	3.6‡	4.5†	3.2†	2.5†	9.8†	2,027	3.9
Went to hospital and did not stay overnight	12.6	19.6	22.2†	20.9†	15.6‡	16.8†	24.7	9.2	16.1	22.4	9,099	17.3
Subtotal—went to hospital	*14.7*	*23.2*	*25.6†*	*28.3*	*25.2†*	*20.4†*	*29.1*	*12.4*	*18.6*	*32.3*	*11,127*	*21.2*
Did not attend hospital	85.3	76.8	74.4	71.7	74.8	79.6	70.9	87.6	81.4	67.7	41,399	78.8
Total (persons who took action for an injury in last 4 weeks)	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*52,525*	*100.0*

(continued)

Table 1.03.4 (continued): Indigenous persons reporting an injury in the last 4 weeks[a], by type of event, action taken and long-term result, by sex, remoteness and age, 2012–13

	Age						Sex		Remoteness		Total	
	0–14	15–24	25–34	35–44	45–54	55+	Males	Females	Non-remote	Remote		
						Per cent[b]					Number	Per cent[c]
Whether consulted medical professional/s outside of hospital (most recent injury)[e]												
Doctor, general practitioner	17.3	36.2	43.5	30.2	26.8†	32.3†	27.2	32.1	29.7	28.7	15,501	29.5
Nurse, sister or other health worker	9.3	7.2†	9.4†	10.2†	3.0‡	2.6‡	8.1	8.0	4.8	22.2	4,241	8.1
Subtotal—yes, saw medical professional/s outside hospital	*26.6*	*43.4*	*52.9*	*40.4*	*29.8†*	*34.9†*	*35.3*	*40.1*	*34.5*	*50.9*	*19,741*	*37.6*
Did not visit medical professional[d]	73.4	56.6	47.1	59.6	70.2	65.1	64.7	59.9	65.5	49.1	32,784	62.4
Total (persons who took action for an injury in last 4 weeks)	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*52,525*	*100.0*
Total number	*18,091*	*14,182*	*9,011*	*4,984*	*3,709*	*2,549*	*27,518*	*25,008*	*42,604*	*9,922*	*52,525*	*52,525*
Whether suffered injury while under the influence of alcohol or other drug(s)[i]												
Yes	. .	9.1†	14.9†	n.p.	12.7‡	n.p.	11.8†	9.3†	10.1	13.2†	3,660	10.6
No	. .	90.9	85.1	n.p.	87.3	n.p.	88.2	90.7	89.9	86.8	30,775	89.4
Total (15+ years reporting injury in last 4 weeks and action taken)	. .	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*34,435*	*100.0*
Total number	. .	*14,182*	*9,011*	*4,984*	*3,709*	*2,549*	*18,267*	*16,168*	*28,232*	*6,203*	*34,435*	*34,435*
Whether has long-term health condition/disability as a result of an accident or injury												
Yes	5.7†	24.4	34.0	32.9	39.6	29.0	29.7	24.4	26.9	27.6	54,676	27.1
No	94.3	75.6	66.0	67.1	60.4	71.0	70.3	75.6	73.1	72.4	147,424	72.9

(continued)

Table 1.03.4 (continued): Indigenous persons reporting an injury in the last 4 weeks[(a)], by type of event, action taken and long-term result, by sex, remoteness and age, 2012–13

	Age						Sex		Remoteness		Total	
	0–14	15–24	25–34	35–44	45–54	55+	Males	Females	Non-remote	Remote		
						Per cent[(b)]					Number	Per cent[(c)]
Total (persons reporting long-term condition/disability)	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*202,100*	*100.0*
Total number[(j)]	*37,239*	*34,295*	*26,935*	*34,413*	*34,350*	*34,867*	*100,207*	*101,893*	*160,446*	*41,654*	*202,100*	*202,100*
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**. .**	
Total persons	**229,383**	**127,722**	**86,720**	**77,855**	**60,002**	**56,642**	**317,958**	**320,366**	**502,291**	**136,033**	**638,324**	**. .**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons responding they had any accidents, hurt themselves, or been hurt by someone or something in the last 4 weeks.

(b) Percentages add within rows.

(c) Distribution of total Indigenous population.

(d) Includes ‘don’t know’.

(e) Multiple response item, sum of components may be greater than total.

(f) Includes Low fall (less than 1 metre) and High fall (more than 1 metre).

(g) Includes car accident and nearly drowned.

(h) Includes internal injury, concussion, choking and poisoning.

(i) Persons aged 15 and over who sustained an injury in most recent event in last 4 weeks and took action.

(j) Excludes ‘not known’.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.03.5: Indigenous persons reporting an injury in the last 4 weeks, by remoteness, age, sex and state/territory, 2012–13[(a)]

	Remoteness						Overall population distribution
	Non-remote		Remote		Total		
	Number	Rate[(b)]	Number	Rate[(b)]	Number	Rate[(b)]	Per cent[(c)]
Age							
0–14	44,824	24.3	8,318	18.4	53,142	23.2	35.9
15–24	22,715	22.3	4,379	17.0	27,094	21.2	20.0
25–34	12,927	19.6	2,698	12.9	15,624	18.0	13.6
35–44	8,119	13.5	1,605	9.0	9,724	12.5	12.2
45–54	7,617	16.4	1,156	8.6	8,773	14.6	9.4
55+	5,437	12.4	854	6.7	6,291	11.1	8.9
Sex							
Males	53,198	21.3	10,770	15.9	63,968	20.1	49.8
Females	48,440	19.2	8,240	12.1	56,680	17.7	50.2
State/territory							
NSW	37,522	19.6	1,474†	16.3†	38,996	19.4	31.5
Vic	12,213	26.7	0	0.0	12,213	26.7	7.2
Qld	26,985	18.4	4,921	14.4	31,907	17.7	28.3
SA	7,408	25.1	810	13.4	8,218	23.1	5.6
WA	8,411	17.2	6,114	18.7	14,525	17.8	12.8
Tas	4,935	21.5	154‡	20.0‡	5,090	21.5	3.7
NT	2,702	23.8	5,536	10.4	8,238	12.8	10.1
ACT	1,461	24.8	0	0.0	1,461	24.8	0.9
Total per cent	**. .**	**20.2**	**. .**	**14.0**	**. .**	**18.9**	**100.0**
Total number	**101,638**	**. .**	**19,009**	**. .**	**120,648**	**. .**	**. .**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons responding they had any accidents, hurt themselves, or been hurt by someone or something in the last 4 weeks.

(b) Number of persons reporting injuries per 100.

(c) Distribution of total Indigenous population.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.03.6: Selected socioeconomic characteristics by Indigenous persons (15 years and over) reporting an injury in the last 4 weeks, 2012–13

	Injury[a]	No injury	Total		Overall population distribution
		Per cent[b]		Number	Per cent[c]
SEIFA[d]					
1st quintile (most disadvantaged)	15.3	84.7	100.0	211,804	51.8
5th quintile (most advantaged)	22.7	77.3	100.0	15,072	3.7
Ratio most disadvantaged/most advantaged	*0.7*	*1.1*	*1.0*	*14.1*	*14.0*
Employment					
Employed	17.3	82.7	100.0	187,107	45.8
Unemployed	18.4	81.4	100.0	50,987	12.5
Not in the labour force	15.1	84.8	100.0	170,847	41.8
Ratio unemployed/employed	*1.1*	*1.0*	*1.0*	*0.3*	*0.3*
Has non-school qualification[e]					
Yes	18.9	81.0	100.0	163,249	39.9
No	14.9	85.0	100.0	245,692	60.1
Ratio no/yes	*0.8*	*1.0*	*1.0*	*1.5*	*1.5*
Highest year of school completed					
Year 12	18.5	81.5	100.0	100,362	24.5
Year 9 or below[f]	13.3	86.5	100.0	119,529	29.2
Ratio Year 9 or below/Year 12	*0.7*	*1.1*	*1.0*	*1.2*	*1.2*
Self-assessed health status					
Excellent/very good/good	15.3	84.6	100.0	307,649	75.2
Fair/poor	20.2	79.7	100.0	101,292	24.8
Ratio fair, poor/excellent, very good, good	*1.3*	*0.9*	*1.0*	*0.3*	*0.3*
Total number of persons 15+	**67,506**	**341,093**	. .	**408,941**	**100.0**

(a) Self-reported data consisting of persons who reported they had any accidents, hurt themselves, or been hurt by someone or something in the last 4 weeks.

(b) Percentages add within rows.

(c) Distribution of total population.

(d) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(e) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED) (includes for example, bachelor degree or higher, diploma, advanced diploma, certificate).

(f) Year 9 or below includes never attended school.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.03.7: Selected household and health risk factors, by Indigenous persons (15 years and over) reporting injury in the last 4 weeks, 2012–13

	Injury(a)	No injury(b)	Total		Overall population distribution
	Per cent(c)			Number	Per cent(d)
Equivalised household income(e)					
1st quintile (lowest)	15.2	84.8	100.0	140,304	42.7
4th/5th quintile (highest)	16.6	83.4	100.0	55,728	17.0
Ratio lowest/highest	*0.9*	*1.0*	*1.0*	*2.5*	*2.5*
Total number	*56,160*	*272,530*	*. .*	*328,690*	*328,690*
Financial stress—whether household could raise $2,000 in an emergency(e)					
Yes	16.9	83.1	100.0	177,097	46.2
No	16.0	84.0	100.0	206,614	53.8
Ratio Yes/No	1.1	1.0	1.0	0.9	0.9
Total number	62,951	320,760	. .	383,711	383,711
Household had day/s without money for basic living expenses in last 12 months					
Yes	18.8	81.2	100.0	164,764	40.5
No	14.9	85.1	100.0	241,932	59.5
Ratio Yes/No	*1.3*	*1.0*	*1.0*	*0.7*	*0.7*
Total number	*67,097*	*339,599*	*. .*	*406,696*	*406,696*
Government pension/allowance main source of personal cash income(e)					
Yes	15.0	85.0	100.0	182,663	46.6
No	18.4	81.6	100.0	209,150	53.4
Ratio Yes/No	*0.8*	*1.0*	*1.0*	*0.9*	*0.9*
Total number	*65,783*	*326,031*	*. .*	*391,813*	*391,813*
Housing tenure type					
Owner	17.6	82.4	100.0	124,490	30.6
Renter	16.0	84.0	100.0	281,001	69.0
Ratio renter/owner	*0.9*	*1.0*	*1.0*	*2.3*	*2.3*
Total number(f)	*67,097*	*339,914*	*. .*	*407,011*	*407,011*
Lives in overcrowded household(g)					
Yes	14.1	85.9	100.0	81,548	20.1
No	17.1	82.9	100.0	325,148	79.9
Ratio yes/no	*0.8*	*1.0*	*1.0*	*0.3*	*0.3*
Total number	*67,097*	*339,599*	*. .*	*406,696*	*406,696*

(continued)

Table 1.03.7 (continued): Selected household and health risk factors, by Indigenous persons (15 years and over) reporting injury in the last 4 weeks, 2012–13

	Injury[(a)]	No injury[(b)]	Total		Overall population distribution
	Per cent[(c)]			Number	Per cent[(d)]
Disability status[(h)]					
Has profound, severe or moderate core activity limitation	23.0	77.0	100.0	51,009	12.5
Has a schooling/employment restriction only	22.9	77.1	100.0	44,580	10.9
Has unspecified limitation or restriction	15.9	84.1	100.0	88,239	21.6
Total with disability/long-term health condition	*19.6*	*80.4*	*100.0*	*183,828*	*45.0*
No disability/long-term health condition	14.0	86.0	100.0	225,113	55.0
Ratio disability/no disability	*1.4*	*0.9*	*1.0*	*0.8*	*0.8*
Psychological distress (Kessler 5)[(i)(j)]					
Low/moderate	14.3	85.7	100.0	252,230	69.8
High/very high	19.2	80.8	100.0	109,134	30.2
Ratio high/very high: low/moderate	*1.3*	*0.9*	*1.0*	*0.4*	*0.4*
Total number[(k)]	*56,988*	*304,376*	. .	*361,364*	*361,364*
Stressors experienced in last 12 months[(l)]					
No stressors	10.4	89.6	100.0	107,171	26.3
Experienced one or more stressor	18.6	81.4	100.0	300,159	73.5
Ratio one or more/no stressors	*1.8*	*0.9*	*1.0*	*2.8*	*2.8*
Total number	*67,449*	*340,770*	. .	*408,220*	*408,220*
Long term health conditions[(m)]					
One	14.5	85.5	100.0	76,185	18.6
Two	16.8	83.2	100.0	63,404	15.5
Three or more	19.3	80.7	100.0	189,444	46.3
Total number of persons 15+	**67,506**	**341,435**	**. .**	**408,941**	**408,941**

(continued)

Table 1.03.7 (continued): Selected household and health risk factors, by Indigenous persons (15 years and over) reporting injury in the last 4 weeks, 2012–13

(a) Self-reported data consisting of persons responding they had any accidents, hurt themselves, or been hurt by someone or something in the last 4 weeks.

(b) Includes ‘don’t know’.

(c) Percentages add within rows.

(d) Distribution of total Indigenous population.

(e) Excludes ‘not stated’ and ‘not known’.

(f) Total includes ‘Other’ and ‘Life Tenure scheme’.

(g) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(h) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities. Only current difficulties with education and/or employment were collected. Respondents aged 65 years and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(i) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25.

(j) Total population is 18 years and over.

(k) Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(l) Stressors experienced by self, family or friends.

(m) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.03.8: Age-specific hospitalisation rates (per 1,000 population) for a principal diagnosis of injury and poisoning, by Indigenous status and sex, Australia, 2011–12 to 2012–13(a)

									All ages(b)	
	0–4	**5–14**	**15–24**	**25–34**	**35–44**	**45–54**	**55–64**	**65+**	**Crude**	**Age std.(c)**
Males										
Indigenous	26.1	25.0	49.2	61.2	61.6	54.3	46.8	50.2	44.0	49.0
Non-Indigenous	19.0	19.6	33.7	26.3	23.8	23.3	25.2	49.8	28.3	28.2
Rate ratio(d)	1.4	1.3	1.5	2.3	2.6	2.3	1.9	1.0	1.6	1.7
Rate difference(e)	7.1	5.4	15.5	34.9	37.8	30.9	21.6	0.4	15.7	20.8
Females										
Indigenous	20.9	14.8	33.6	51.8	54.0	44.7	41.9	51.3	35.1	41.0
Non-Indigenous	14.4	12.0	16.5	13.1	15.0	17.3	21.5	62.2	22.9	21.2
Rate ratio(d)	1.5	1.2	2.0	3.9	3.6	2.6	1.9	0.8	1.5	1.9
Rate difference(e)	6.5	2.8	17.1	38.7	39.0	27.4	20.4	–11.0	12.2	19.9
Persons(f)										
Indigenous	23.5	20.0	41.6	56.5	57.7	49.3	44.3	50.8	39.6	45.0
Non-Indigenous	16.7	15.9	25.3	19.7	19.4	20.3	23.4	56.5	25.6	24.8
Rate ratio(d)	1.4	1.3	1.6	2.9	3.0	2.4	1.9	0.9	1.5	1.8
Rate difference(e)	6.8	4.1	16.3	36.7	38.3	29.0	20.9	–5.7	14.0	20.2

(a) Data are reported by place of residence of the patient and include separations from public and private hospitals in all jurisdictions.

(b) All age data includes age not stated.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes S00–Y98.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.9: Hospitalisations for principal diagnosis of injury and poisoning, by Indigenous status and sex, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
NSW								
Males	7,600	35.8	40.1	196,497	27.9	27.7	1.4	12.4
Females	5,230	24.6	29.2	161,007	22.5	20.2	1.4	9.0
Persons[(h)]	12,830	30.2	34.6	357,507	25.2	24.1	1.4	10.5
Vic								
Males	1,435	29.6	33.8	149,867	27.1	26.9	1.3	6.9
Females	1,019	21.0	26.2	129,149	22.9	20.9	1.3	5.3
Persons[(h)]	2,454	25.3	30.0	279,020	25.0	24.1	1.2	6.0
Qld								
Males	8,247	42.8	48.1	131,357	30.1	30.3	1.6	17.8
Females	6,025	31.0	37.2	102,811	23.5	22.5	1.7	14.7
Persons[(h)]	14,272	36.9	42.7	234,169	26.8	26.5	1.6	16.2
WA								
Males	5,584	62.5	68.6	69,175	29.2	29.6	2.3	39.0
Females	4,918	54.2	61.9	54,394	23.4	22.6	2.7	39.3
Persons[(h)]	10,502	58.3	65.2	123,569	26.3	26.3	2.5	38.9
SA								
Males	1,888	49.9	56.3	42,077	26.3	25.7	2.2	30.6
Females	1,604	41.6	47.1	37,682	23.1	20.3	2.3	26.8
Persons[(h)]	3,492	45.7	51.7	79,760	24.7	23.1	2.2	28.5
Tas								
Males	n.p.	16.0	17.1	n.p.	22.5	21.9	0.8	–4.8
Females	n.p.	11.0	13.3	n.p.	18.8	16.7	0.8	–3.4
Persons[(h)]	n.p.	13.5	15.1	n.p.	20.6	19.4	0.8	–4.2
NT								
Males	n.p.	64.5	68.8	n.p.	31.7	33.4	2.1	35.4
Females	n.p.	69.2	74.0	n.p.	17.4	20.0	3.7	54.1
Persons[(h)]	n.p.	66.8	71.6	n.p.	25.0	27.2	2.6	44.4
ACT								
Males	n.p.	30.8	29.4	n.p.	23.3	23.7	1.2	5.7
Females	n.p.	18.9	21.1	n.p.	19.0	19.1	1.1	2.0
Persons[(h)]	n.p.	25.1	25.6	n.p.	21.1	21.5	1.2	4.1
Australia								
Males	**30,000**	**44.0**	**49.0**	**620,103**	**28.3**	**28.2**	**1.7**	**20.8**
Females	**24,079**	**35.1**	**41.0**	**507,521**	**22.9**	**21.2**	**1.9**	**19.8**
Persons[(h)]	**54,079**	**39.5**	**45.0**	**1,127,633**	**25.6**	**24.8**	**1.8**	**20.2**

(continued)

Table 1.03.9 (continued): Hospitalisations for principal diagnosis of injury and poisoning, by Indigenous status and sex, Australia, 2011–12 to 2012–13(a)(b)(c)(d)

(a) Data are reported by place of residence of the patient and include separations from public and private hospitals in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes S00–T98.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+. As different age-groupings were used, rates for Tasmania and the Australian Capital Territory cannot be compared with the rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.10: Hospitalisations for principal diagnosis of injury and poisoning by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[(a)(b)]

	Indigenous		Non-Indigenous			
	Number	**No. per 1,000**[(c)]	**Number**	**No. per 1,000**[(c)]	**Ratio**[(d)]	**Difference**[(e)]
Major cities	13,423	32.9	743,428	23.1	1.4	9.7
Inner regional	8,697	33.0	234,625	27.8	1.2	5.2
Outer regional[(f)]	11,375	43.6	114,471	29.3	1.5	14.3
Remote[(g)]	8,435	87.6	17,114	33.1	2.6	54.5
Very remote	11,744	68.0	6,902	33.4	2.0	34.6
Total[(h)]	**54,079**	**45.0**	**1,127,633**	**24.8**	**1.8**	**20.2**

(a) Data are reported by place of residence of the patient and include separations from public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes S00–T98.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS 2011 Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.11a: Age-standardised hospitalisation separations for injury and poisoning, Qld, WA, SA and NT, 1998–99 to 2012–13[(a)(b)]

	Indigenous separations			Non-Indigenous separations		
	Males	**Females**	**Persons**[(c)]	**Males**	**Females**	**Persons**[(c)]
1998–99	7,048	5,618	12,666	87,127	59,751	146,878
1999–00	6,649	5,643	12,292	89,170	60,935	150,105
2000–01	6,735	5,523	12,259	87,758	61,459	149,219
2001–02	7,208	5,737	12,946	88,035	61,764	149,801
2002–03	6,867	5,661	12,528	85,992	61,731	147,728
2003–04	6,909	5,821	12,730	89,287	64,095	153,382
2004–05	7,145	5,884	13,029	92,575	66,157	158,732
2005–06	7,550	6,169	13,719	96,719	69,693	166,412
2006–07	7,637	6,522	14,159	102,203	72,576	174,779
2007–08	7,944	6,462	14,406	107,232	75,769	183,002
2008–09	8,412	6,850	15,262	112,462	82,128	194,590
2009–10	8,896	7,264	16,160	113,409	84,710	198,119
2010–11	9,497	7,933	17,430	116,709	90,017	206,726
2011–12	9,742	8,513	18,255	120,396	94,904	215,302
2012–13	10,489	8,847	19,336	127,487	102,470	229,957
Annual change[(d)]	251.4	226.7	478.1	3,003.8	2,958.5	5,962.2
Per cent change[(e)]	57.2	63.8	60.1	52.5	77.9	62.6

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
2. Principal diagnosis code used unless specified otherwise.
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10-AM code S00–T98.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.11b: Age-standardised hospitalisation rates for injury and poisoning, Qld, WA, SA and NT, 1998–99 to 2012–13(a)(b)

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	Females	Persons(c)	Males	Females	Persons(c)
1998–99	53.6	45.3	49.4	26.4	17.6	22.2
1999–00	48.8	43.9	46.3	26.8	17.6	22.4
2000–01	49.3	42.3	45.8	26.1	17.5	21.9
2001–02	50.7	42.7	46.7	25.8	17.2	21.7
2002–03	46.3	40.8	43.6	24.8	16.9	21.0
2003–04	47.0	41.7	44.4	25.4	17.2	21.4
2004–05	47.8	41.0	44.5	25.8	17.4	21.8
2005–06	49.9	41.6	45.7	26.4	18.0	22.4
2006–07	48.0	42.8	45.5	27.3	18.3	23.0
2007–08	49.0	42.2	45.7	27.9	18.7	23.4
2008–09	51.8	43.2	47.5	28.5	19.8	24.3
2009–10	53.1	44.6	48.8	28.2	19.9	24.2
2010–11	56.2	47.7	51.9	28.4	20.7	24.7
2011–12	56.1	50.3	53.3	28.8	21.4	25.2
2012–13	58.8	51.3	55.1	29.7	22.6	26.3
Annual change(d)	0.5	0.4	0.5	0.3	0.3	0.3
Per cent change(e)	15.4	15.3	15.4	14.5	29.8	20.2

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Principal diagnosis code used unless specified otherwise.
5. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10-AM code S00–T98.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.11c: Age-standardised hospitalisation rate ratios and rate differences for injury and poisoning, Qld, WA, SA and NT, 1998–99 to 2012–13(a)(b)

	Rate ratio(c)			Rate difference(d)		
	Males	**Females**	**Persons(e)**	**Males**	**Females**	**Persons(e)**
1998–99	2.0	2.6	2.2	27.2	27.7	27.2
1999–00	1.8	2.5	2.1	21.9	26.3	23.9
2000–01	1.9	2.4	2.1	23.2	24.9	23.9
2001–02	2.0	2.5	2.2	24.8	25.5	25.0
2002–03	1.9	2.4	2.1	21.5	23.9	22.6
2003–04	1.9	2.4	2.1	21.7	24.5	23.0
2004–05	1.9	2.4	2.0	22.1	23.6	22.7
2005–06	1.9	2.3	2.0	23.5	23.6	23.3
2006–07	1.8	2.3	2.0	20.7	24.5	22.5
2007–08	1.8	2.3	1.9	21.1	23.6	22.2
2008–09	1.8	2.2	2.0	23.3	23.4	23.2
2009–10	1.9	2.2	2.0	25.0	24.6	24.6
2010–11	2.0	2.3	2.1	27.8	27.0	27.2
2011–12	2.0	2.4	2.1	27.4	28.9	28.1
2012–13	2.0	2.3	2.1	29.1	28.7	28.8
Annual change(f)	n.a.	n.a.	n.a.	0.3	0.1	0.2
Per cent change(g)	n.a.	n.a.	n.a.	16.4	5.7	11.0

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(d) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(e) Persons data includes sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Principal diagnosis code used unless specified otherwise.
5. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10-AM code S00–T98.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.12: Age-standardised hospitalisation rates, rate ratios and rate differences for injury and poisoning, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)][(b)]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(c)]	Per cent change over period[(d)]
Indigenous separations											
Males	9,849	10,660	11,015	11,251	12,079	12,848	13,602	14,160	15,106	638.3	52.5
Females	7,814	8,185	8,672	8,639	9,311	9,835	10,694	11,664	11,945	536.7	57.3
Persons[(e)]	17,663	18,845	19,687	19,890	21,390	22,683	24,297	25,824	27,051	1,175.0	54.6
Non-Indigenous Australian separations											
Males	236,633	247,369	258,439	265,942	275,609	281,073	290,134	299,658	294,580	7,786.3	25.8
Females	178,958	188,176	194,965	200,358	211,446	219,050	231,627	243,487	244,038	8,637.8	38.8
Persons[(e)]	415,595	435,549	453,409	466,304	487,058	500,124	521,763	543,151	538,621	16,424.0	31.4
Indigenous rate (separations per 1,000)											
Males	39.2	41.8	41.1	41.5	44.0	46.0	48.6	49.3	51.0	1.5	30.7
Females	32.6	33.1	34.4	33.8	35.5	36.6	39.3	41.8	42.4	1.3	33.1
Persons[(e)]	35.9	37.4	37.9	37.7	39.8	41.2	43.9	45.6	46.7	1.4	31.7
Non-Indigenous Australian rate (separations per 1,000)											
Males	25.7	26.5	27.2	27.4	27.8	27.8	28.2	28.6	27.6	0.3	8.2
Females	17.9	18.5	18.8	19.0	19.6	19.9	20.6	21.3	20.9	0.4	18.6
Persons[(e)]	22.0	22.7	23.2	23.3	23.8	24.0	24.6	25.1	24.4	0.3	12.2
Rate ratio[(f)]											
Males	1.5	1.6	1.5	1.5	1.6	1.7	1.7	1.7	1.8	n.a.	n.a.
Females	1.8	1.8	1.8	1.8	1.8	1.8	1.9	2.0	2.0	n.a.	n.a.
Persons[(e)]	1.6	1.6	1.6	1.6	1.7	1.7	1.8	1.8	1.9	n.a.	n.a.

(continued)

Table 1.03.12 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences for injury and poisoning, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a][b]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[c]	Per cent change over period[d]
Rate difference[g]											
Males	13.4	15.3	13.9	14.1	16.2	18.2	20.4	20.6	23.4	1.2	78.5
Females	14.6	14.6	15.6	14.9	15.9	16.7	18.7	20.5	21.4	0.9	52.6
Persons[f]	13.9	14.7	14.7	14.3	15.9	17.3	19.3	20.4	22.3	1.0	65.7

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(e) Persons data includes sex not stated and indeterminate.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Principal diagnosis code used unless specified otherwise.
5. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10-AM code S00–T98.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.13: Hospitalisations of Indigenous persons for principal diagnosis of injury and poisoning and certain other consequences of external causes, by type of injury and sex, Australia, 2011–12 to 2012–13[a][b]

Principal diagnosis	Number	Per cent [d]	No per 1,000[e]	Ratio[f]	Difference[g]
			Males		
Injuries (S00–T19)	23,626	78.8	37.0	1.7	15.7
Complications of surgical and medical care n.e.c. (T80–T89)	2,928	9.8	6.7	1.5	2.2
Poisoning (T36–T50)	1,514	5.0	2.5	2.4	1.5
Other and unspecified effects of external causes/certain early complications of trauma (T66–T79)	636	2.1	1.0	1.6	0.4
Burns and frostbite (T20–T35)	912	3.0	1.3	2.8	0.8
Toxic effects of substances chiefly non-medicinal (T51–T65)	384	1.3	0.6	1.8	0.2
Total (S00–T98)[h]	**30,000**	**100.0**	**49.0**	**1.7**	**20.8**
			Females		
Injuries (S00–T19)	16,761	69.6	27.9	2.0	13.7
Complications of surgical and medical care n.e.c. (T80–T89)	3,424	14.2	7.3	1.7	3.1
Poisoning (T36–T50)	2,358	9.8	3.6	2.1	1.9
Other and unspecified effects of external causes/certain early complications of trauma (T66–T79)	649	2.7	1.0	1.8	0.5
Burns and frostbite (T20–T35)	627	2.6	0.8	3.6	0.6
Toxic effects of substances chiefly non-medicinal (T51–T65)	260	1.1	0.4	1.7	0.2
Total (S00–T98)[h]	**24,079**	**100.0**	**41.0**	**1.9**	**19.8**
			Persons[c]		
Injuries (S00–T19)	40,387	74.7	32.5	1.8	14.5
Complications of surgical and medical care n.e.c. (T80–T89)	6,352	11.7	7.0	1.6	2.7
Poisoning (T36–T50)	3,872	7.2	3.1	2.2	1.7
Other and unspecified effects of external causes/certain early complications of trauma (T66–T79)	1,285	2.4	1.0	1.7	0.4
Burns and frostbite (T20–T35)	1,539	2.8	1.0	3.0	0.7
Toxic effects of substances chiefly non-medicinal (T51–T65)	644	1.2	0.5	1.8	0.2
Total (S00–T98)[h]	**54,079**	**100.0**	**45.0**	**1.8**	**20.2**

(continued)

Table 1.03.13 (continued): Hospitalisations of Indigenous persons for principal diagnosis of injury and poisoning and certain other consequences of external causes, by type of injury and sex, Australia, 2011–12 to 2012–13(a)(b)

(a) Data are reported by place of residence of the patient and include separations from public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Persons data includes sex not stated and indeterminate.

(d) Proportion of male, female and total hospitalisations of Indigenous persons in the period 2011–12 to 2012–13.

(e) Directly age-standardised using the 2001 Australian standard population.

(f) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(g) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(h) Total includes sequelae of injuries, poisoning, external causes (T90–T98).

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.14: External causes for hospitalisations of Indigenous Australians with a principal diagnosis of injury and poisoning and other consequences of external causes, by sex, Australia, 2011–12 to 2012–13[(a)(b)]

External causes	Number	Per cent[(c)]	No. per 1,000[(d)]	Rate ratio[(e)]	Rate difference[(f)]
			Males		
Assault (X85–Y09)	5,852	19.5	9.5	8.0	8.3
Falls (W00–W19)	5,902	19.7	10.5	1.4	3.0
Exposure to inanimate mechanical forces (W20–W49)	4,579	15.3	6.3	1.4	1.7
Complications of medical and surgical care (Y40–Y84)	3,008	10.0	6.8	1.4	2.1
Transport accidents (V00–V99)	3,174	10.6	4.4	1.3	0.9
Other accidental exposures[(g)]	2,102	7.0	3.3	1.0	–0.1
Intentional self-harm (X60–X84)	1,540	5.1	2.5	2.9	1.6
Exposure to animate mechanical forces (W50–W64)	1,622	5.4	2.3	2.2	1.2
Exposure to electric current/smoke/fire/venomous animals and plants/forces of nature (W85–W99, X00–X39)[(h)]	1,046	3.5	1.5	2.3	0.8
Accidental poisoning by and exposure to noxious substances (X40–X49)	646	2.2	1.0	2.3	0.6
Other external causes[(i)]	515	1.7	0.8	3.1	0.6
No external causes	14	0.0	0.0	4.6	0.0
Total	**30,000**	**100.0**	**49.0**	**1.7**	**20.8**
			Females		
Assault (X85–Y09)	6,431	26.7	10.1	32.4	9.8
Falls (W00–W19)	4,539	18.9	9.4	1.1	1.1
Exposure to inanimate mechanical forces (W20–W49)	2,105	8.7	2.9	1.9	1.3
Complications of medical and surgical care (Y40–Y84)	3,545	14.7	7.5	1.7	3.1
Transport accidents (V00–V99)	1,443	6.0	2.0	1.2	0.4
Other accidental exposures[(g)]	1,265	5.3	2.1	1.1	0.2
Intentional self-harm (X60–X84)	2,423	10.1	3.6	2.3	2.0
Exposure to animate mechanical forces (W50–W64)	685	2.8	1.0	1.9	0.5
Exposure to electric current/smoke/fire/venomous animals and plants/forces of nature (W85–W99, X00–X39)[(h)]	642	2.7	0.9	2.5	0.5
Accidental poisoning by and exposure to noxious substances (X40–X49)	592	2.5	0.9	2.4	0.5
Other external causes[(i)]	403	1.7	0.7	3.0	0.4
No external causes	6	0.0	0.0	2.9	0.0
Total	**24,079**	**100.0**	**41.0**	**1.9**	**19.8**

(continued)

Table 1.03.14 (continued): External causes for hospitalisations of Indigenous Australians with a principal diagnosis of injury and poisoning and other consequences of external causes, by sex, Australia, 2011–12 to 2012–13[a][b]

External causes	Number	Per cent[c]	No. per 1,000[d]	Rate ratio[e]	Rate difference[f]
			Persons[j]		
Assault (X85–Y09)	12,283	22.7	9.8	13.0	9.0
Falls (W00–W19)	10,441	19.3	10.0	1.2	2.0
Exposure to inanimate mechanical forces (W20–W49)	6,684	12.4	4.6	1.5	1.5
Complications of medical and surgical care (Y40–Y84)	6,553	12.1	7.2	1.6	2.6
Transport accidents (V00–V99)	4,617	8.5	3.2	1.2	0.6
Other accidental exposures[g]	3,367	6.2	2.7	1.0	0.0
Intentional self-harm (X60–X84)	3,963	7.3	3.0	2.5	1.8
Exposure to animate mechanical forces (W50–W64)	2,307	4.3	1.6	2.0	0.8
Exposure to electric current/smoke/fire/venomous animals and plants/forces of nature (W85–W99, X00–X39)[h]	1,688	3.1	1.2	2.3	0.7
Accidental poisoning by and exposure to noxious substances (X40–X49)	1,238	2.3	0.9	2.4	0.5
Other external causes[i]	918	1.7	0.7	3.1	0.5
No external causes	20	0.0	0.0	3.8	0.0
Total	**54,079**	**100.0**	**45.0**	**1.8**	**20.2**

(a) Data are reported by place of residence of the patient and include separations from public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Proportion of male, female and total hospitalisations of Indigenous persons in the period 2011–12 to 2012–13.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(g) This category includes: Accidental drowning and submersion (W65–W74), accidental threats to breathing (W75–W84), overexertion, travel and privation (X50–X57), accidental exposure to other and unspecified factors (X58–X59).

(h) This category includes: Includes exposure to electrical current, radiation and extreme ambient air temperature and pressure (W85–W99), smoke, fire and flames (X00–X09), contact with heat and hot substances (X10–X19), contact with venomous animals and plants (X20–X29), exposure to forces of nature (X30–X39).

(i) This category includes: event of undetermined intent (Y10–Y34), legal intervention and operation of war (Y35–Y36), sequelae of external causes of morbidity and mortality (Y85–Y89), supplementary factors classified elsewhere (Y90–Y98).

(j) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.15: Mode of transport for transport-related serious injury by Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2005–06 to 2009–10

	Indigenous			Non-Indigenous				
Mode of transport	**Count**	**Per cent**	**Rate**(a)	**Count**	**Per cent**	**Rate**(a)	**Rate ratio**(b)	**Rate difference**(c)
Car occupant(d)	3,392	40.1	140.0	81,102	33.1	80.4	1.7	59.6
traffic(e)	2,913	34.4	119.3	72,484	29.6	71.9	1.7	47.4
non-traffic(f)	350	4.1	14.1	5,940	2.4	5.9	2.4	8.2
Motorcyclist	1,445	17.1	47.7	64,394	26.3	65.5	0.7	–17.8
traffic(e)	717	8.5	24.9	34,781	14.2	35.1	0.7	–10.2
non-traffic(f)	697	8.2	21.8	27,685	11.3	28.5	0.8	–6.7
Pedal cyclist	1,326	15.7	37.4	42,261	17.2	43.7	0.9	–6.3
traffic(e)	649	7.7	19.7	22,438	9.1	23.0	0.9	–3.3
non-traffic(f)	629	7.4	16.5	18,661	7.6	19.5	0.8	–3.0
Pedestrian	1,169	13.8	46.9	16,849	6.9	16.8	2.8	30.1
traffic(e)	884	10.4	36.4	12,119	4.9	12.0	3.0	24.4
non-traffic(f)	161	1.9	5.6	3,224	1.3	3.2	1.7	2.4
Occupant of pick-up truck or van	93	1.1	3.9	2,074	0.8	2.1	1.9	1.8
Occupant of heavy transport vehicle	55	0.7	2.5	3,629	1.5	3.6	0.7	–1.1
Bus occupant	69	0.8	4.4	2,212	0.9	2.1	2.1	2.3
Animal rider or occupant of animal-drawn vehicle	387	4.6	13.6	14,749	6.0	15.0	0.9	–1.4
Occupant of special all-terrain or off-road vehicle	143	1.7	4.4	4,233	1.7	4.3	1.0	0.1
Occupant of 3-wheeled motor vehicle	n.p.	n.p.	n.p.	301	0.1	0.3	n.p.	n.p.
Occupant of tram	10	0.1	0.4	365	0.1	0.3	1.3	0.1
Occupant of train	19	0.2	0.7	521	0.2	0.5	1.5	0.2
Occupant of special industrial vehicle	16	0.2	0.7	729	0.3	0.7	1.0	0.0

(continued)

Table 1.03.15 (continued): Mode of transport for transport-related serious injury by Indigenous status, NSW, Vic, Qld, WA, SA and NT, 2005–06 to 2009–10

	Indigenous			Non-Indigenous				
Mode of transport	**Count**	**Per cent**	**Rate**[(a)]	**Count**	**Per cent**	**Rate**[(a)]	**Rate ratio**[(b)]	**Rate difference**[(c)]
Occupant of special agricultural vehicle	13	0.2	0.4	997	0.4	1.0	0.5	–0.6
Occupant of special construction vehicle	8	0.1	0.4	305	0.1	0.3	1.3	0.1
Occupant of watercraft	68	0.8	2.8	4,330	1.8	4.3	0.6	–1.5
Occupant of aircraft	n.p.	n.p.	n.p.	673	0.3	0.7	n.p.	n.p.
Other and unspecified	242	2.9	9.6	5,554	2.3	5.6	1.7	4.0
Total[(g)]	**8,460**	**100.0**	**316.0**	**245,278**	**100.0**	**247.3**	**1.3**	**68.7**

n.p. not publishable because of small numbers, confidentiality or other concerns about the quality of the data.

(a) Per 100,000 population per year, adjusted by direct standardisation to the Australian population in June 2001.

(b) Ratio of age-standardised rate for persons specified as Indigenous to the equivalent rate for all other persons (specified as non-Indigenous plus Indigenous status not stated).

(c) Difference between age-standardised rate for persons specified as Indigenous to the equivalent rate for all other persons (that is, non-Indigenous or not stated).

(d) ‘Mode of transport’ is how a person was being conveyed when injured. Mode is a type of vehicle or being a pedestrian.

(e) ‘Traffic’ refers to cases in which injury was due to a vehicle accident that occurred on a public road, entirely or partly.

(f) ‘Non-traffic’ refers to cases in which injury was due to a vehicle accident that occurred entirely in any place other than a public road.

(g) Cases that were not specified as traffic or non-traffic are included in the total for each mode of transport. Hence the sum of traffic and non-traffic cases may be less than the total for a mode.

Source: AIHW 2013.

Table 1.03.16a: Age-standardised hospitalisation separations for a principal diagnosis of injury and poisoning and a first reported external cause of assault, Qld, WA, SA and NT, 1998–99 to 2012–13[(a)]

	Indigenous separations			Non-Indigenous separations		
	Males	Females	Persons[(b)]	Males	Females	Persons[(b)]
1998–99	1,603	1,749	3,352	4,589	1,022	5,611
1999–00	1,789	2,108	3,897	4,588	981	5,569
2000–01	1,866	2,016	3,882	4,922	1,049	5,972
2001–02	1,960	2,180	4,140	5,039	1,117	6,156
2002–03	1,528	1,692	3,220	4,624	1,036	5,661
2003–04	1,764	2,127	3,891	4,729	1,090	5,819
2004–05	1,803	2,181	3,984	5,062	1,029	6,091
2005–06	1,868	2,255	4,123	5,496	1,160	6,656
2006–07	1,880	2,363	4,243	5,916	1,154	7,070
2007–08	1,994	2,232	4,226	6,296	1,243	7,539
2008–09	2,032	2,277	4,309	6,632	1,424	8,056
2009–10	2,093	2,370	4,463	6,365	1,460	7,825
2010–11	2,243	2,640	4,883	5,895	1,484	7,379
2011–12	2,277	2,805	5,082	5,684	1,489	7,173
2012–13	2,408	2,946	5,354	5,940	1,622	7,562
Annual change[(c)]	46.5	66.4	112.9	129.3	44.3	173.6
Per cent change[(d)]	40.3	51.7	46.3	39.8	67.8	44.5

(a) Data are reported by state/territory of usual residence of the patient hospitalised and exclude separations from private hospitals in the Northern Territory.

(b) Persons data includes sex not stated and indeterminate.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
2. Principal diagnosis code used unless specified otherwise.
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010). Causes of injury are based on the first reported external cause as 'assault' ICD-10-AM codes X85–Y09, where the principal diagnosis was 'injury and poisoning' (S00–T98).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.16b: Age-standardised hospitalisation rates for a principal diagnosis of injury and poisoning and a first reported external cause of assault, Qld, WA, SA and NT, 1998–99 to 2012–13[(a)]

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	**Females**	**Persons**[(b)]	**Males**	**Females**	**Persons**[(b)]
1998–99	12.5	12.5	12.5	1.3	0.3	0.8
1999–00	13.5	14.6	14.0	1.3	0.3	0.8
2000–01	13.4	13.7	13.6	1.4	0.3	0.9
2001–02	14.0	14.2	14.1	1.4	0.3	0.9
2002–03	10.7	11.0	10.8	1.3	0.3	0.8
2003–04	11.9	13.3	12.6	1.3	0.3	0.8
2004–05	11.9	13.6	12.7	1.4	0.3	0.8
2005–06	12.0	13.6	12.8	1.5	0.3	0.9
2006–07	11.8	13.9	12.9	1.6	0.3	0.9
2007–08	12.3	13.0	12.6	1.6	0.3	1.0
2008–09	12.2	13.0	12.6	1.7	0.4	1.0
2009–10	12.3	13.3	12.8	1.6	0.4	1.0
2010–11	13.0	14.5	13.7	1.4	0.4	0.9
2011–12	12.8	15.2	14.0	1.4	0.4	0.9
2012–13	13.3	15.7	14.5	1.4	0.4	0.9
Annual change[(c)]	–0.01	0.1	0.1	0.01	0.01	0.01
Per cent change[(d)]	–0.8	12.3	5.9	10.1	31.7	14.2

(a) Data are reported by state/territory of usual residence of the patient hospitalised and exclude separations from private hospitals in the Northern Territory.

(b) Persons data includes sex not stated and indeterminate.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010). Causes of injury are based on the first reported external cause as ‘assault’ ICD-10-AM codes X85–Y09, where the principal diagnosis was ‘injury and poisoning’ (S00–T98).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.16c: Age-standardised hospitalisation rate ratios and rate differences for a principal diagnosis of injury and poisoning and a first reported external cause of assault, Qld, WA, SA and NT, 1998–99 to 2012–13[(a)]

	Rate ratio[(b)]			Rate difference[(c)]		
	Males	Females	Persons[(d)]	Males	Females	Persons[(d)]
1998–99	9.3	41.3	15.1	11.1	12.2	11.6
1999–00	10.1	50.4	17.2	12.2	14.3	13.2
2000–01	9.4	44.6	15.6	12.0	13.4	12.7
2001–02	9.7	43.7	15.8	12.6	13.9	13.2
2002–03	8.2	36.9	13.4	9.4	10.7	10.0
2003–04	9.0	42.9	15.3	10.6	12.9	11.8
2004–05	8.5	47.2	15.1	10.5	13.3	11.9
2005–06	8.1	42.6	14.1	10.6	13.3	11.9
2006–07	7.6	44.6	13.6	10.3	13.6	11.9
2007–08	7.6	39.5	12.8	10.7	12.6	11.6
2008–09	7.3	35.3	12.3	10.5	12.6	11.6
2009–10	7.9	35.9	13.1	10.7	12.9	11.8
2010–11	9.1	39.2	15.2	11.6	14.1	12.8
2011–12	9.5	41.7	16.2	11.4	14.8	13.1
2012–13	9.6	40.3	16.2	11.9	15.3	13.6
Annual change[(e)]	n.a.	n.a.	n.a.	–0.02	0.1	0.05
Per cent change[(f)]	n.a.	n.a.	n.a.	–2.1	11.8	5.3

(a) Data are reported by state/territory of usual residence of the patient hospitalised and exclude separations from private hospitals in the Northern Territory.

(b) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(c) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(d) Persons data includes sex not stated and indeterminate.

(e) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(f) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010). Causes of injury are based on the first reported external cause as 'assault' ICD-10-AM codes X85–Y09, where the principal diagnosis was 'injury and poisoning' (S00–T98).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.17: Age-standardised hospitalisation rates, rate ratios and rate differences between Indigenous and non-Indigenous Australians for a principal diagnosis of injury and poisoning and a first reported external cause of assault, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13(a)

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change(b)	% change(c)
Indigenous separations											
Males	2,251	2,352	2,464	2,539	2,587	2,657	2,782	2,821	2,931	81.4	28.6
Females	2,502	2,572	2,750	2,559	2,646	2,716	2,978	3,136	3,242	87.8	28.8
Persons(d)	4,753	4,924	5,214	5,098	5,233	5,373	5,761	5,957	6,173	169.1	28.7
Non-Indigenous Australian separations											
Males	12,697	13,858	14,740	14,955	15,404	14,393	13,407	12,659	11,847	–170.4	–9.4
Females	2,798	2,891	2,874	2,920	3,191	3,082	3,154	3,283	3,109	52.4	14.8
Persons(d)	15,495	16,749	17,614	17,875	18,595	17,475	16,562	15,942	14,956	–118	–5.5
Indigenous rate (separations per 1,000)											
Males	8.9	9.1	9.3	9.5	9.4	9.5	9.7	9.7	9.9	0.1	9.2
Females	9.4	9.5	9.9	9.0	9.2	9.3	9.9	10.4	10.5	0.1	11.1
Persons(d)	9.2	9.3	9.6	9.2	9.3	9.3	9.8	10.0	10.2	0.1	10.1
Non-Indigenous rate (separations per 1,000)											
Males	1.4	1.5	1.5	1.5	1.5	1.4	1.3	1.2	1.1	–0.04	–20.1
Females	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.001	1.5
Persons(d)	0.8	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.7	–0.02	–16.5
Rate ratio(e)											
Males	6.5	6.2	6.0	6.2	6.1	6.7	7.4	7.9	8.8	n.a.	n.a.
Females	31.1	30.6	32.6	29.9	28.4	30.1	32.0	32.4	35.4	n.a.	n.a.
Persons(d)	10.9	10.4	10.3	10.0	9.9	10.8	12.1	13.0	14.3	n.a.	n.a.

(continued)

Table 1.03.17 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences between Indigenous and non-Indigenous Australians for a principal diagnosis of injury and poisoning and a first reported external cause of assault, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(b)]	% change[(c)]
Rate difference[(f)]											
Males	7.6	7.6	7.7	8.0	7.9	8.1	8.4	8.5	8.8	0.1	15.3
Females	9.1	9.2	9.6	8.7	8.9	8.9	9.6	10.0	10.2	0.1	11.5
Persons[(d)]	8.3	8.4	8.6	8.3	8.4	8.5	9.0	9.2	9.5	0.1	13.2

(a) Data are from public and most private hospitals and exclude private hospitals in the Northern Territory. Data are reported by place of residence of the patient.

(b) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(c) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

(d) Persons data includes sex not stated and indeterminate.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010). Causes of injury are based on the first reported external cause as ‘assault’ ICD-10-AM codes X85–Y09, where the principal diagnosis was ‘injury and poisoning’ (S00–T98).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.03.18: Problems relating to injury(a) managed by general practitioners, by Indigenous status of the patient, BEACH survey years April 2008–March 2009 to April 2012–March 2013 inclusive(b)(c)

	Number		Per cent		Crude rate (no. per 1,000 encounters)						Age-standardised rate (no. per 1,000 encounters)(d)			
Problem managed	**Indig.**	**Other(e)**	**Indig.**	**Other(e)**	**Indig.**	**95% LCL(f)**	**95% UCL(g)**	**Other**	**95% LCL(f)**	**95% UCL(g)**	**Indig.**	**Other(e)**	**Ratio(h)**	**Rate difference(i)**
General injuries (A80–82)	15	1,073	0.1	0.1	2.0	0.9	3.2	2.2	2.0	2.4	2.6	2.2	1.2	0.4
Trauma/injury NOS (A80)(j)	13	974	0.1	0.1	1.8	0.7	2.8	2.0	1.8	2.2	2.4	2.0	1.2	0.4
Multiple trauma/injuries (A81)(j)	2	89	0.0	0.0	0.3	–0.1	0.6	0.2	0.1	0.2	0.2	0.2	1.1	0.0
Musculoskeletal injuries(k)	286	16,754	2.4	2.2	38.8	33.2	44.3	34.6	33.8	35.4	34.3	34.6	1.0	–0.3
Skin injuries (S12–19)	189	11,354	1.6	1.5	25.6	21.4	29.8	23.4	22.8	24.0	23.6	23.4	1.0	0.2
Neurological injuries (N79–81)	9	725	0.1	0.1	1.2	0.4	2.0	1.5	1.4	1.6	0.9	1.5	0.6	–0.6
Ear injuries (H76–79, H85)	9	457	0.1	0.1	1.2	0.3	2.2	0.9	0.9	1.0	1.2	0.9	1.3	0.3
Eye injuries (F75–79)	7	871	0.1	0.1	0.9	0.3	1.6	1.8	1.7	1.9	1.1	1.8	0.6	–0.7
Assault/harmful event (Z25)	21	233	0.2	0.0	2.8	1.6	4.1	0.5	0.4	0.5	2.2*	0.5*	4.5*	1.7*
Other injuries(l)	4	233	0.0	0.0	0.5	0.0	1.1	0.5	0.4	0.6	0.4	0.5	0.7	–0.1
Total injury problems(m)	*540*	*31,687*	*4.6*	*4.1*	*73.2*	*65.4*	*80.9*	*65.4*	*64.3*	*66.5*	*66.2*	*65.4*	*1.0*	*0.8*
Other problems managed	11,149	733,009	95.4	95.9	1,510.7	1,460.7	1,560.7	1,512.9	1,503.6	1,522.1	1,619.0*	1,511.3*	1.1*	107.7*
Total problems	**11,689**	**764,696**	**100.0**	**100.0**	**1,583.9**	**1,534.0**	**1,633.8**	**1,578.3**	**1,569.1**	**1,587.4**	**1,685.3***	**1,576.7***	**1.1***	**108.5***

(continued)

Table 1.03.18 (continued): Problems relating to injury(a) managed by general practitioners, by Indigenous status of the patient, BEACH survey years April 2008–March 2009 to April 2012–March 2013 inclusive(b)(c)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Classified according to ICPC-2 chapter codes (Classification Committee of the World Organization of Family Doctors (WICC) 1998).

(b) Data from five combined BEACH years April 2008–March 2009 to April 2012–March 2013 inclusive.

(c) Data for Indigenous and other Australians have not been weighted.

(d) Directly age-standardised rate (no. per 1,000 encounters). Figures do not add to 100 as more than one problem can be managed at each encounter.

(e) 'Other' includes encounters with non-Indigenous patients and those with patients for whom Indigenous status was not stated.

(f) LCL = lower confidence interval.

(g) UCL = upper confidence interval.

(h) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for other Australians.

(i) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for other Australians.

(j) Trauma/injury NOS and Multiple trauma/injuries are subsets of General Injuries.

(k) ICPC–2 codes: L72–L81, L96, L19014, L83023–26, L84019–21, L84033–39, L95003, L99017–19, L99084, L99089, L99091, L99 095, N54005, N80012–14.

(l) ICPC–2 codes: B76–B77, D79–D80, R87–R88, U80, W75, X82, Y80.

(m) ICPC–2 codes: A80–A82, F75–F79, H76–H79, H85, L72–L81, L96, L19014, L83023–26, L84019–21, L95003, L99017–19, L99084, L99089, L99091, L99 095, N54005, N80012–14, N79–N81, S12–S19, Z25.

Source: Analyses conducted by the Family Medicine Research Centre, University of Sydney, of BEACH data collected by that Centre.

Data sources and quality

National Hospital Morbidity Database

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010a). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

Bettering the Evaluation and Care of Health survey

The Bettering the Evaluation and Care of Health (BEACH) survey collects information about encounters with general practitioners (GPs), including: GP and patient characteristics; patient reasons for the visit; problems managed; and treatments provided. The survey has been conducted annually since April 1998. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. Each participating GP provides details of 100 consecutive patient encounters. Although the questionnaire contains an Indigenous identifier, it is unknown whether all GPs ask their patients this question.

In a sub-study of approximately 9,000 patients, Supplementary Analysis of Nominated Data, it was found that if the question on Indigenous status was asked within the context of a series of questions about origin and cultural background, 1.3% identified as Aboriginal and Torres Strait Islander. This is twice the rate routinely recorded in BEACH, indicating that BEACH may under-estimate the number of encounters with Indigenous Australians.

Under the National Indigenous Reform Agreement, governments have agreed to the implementation of *National best practice guidelines for collecting Indigenous status in health data sets* (AIHW 2010b), which include recommended strategies for local service providers such as GPs and practice nurses to improve Indigenous identification data. General practices and Aboriginal and Torres Strait Islander health services that meet accreditation requirements are eligible for financial incentives when they do the following activities: sign on to the Practice Incentives Program—Indigenous Health Incentive (PIP IHI); obtain consent from their

Indigenous clients to be registered for chronic disease management through the IHI; and provide a targeted level of care for each registered patient. Participation in the PIP IHI also provides eligibility for other initiatives under Medicare.

A Voluntary Indigenous Identifier was introduced into the Medicare database from November 2002. By July 2014, 415,730 people had identified as Aboriginal, Torres Strait Islander, or both.

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013b). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013c).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the 2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013a). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Australian Health Survey

The Australian Health Survey (AHS) combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) together with 2 new elements: a National Nutrition and Physical Activity Survey (NNPAS) and a National Health Measures Survey (NHMS).

For more information see:

- National Health Survey <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4363.0.55.001Main+Features12011-13?OpenDocument>.

- National Aboriginal and Torres Strait Islander Health Survey <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4715.0/>.
- National Nutrition and Physical Activity Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.007~2011-12~Main%20Features~About%20the%20National%20Nutrition%20and%20Physical%20Activity%20Survey~731>.
- National Health Measures Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.005Chapter1102011-12>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
0	zero
. .	not applicable
n.e.c.	not elsewhere classified
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 4 of 68

Detailed analyses

1.04 Respiratory disease

This measure reports on deaths, hospitalisations and prevalence of respiratory disease for Aboriginal and Torres Strait Islander people expressed as a rate by age group, age-standardised rate and ratio

Introduction

This is no. 4 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- National Mortality Database
- Australian Aboriginal and Torres Strait Islander Health Survey
- National Hospital Morbidity Database
- National Notifiable Diseases Surveillance System.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Age-standardised rates and ratios have been used as a measure of morbidity in the Indigenous population relative to non-Indigenous Australians. Ratios of this type illustrate differences between the rates of morbidity among Indigenous people and those of non-Indigenous Australians, taking into account differences in age distributions.

Time series analyses of hospital data may be affected by changes in the quality of Indigenous identification over time.

For more information relating to deaths due to respiratory disease see measure 1.23. Also see 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Deaths, see tables 1.04.1, 1.23.1 and 1.23.21
- Self-reported prevalence, see tables 1.04.2–6
- Hospitalisations, see tables 1.04.7–16
- Notifications of invasive pneumococcal disease, see tables 1.04.17–18.

Deaths

Current period

In the period 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- Respiratory disease caused 888 deaths of Indigenous Australians (8% of Indigenous deaths) (Table 1.04.1). After adjusting for age differences, the mortality rate due to respiratory disease for Indigenous Australians was almost twice the non-Indigenous rate (96 per 100,000 and 50 per 100,000 respectively). There was a significant gap between Indigenous and non-Indigenous Australians of 47 per 100,000 (Table 1.23.1).
- For respiratory deaths among Indigenous Australians, 471 (53%) were attributable to COPD, 167 (19%) to pneumonia and influenza and 35 (4%) to asthma (Table 1.04.1).

Trend

In the period from 1998 to 2012:

- There was a significant decline in the respiratory disease mortality rate among Indigenous Australians (27%, from 134 to 99 per 100,000), and also a significant decline in the gap between Indigenous and non-Indigenous Australians (40%, from 82 to 46 per 100,000).

In the period from 2006 to 2012:

- There was no significant change in the Indigenous death rate from respiratory disease (from 103 to 99 per 100,000), and no significant change in the gap between Indigenous and non-Indigenous Australians (from 53 to 46 per 100,000) (Table 1.23.21).

Self-reported prevalence

Current period

In the period 2012–13:

- 31% of Indigenous Australians had long term respiratory disease that had lasted, or was expected to last, 6 months or more. After adjusting for age, Indigenous Australians were 1.2 times as likely as non-Indigenous Australians to report respiratory disease (tables 1.04.2–3).
- Indigenous females (34%) were more likely to report respiratory disease than Indigenous males (28%) (Table 1.04.2).
- The proportion of Indigenous Australians reporting respiratory disease increased with age, ranging from 21% of those aged 0–14, to 43% of those aged 45–54 (Table 1.04.2).

Hospitalisations

Current period

In the 2 years 2011–12 and 2012–13:

- There were 42,209 hospitalisations for respiratory disease among Indigenous Australians. After adjusting for age, the hospitalisation rate for Indigenous Australians was 2.4 times as high as the rate for non-Indigenous Australians (39 per 1,000 and 17 per 1,000 respectively). The rate difference between Indigenous and non-Indigenous Australians was 23 per 1,000 (Table 1.04.7).
- The rate difference was widest among those aged 65 and over (56 per 1,000) and narrowest among those aged 15–24 (0 per 1,000) (Table 1.04.8).
- COPD was the most common type of respiratory disease for which Indigenous Australians were hospitalised (29% of respiratory hospitalisations), followed by pneumonia (23%) and asthma (11%) (Table 1.04.10).

Trend

Time series analyses may be affected by changes in the quality of Indigenous identification over time.

In the period from 1998–99 to 2012–13 in Queensland, Western Australia, South Australia and the Northern Territory combined:

- There was an 11% decrease in the rate of hospitalisations for respiratory disease for Indigenous females (from 54 to 45 per 1,000), and a narrowing of the rate difference between Indigenous and non-Indigenous Australian females from 39 per 1,000 to 29 per 1,000. Rates for males were relatively stable.
  - There was little to no change in the overall rates of hospitalisation for respiratory disease for Indigenous or non-Indigenous Australians, and no change in the overall rate difference (Table 1.04.11).

In the period from 2004–05 to 2012–13 in New South Wales, Victoria, Queensland, Western Australia, South Australia, and the Northern Territory combined:

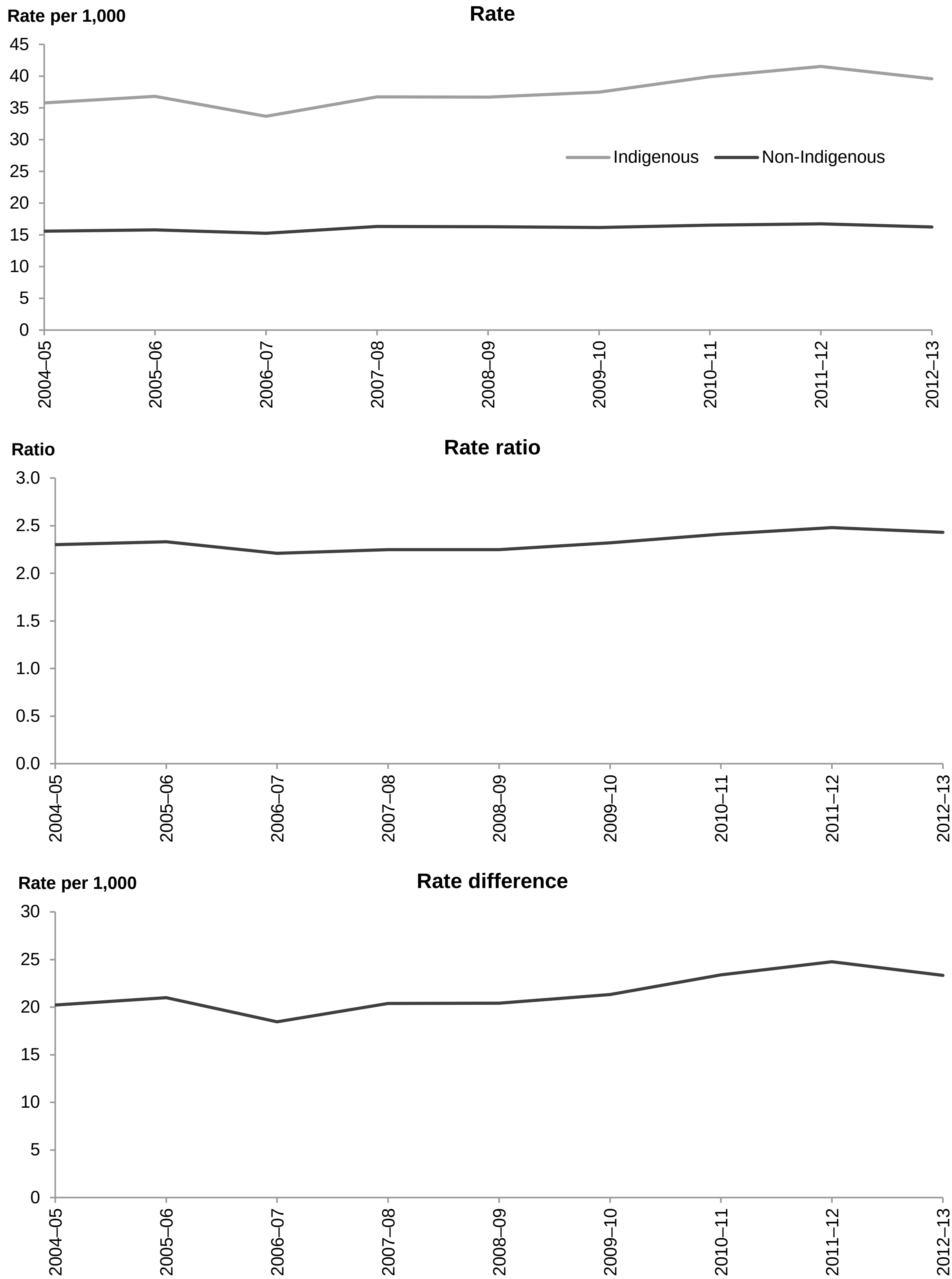
- There was a 16% increase in the rate of hospitalisations for respiratory disease for Indigenous Australians, from 36 per 1,000 to 40 per 1,000. The rate difference between Indigenous and non-Indigenous Australians increased by 24%, from 20 per 1,000 to 23 per 1,000 (Table 1.04.13, Figure 1.04.1).

Invasive pneumococcal disease

Current period

In 2011–13:

- There were 745 notifications of invasive pneumococcal disease for Indigenous Australians. After adjusting for age differences, the notification rate for Indigenous Australians was almost 7 times as high as that for other Australians (45 per 100,000 and 7 per 100,000 respectively). The gap between Indigenous and non-Indigenous Australians was 38 per 100,000 (Table 1.04.17).



Source: Table 1.04.13.

Figure 1.04.1: Age-standardised hospitalisation rates, rate ratios and rate differences for diseases of the respiratory system, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13

Table 1.04.1: Selected multiple causes of death, by Indigenous status and sex, respiratory diseases, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
	Deaths	% of total deaths	Age-standardised(g) % of total deaths	Deaths	% of total deaths	Age-standardised(g) % of total deaths	Deaths	% of total deaths	Age-standardised(g) % of total deaths	Deaths	% of total deaths	Age-standardised(g) % of total deaths	Crude mean no. of causes(h)	Crude mean no. of causes(h)
							Males							
Chronic lower respiratory diseases (J40–J47)	280	4.4	6.4	11,472	4.5	4.6	671	10.5	15.6	30,836	12.1	12.3	3.8	3.6
COPD (J40–J44)(i)	231	3.6	5.8	10,684	4.2	4.3	595	9.4	14.5	28,831	11.3	11.5	3.8	3.6
Asthma (J45–J46)(i)	14	0.2	n.p.	469	0.2	0.2	41	0.6	0.7	1,680	0.7	0.7	3.4	3.7
Pneumonia and influenza (J09–J18)	91	1.4	1.7	3,168	1.2	1.3	621	9.8	11.7	28,198	11.1	11.4	2.6	2.5
Other respiratory disease (J00–06, J20–39, J60–99)	86	1.4	2.0	7,228	2.8	2.9	679	10.7	13.6	37,971	14.9	15.1	3.6	3.7
Total respiratory diseases	457	7.2	10.1	21,868	8.6	8.8	1,605	25.2	33.0	80,029	31.4	31.9	3.5	3.5
All causes	**6,361**	**100.0**	**100.0**	**254,922**	**100.0**	**100.0**	**6,361**	**100.0**	**100.0**	**254,922**	**100.0**	**100.0**	**3.3**	**3.2**
							Females							
Chronic lower respiratory diseases (J40–J47)	284	5.4	6.5	9,898	4.1	4.1	669	12.7	15.4	23,133	9.6	9.6	3.7	3.6
COPD (J40–J44)(i)	240	4.6	5.7	8,300	3.4	3.4	571	10.9	13.6	19,315	8.0	8.0	3.7	3.5
Asthma (J45–J46)(i)	21	0.4	0.4	872	0.4	0.4	70	1.3	1.4	3,014	1.3	1.3	3.6	3.9
Pneumonia and influenza (J09–J18)	76	1.4	1.4	4,141	1.7	1.7	513	9.8	11.4	28,562	11.9	11.6	2.9	2.3

(continued)

Table 1.04.1 (continued): Selected multiple causes of death, by Indigenous status and sex, respiratory diseases, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)]

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
	Deaths	% of total deaths	Age-standardised[(g)] % of total deaths	Deaths	% of total deaths	Age-standardised[(g)] % of total deaths	Deaths	% of total deaths	Age-standardised[(g)] % of total deaths	Deaths	% of total deaths	Age-standardised[(g)] % of total deaths	Crude mean no. of causes[(h)]	Crude mean no. of causes[(h)]
Other respiratory disease (J00–06, J20–39, J60–99)	71	1.4	1.7	5,618	2.3	2.3	592	11.3	12.6	31,451	13.1	13.0	3.5	3.6
Total respiratory diseases	431	8.2	9.7	19,657	8.2	8.1	1,455	27.7	31.9	69,979	29.1	28.7	3.5	3.3
All causes	**5,251**	**100.0**	**100.0**	**240,860**	**100.0**	**100.0**	**5,251**	**100.0**	**100.0**	**240,860**	**100.0**	**100.0**	**3.4**	**3.2**
							Persons							
Chronic lower respiratory diseases (J40–J47)	564	4.9	6.4	21,370	4.3	4.3	1,340	11.5	15.3	53,969	10.9	10.8	3.7	3.6
COPD (J40–J44)[(i)]	471	4.1	5.6	18,984	3.8	3.8	1,166	10.0	13.9	48,146	9.7	9.7	3.7	3.6
Asthma (J45–J46)[(i)]	35	0.3	0.3	1,341	0.3	0.3	111	1.0	1.0	4,694	0.9	0.9	3.5	3.8
Pneumonia and influenza (J09–J18)	167	1.4	1.6	7,309	1.5	1.5	1,134	9.8	11.5	56,760	11.4	11.4	2.7	2.4
Other respiratory disease (J00–06, J20–39, J60–99)	157	1.4	1.8	12,846	2.6	2.6	1,271	10.9	13.0	69,422	14.0	14.0	3.6	3.6
Total respiratory diseases	888	7.6	9.8	41,525	8.4	8.3	3,060	26.4	32.2	150,008	30.3	30.1	3.5	3.4
All causes	**11,612**	**100.0**	**100.0**	**495,782**	**100.0**	**100.0**	**11,612**	**100.0**	**100.0**	**495,782**	**100.0**	**100.0**	**3.4**	**3.2**

(continued)

Table 1.04.1 (continued): Selected multiple causes of death, by Indigenous status and sex, respiratory diseases, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(h) Mean number of causes is calculated based on the average number of causes of death present for a death with the selected underlying cause of death. This data item provides insight into co-morbidity.

(i) Data presented for COPD and asthma are a subset of data presented for all chronic lower respiratory diseases.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.04.2: Indigenous persons reporting respiratory disease, by remoteness, age, sex and state/territory, 2012–13[(a)]

	Remoteness						Overall population distribution
	Non-remote		Remote		Total		
	Number	Rate[(b)]	Number	Rate[(b)]	Number	Rate[(b)]	Per cent[(c)]
Age							
0–14	43,254	23.5	4,688	10.4	47,941	20.9	35.9
15–24	35,045	34.4*	3,110	12.1*	38,154	29.9*	20.0
25–34	28,693	43.6*	3,334	16.0*	32,027	36.9*	13.6
35–44	26,137	43.6*	4,884	27.3*	31,021	39.8*	12.2
45–54	21,789	46.8*	3,757	27.9*	25,545	42.6*	9.4
55+	19,044	43.5*	4,013	31.3*	23,057	40.7*	8.9
Sex							
Males	80,052	32.0*	10,183	15.0*	90,235	28.4*	49.8
Females	93,909	37.3	13,603	19.9	107,511	33.6	50.2
State/territory							
NSW	76,182	39.7*	3,672	40.5*	79,854	39.8*	31.5
Vic	17,587	38.4*	. .	. .	17,587	38.4*	7.2
Qld	39,664	27.1	6,045	17.7*	45,708	25.3*	28.3
SA	11,085	37.6*	1,335	22.1*	12,420	35.0*	5.6
WA	15,600	32.0*	7,031	21.5*	22,631	27.8*	12.8
Tas	8,162	35.6*	275†	35.7*†	8,437	35.6*	3.7
NT	3,089	27.3	5,428	10.2	8,517	13.2	10.1
ACT	2,593	44.0*	. .	. .	2,593	44.0*	0.9
Total percent	**. .**	**34.6**	**. .**	**17.5***	**. .**	**31.0***	**100.0**
Total number	**173,961**	**. .**	**23,786**	**. .**	**197,747**	**. .**	**638,324**

(continued)

Table 1.04.2 (continued): Indigenous persons reporting respiratory disease, by remoteness, age, sex and state/territory, 2012–13[(a)]

* Represents statistically significant differences at the $p < 0.05$ level. Differences between rates were tested within each remoteness category, using 0–14 as the reference category for Age, females as the reference category for Sex, and NT as the reference category for State/territory. Differences between the overall rates for remoteness categories were also tested, using non-remote as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is likely to last, for 6 months or more.

(b) Rate per 100.

(c) Distribution of total Indigenous population.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.04.3: Persons reporting respiratory disease, by remoteness, Indigenous status, age, sex and state/territory, 2012–13(a)(b)(c)

	Remoteness											Overall population distribution	
	Non-remote			Remote			Total						
	Indig.	Non-Indig.	Rate ratio(d)	Indig.	Non-Indig.	Rate ratio(d)	Indig.	Non-Indig.	Rate ratio(d)	Indig.	Non-Indig.	Indig.	Non-Indig.
	Rate(e)			Rate(e)			Rate(e)			Number		Per cent(f)	
Age(g)													
0–14	23.5	18.9	1.2	10.4	12.9†	0.8	20.9	18.8	1.1	47,941	756,667	35.9	18.6
15–24	34.4	28.7	1.2	12.1	13.8‡	0.9	29.9	28.5	1.0	38,154	840,261	20.0	13.6
25–34	43.6	31.2	1.4	16.0	31.4†	0.5	36.9	31.2	1.2	32,027	983,419	13.6	14.6
35–44	43.6	34.2	1.3	27.3	36.1	0.8	39.8	34.2	1.2	31,021	1,054,725	12.2	14.2
45–54	46.8	31.0	1.5	27.9	18.9†	1.5	42.6	30.9	1.4	25,545	917,899	9.4	13.7
55+	43.5	30.0	1.5	31.3	30.4	1.0	40.7	30.0	1.4	23,057	1,635,417	8.9	25.2
Sex													
Males	33.5	27.6	1.2	18.0	21.1	0.9	30.1	27.5	1.1	90,235	2,962,030	49.8	49.9
Females	43.2	29.3	1.5	23.9	27.0	0.9	38.9	29.3	1.3	107,511	3,226,358	50.2	50.1
State/territory													
NSW	43.2	27.0	1.6	43.0	n.p.	n.a.	43.3	27.0	1.6	79,854	1,907,420	31.5	32.5
Vic	41.2	29.6	1.4	. .	. .	n.a.	41.2	29.6	1.4	17,587	1,642,910	7.2	25.5
Qld	31.2	27.1	1.2	21.2	31.4‡	0.7	29.2	27.1	1.1	45,708	1,169,580	28.3	19.8
SA	42.8	30.9	1.4	26.2	23.1	1.1	39.9	30.7	1.3	12,420	487,667	5.6	7.3
WA	37.9	30.1	1.3	25.2	26.4	1.0	32.6	29.9	1.1	22,631	672,028	12.8	10.3
Tas	37.5	33.6	1.1	30.1	n.p.	n.a.	37.5	33.4	1.1	8,437	159,734	3.7	2.2
NT	31.9	24.2	1.3	12.8	20.5	0.6	16.6	23.6	0.7	8,517	34,545	10.1	0.7
ACT	49.1	32.1	1.5	. .	. .	n.a.	49.1	32.1	1.5	2,593	114,504	0.9	1.6
Total per cent	**38.6**	**28.5**	**1.4**	**21.0**	**24.0**	**0.9**	**34.7**	**28.5**	**1.2**	**. .**	**. .**	**100.0**	**100.0**
Total number	**173,961**	**6,126,172**	**0.0**	**23,786**	**62,216**	**0.4**	**197,747**	**6,188,388**	**0.0**	**197,747**	**6,188,388**	**638,324**	**21,622,358**

(continued)

Table 1.04.3 (continued): Persons reporting respiratory disease, by remoteness, Indigenous status, age, sex and state/territory, 2012–13(a)(b)(c)

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is likely to last, for 6 months or more.

(b) Data for non-Indigenous people are for 2011–12 from the Australian Health Survey 2011–13.

(c) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(d) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(e) Persons reporting respiratory disease per 100.

(f) Distribution of total population.

(g) Data for specific age groups are not age-standardised, only the totals.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.04.4: Indigenous persons (15 and over) reporting respiratory disease, by selected socioeconomic and health characteristics, 2012–13

	Respiratory disease[(a)]	No respiratory disease	Total		Overall population distribution
	Per cent[(b)]			Number	Per cent[(c)]
SEIFA[(d)]					
1st quintile (most disadvantaged)	33.0	67.0	100.0	211,804	51.8
5th quintile (most advantaged)	45.3	54.7	100.0	15,072	3.7
Ratio most disadvantaged/most advantaged	*0.7*	*1.2*	*1.0*	*14.1*	*14.0*
Employment					
Employed	36.6	63.4	100.0	187,107	45.8
Unemployed	34.1	65.9	100.0	50,987	12.5
Not in the labour force	37.5	62.5	100.0	170,847	41.8
Ratio unemployed/employed	*0.9*	*1.0*	*1.0*	*0.3*	*0.3*
Has non-school qualification[(e)]					
Yes	42.6	57.4	100.0	163,249	39.9
No	32.6	67.4	100.0	245,692	60.1
Ratio no/yes	*0.8*	*1.2*	*1.0*	*1.5*	*1.5*
Highest year of school completed					
Year 12	40.7	59.3	100.0	100,362	24.5
Year 9 or below[(f)]	33.9	66.1	100.0	119,529	29.2
Ratio Year 9 or below/Year 12	*0.8*	*1.1*	*1.0*	*1.2*	*1.2*
Smoker status					
Current smoker [(g)]	35.2	64.8	100.0	175,768	43.0
Non-smoker[(h)]	37.7	62.3	100.0	233,173	57.0
Ratio smoker/non-smoker	*0.9*	*1.0*	*1.0*	*0.8*	*0.8*
Adequate daily vegetable intake[(i)]					
Yes	42.5	57.5	100.0	20,158	4.9
No	36.3	63.7	100.0	388,783	95.1
Ratio no/yes	*0.9*	*1.1*	*1.0*	*19.3*	*19.4*
Adequate daily fruit intake[(j)]					
Yes	33.8	66.2	100.0	175,227	42.8
No	38.8	61.2	100.0	233,714	57.2
Ratio no/yes	*1.1*	*0.9*	*1.0*	*1.3*	*1.3*
Obese[(k)]					
Yes	42.8	57.2	100.0	124,997	37.0
No	33.7	66.3	100.0	212,509	63.0
Ratio yes/no	*1.3*	*0.9*	*1.0*	*0.6*	*0.6*
Total number[(l)]	*125,128*	*212,378*	*. .*	*337,506*	*337,506*

(continued)

Table 1.04.4 (continued): Indigenous persons (15 and over) reporting respiratory disease, by selected socioeconomic and health characteristics, 2012–13

	Respiratory disease[(a)]	No respiratory disease	Total		Overall population distribution
	Per cent[(b)]			Number	Per cent[(c)]
Self-assessed health status					
Excellent/very good/good	33.0	67.0	100.0	307,649	75.2
Fair/poor	47.8	52.2	100.0	101,292	24.8
Ratio fair, poor/excellent, very good, good	*1.4*	*0.8*	*1.0*	*0.3*	*0.3*
Heart/circulatory disease[(m)]					
Yes	44.2	55.8	100.0	72,617	17.8
No	35.0	65.0	100.0	336,324	82.2
Ratio yes/no	*1.3*	*0.9*	*1.0*	*0.2*	*0.2*
Diabetes[(m)(n)]					
Yes	43.6	56.4	100.0	47,898	11.7
No	35.7	64.3	100.0	361,043	88.3
Ratio yes/no	*1.2*	*0.9*	*1.0*	*0.1*	*0.1*
Kidney disease[(m)]					
Yes	45.5	54.5	100.0	9,819	2.4
No	36.4	63.6	100.0	399,122	97.6
Ratio yes/no	*1.3*	*0.9*	*1.0*	*0.0*	*0.0*
Total number of persons 15+	**149,805**	**259,136**	. .	**408,941**	**408,941**

(a) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitis, and other diseases of the respiratory system.

(b) Percentages add within rows.

(c) Distribution of Indigenous population.

(d) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(e) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED)(includes Bachelor degree or higher, diploma, advanced diploma, certificate).

(f) Year 9 or below includes never attended school.

(g) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(h) Includes ex-smoker and those who have never smoked.

(i) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 years and over, with the exception of 18-49 year old males who eat 6 serves.

(j) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 years and over.

(k) Body Mass Index greater than 30.0 for people aged 18 years and over. For information on the calculation of BMI scores for people aged 15–17 years, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001).

(l) Totals and population distributions exclude measurements not taken.

(m) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(n) Includes type 1 and type 2 diabetes, and type unknown. Includes persons who reported they had diabetes but that it was not current at the time of interview.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.04.5: Selected socioeconomic and health characteristics by Indigenous persons (15 and over) reporting respiratory disease, 2012–13

	Respiratory disease[a]	No respiratory disease	Total		Overall population distribution
	Per cent[b]			Number	Per cent[c]
Equivalised household income[d]					
1st quintile (lowest)	36.5	63.5	100.0	140,304	42.7
4th/5th quintile (highest)	42.0	58.0	100.0	55,728	17.0
Ratio lowest/highest	*0.9*	*1.1*	*1.0*	*2.5*	*2.5*
Total number	*120,782*	*207,908*	*. .*	*328,690*	*328,690*
Financial stress—whether household could raise $2,000 in an emergency					
Yes	39.7	60.3	100.0	177,097	46.2
No	35.2	64.8	100.0	206,614	53.8
Ratio yes/no	1.1	0.9	1.0	0.9	0.9
Total number	143,115	240,596	. .	383,711	383,711
Household had day/s without money for basic living expenses in last 12 months					
Yes	38.2	61.8	100.0	164,764	40.5
No	35.6	64.4	100.0	241,932	59.5
Ratio yes/no	*1.1*	*1.0*	*1.0*	*0.7*	*0.7*
Total number	*149,183*	*257,513*	*. .*	*406,696*	*406,696*
Housing tenure type[e]					
Owner	42.8	57.2	100.0	124,490	30.6
Renter	33.8	66.2	100.0	281,001	69.0
Ratio renter/owner	*0.8*	*1.2*	*1.0*	*2.3*	*2.3*
Total number	*149,183*	*257,828*	*. .*	*407,011*	*407,011*
Lives in overcrowded household[f]					
Yes	27.8	72.2	100.0	81,548	20.1
No	38.9	61.1	100.0	325,148	79.9
Ratio yes/no	*0.7*	*1.2*	*1.0*	*0.3*	*0.3*
Total number	*149,183*	*257,513*	*. .*	*406,696*	*406,696*
Alcohol consumption					
Abstained from alcohol in last 12 months[g]	31.5	68.5	100.0	108,024	26.4
Short-term/single occasion risk[h]					
Yes	36.8	63.2	100.0	219,176	53.6
No	44.1	55.9	100.0	74,582	18.2
Ratio yes/no	*0.8*	*1.1*	*1.0*	*2.9*	*2.9*

(continued)

Table 1.04.5 (continued): Selected socioeconomic and health characteristics by Indigenous persons (15 and over) reporting respiratory disease, 2012–13

	Respiratory disease[(a)]	No respiratory disease	Total		Overall population distribution
	Per cent[(b)]			Number	Per cent[(c)]
Physical activity[(d)(i)]					
Met guidelines[(j)]	41.6	58.4	100.0	117,125	41.4
Did not meet guidelines[(k)]	42.5	57.5	100.0	165,910	58.6
Ratio did not meet/met guidelines	*1.0*	*1.0*	*1.0*	*1.4*	*1.4*
Total number	*119,163*	*163,872*	*. .*	*283,035*	*283,035*
Disability status[(l)]					
Has profound, severe or moderate core activity limitation	52.2	47.8	100.0	51,009	12.5
Has a schooling/employment restriction only	45.5	54.5	100.0	44,580	10.9
Has unspecified limitation or restriction	41.2	58.8	100.0	88,239	21.6
Total with disability/long-term health condition	*45.3*	*54.7*	*100.0*	*183,828*	*45.0*
No disability/long-term health condition	29.6	70.4	100.0	225,113	55.0
Ratio disability/no disability	*1.5*	*0.8*	*1.0*	*0.8*	*0.8*
Psychological distress (Kessler 5)[(d)(m)]					
Low/moderate	34.6	65.4	100.0	252,230	69.8
High/very high	44.4	55.6	100.0	109,134	30.2
Ratio high, very high/low, moderate	*1.3*	*0.9*	*1.0*	*0.4*	*0.4*
Total number	*135,623*	*225,740*	*. .*	*361,364*	*361,364*
Stressors experienced in last 12 months[(n)]					
No stressors	28.0	72.0	100.0	107,171	26.3
Experienced one or more stressor	39.7	60.3	100.0	300,159	73.5
Ratio one or more/no stressors	*1.4*	*0.8*	*1.0*	*2.8*	*2.8*
Total number	*149,426*	*258,794*	*. .*	*408,220*	*408,220*
Long term health conditions[(o)]					
One	17.8	82.2	100.0	76,185	18.6
Two	33.7	66.3	100.0	63,404	15.5
Three or more	60.6	39.4	100.0	189,444	46.3
Ratio three or more/one conditions	*3.4*	*0.5*	*1.0*	*2.5*	*2.5*
Cancer[(p)]					
Yes	35.3	64.7	100.0	5,550	1.4
No	36.7	63.3	100.0	403,391	98.6
Ratio yes/no	*1.0*	*1.0*	*1.0*	*0.0*	*0.0*
Total	**36.6**	**63.4**	**100.0**	**. .**	**100.0**
Total number of persons 15+	**149,805**	**259,136**	**. .**	**408,941**	**408,941**

(continued)

Table 1.04.5 (continued): Selected socioeconomic and health characteristics by Indigenous persons (15 and over) reporting respiratory disease, 2012–13

(a) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitus, and other diseases of the respiratory system.

(b) Percentages add within rows.

(c) Distribution of total Indigenous population.

(d) Excludes ‘not stated’ and ‘not known’.

(e) Total includes ‘other’ and ‘life tenure scheme’.

(f) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(g) Abstainer includes those who have never consumed alcohol.

(h) Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months nb. Guideline 2: For healthy men and women, drinking no more than four standard drinks on a single occasion reduces the risk of alcohol related injury arising from that occasion.

(i) Physical activity data collected from persons 18 years and over; and non-remote areas only.

(j) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(k) Includes ‘don’t know’.

(l) Self-reported data consisting of persons who reported having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities. Only current difficulties with education and/or employment were collected. Respondents aged 65 years and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(m) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25. Total population is 18 years and over, excludes ‘No Score’.

(n) Stressors experiences by self, family or friends.

(o) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(p) Self-reported data consisting of persons ever told has condition, still current and in remission.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.04.6: People reporting respiratory disease by Indigenous status and remoteness, 2012–13[(a)]

	Crude rates[(b)]			Age-standardised rates[(c)]		
Remoteness	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Indigenous**	**Non-Indigenous**	**Rate ratio[(d)]**
	Number		**Per cent**	**Per cent**		
Major city	83,860	4,339,267	37.4	41.7	27.8*	1.5
Inner regional	51,468	1,272,282	36.5	40.4	31.2	1.3
Outer regional	38,633	514,622	28.2*	31.9*	28.2*	1.1
Total non-remote	*173,961*	6,126,172	*34.6*	*38.6**	*28.5*	*1.4*
Remote	12,402	62,216	25.6*	29.1*	24.0*	1.2
Very remote	11,384	. .	13.0*	16.4*	. .	. .
Total remote	*23,786*	. .	*17.5**	*21.0**	. .	. .
Total	**197,747**	**6,188,388**	**31.0***	**34.7***	**28.5**	**1.2**

* Represents statistically significant differences at the $p < 0.05$ level. Differences between remoteness categories were tested, with non-remote used as the reference category.

(a) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitus, and other diseases of the respiratory system.

(b) Rate per 100.

(c) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(d) Ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.04.7: Hospitalisations for principal diagnosis of diseases of the respiratory system, by Indigenous status and sex, Australia, 2011–12 to 2012–13(a)(b)(c)(d)

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000(e)	Number	Crude rate per 1,000	ASR rate per 1,000(e)	Ratio(f)	Difference(g)
NSW								
Males	5,462	25.7	32.7	132,698	18.8	18.4	1.8	14.3
Females	5,659	26.6	33.7	117,766	16.5	15.3	2.2	18.4
Persons(h)	11,121	26.2	33.1	250,464	17.6	16.7	2.0	16.4
Vic								
Males	943	19.5	26.2	96,814	17.5	17.4	1.5	8.8
Females	962	19.8	24.1	88,220	15.6	14.7	1.6	9.4
Persons(h)	1,905	19.6	24.9	185,037	16.6	15.9	1.6	9.0
Qld								
Males	5,244	27.2	37.8	80,751	18.5	18.6	2.0	19.2
Females	5,133	26.4	34.4	72,853	16.6	16.0	2.1	18.4
Persons(h)	10,377	26.8	35.7	153,605	17.6	17.2	2.1	18.5
WA								
Males	3,881	43.4	56.8	36,496	15.4	16.2	3.5	40.6
Females	4,162	45.9	56.3	33,106	14.3	14.0	4.0	42.4
Persons(h)	8,043	44.6	56.1	69,602	14.8	15.0	3.7	41.1
SA								
Males	1,322	34.9	46.1	32,719	20.4	19.7	2.3	26.4
Females	1,259	32.7	40.3	29,711	18.2	16.7	2.4	23.6
Persons(h)	2,581	33.8	42.5	62,430	19.3	18.0	2.4	24.5
Tas								
Males	n.p.	10.2	13.1	n.p.	14.5	13.1	1.0	0.0
Females	n.p.	10.5	13.0	n.p.	13.7	12.4	1.1	0.6
Persons(h)	n.p.	10.3	13.0	n.p.	14.1	12.7	1.03	0.3
NT								
Males	n.p.	50.9	66.9	n.p.	13.7	17.5	3.8	49.4
Females	n.p.	54.5	68.1	n.p.	10.2	12.4	5.5	55.7
Persons(i)	n.p.	52.7	67.2	n.p.	12.1	15.1	4.4	52.1
ACT								
Males	n.p.	15.7	16.7	n.p.	14.1	15.0	1.1	1.7
Females	n.p.	13.4	21.5	n.p.	13.2	13.5	1.6	8.0
Persons(i)	n.p.	14.6	19.8	n.p.	13.7	14.2	1.4	5.6

(continued)

Table 1.04.7 (continued): Hospitalisations for principal diagnosis of diseases of the respiratory system, by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b][c][d]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Ratio[f]	Difference[g]
Australia								
Males	**20,838**	**30.5**	**40.0**	**395,744**	**18.0**	**17.9**	**2.2**	**22.1**
Females	**21,371**	**31.2**	**39.3**	**356,081**	**16.1**	**15.2**	**2.6**	**24.1**
Persons[h]	**42,209**	**30.8**	**39.4**	**751,829**	**17.1**	**16.5**	**2.4**	**23.0**

(a) Data include public and private hospital in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes J00–J99.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+. As different age-groupings were used, rates for Tasmania and the Australian Capital Territory cannot be compared with the rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.8: Age-specific hospitalisation rates for a principal diagnosis of diseases of the respiratory system, by Indigenous status and sex, Australia, 2011–12 to 2012–13[(a)]

									All ages	
	0–4	**5–14**	**15–24**	**25–34**	**35–44**	**45–54**	**55–64**	**65+**	**Crude**[(b)]	**Age std.**[(c)]
Males										
Indigenous	89.7	13.7	8.3	11.9	24.5	39.8	51.7	110.4	30.5	40.0
Non-Indigenous	54.9	13.1	8.3	6.3	7.0	8.4	14.3	51.6	18.0	17.9
Rate ratio[(d)]	1.6	1.0	1.0	1.9	3.5	4.7	3.6	2.1	1.7	2.2
Rate difference[(e)]	34.8	0.6	0.0	5.6	17.5	31.4	37.4	58.9	12.5	22.1
Females										
Indigenous	67.0	13.3	11.5	16.7	29.5	46.3	64.6	93.3	31.2	39.3
Non-Indigenous	37.0	11.8	11.5	7.2	7.4	8.4	13.7	39.4	16.1	15.2
Rate ratio[(d)]	1.8	1.1	1.0	2.3	4.0	5.5	4.7	2.4	1.9	2.6
Rate difference[(e)]	30.0	1.5	0.0	9.6	22.1	37.9	50.9	53.9	15.1	24.1
Persons[(f)]										
Indigenous	78.6	13.5	9.9	14.3	27.1	43.2	58.4	100.9	30.8	39.4
Non-Indigenous	46.2	12.5	9.9	6.7	7.2	8.4	14.0	45.1	17.1	16.5
Rate ratio[(d)]	1.7	1.1	1.0	2.1	3.8	5.1	4.2	2.2	1.8	2.4
Rate difference[(e)]	32.4	1.0	0.0	7.6	19.9	34.8	44.4	55.9	13.8	23.0

(a) Data includes public and private hospitals in all jurisdictions.

(b) All age data includes age not stated.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Categories are based on the ICD10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes J00–J99.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.9: Hospitalisations for principal diagnosis of diseases of the respiratory system, by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[(a)(b)]

	Indigenous		Non-Indigenous			
	Number	**No. per 1,000**(c)	**Number**	**No. per 1,000**(c)	**Ratio**(d)	**Difference**(e)
Major cities	9,146	24.6	495,993	15.5	1.6	9.1
Inner regional	7,162	29.5	161,682	18.4	1.6	11.1
Outer regional(f)	9,881	43.3	76,620	18.8	2.3	24.6
Remote(g)	6,844	81.3	10,572	20.1	4.0	61.2
Very remote	9,024	58.9	3,752	19.5	3.0	39.4
Total(h)	**42,209**	**39.4**	**751,829**	**16.5**	**2.4**	**23.0**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes J00–J99

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS 2011 Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.10: Hospitalisations of Indigenous persons for principal diagnosis of diseases of the respiratory system, by type of respiratory disease and sex, Australia, 2011–12 to 2012–13(a)(b)

Principal diagnosis	Number	Per cent (d)	No per 1,000(e)	Ratio(f)	Difference(g)
			Males		
Influenza (J09–J11)	359	1.7	0.6	2.6	0.3
Pneumonia (J12–J18)	4,843	23.2	11.0	3.3	7.6
Allergic rhinitis ('hay fever') (J30.1–J30.4)	10	0.0	0.0	0.7	0.0
Chronic sinusitis (J32)	105	0.5	0.2	0.5	–0.3
COPD (J40–J47)	5,431	26.1	14.5	3.1	9.9
Asthma (J45–J46)	1889	9.1	2.1	1.3	0.5
Pneumoconiosis (J60–J64)	4	0	0	2.5	0
Total (J00–J99)(h)	**20838**	**100**	**40**	**2.2**	**22.1**
			Females		
Influenza (J09–J11)	401	1.9	0.6	2.9	0.4
Pneumonia (J12–J18)	4,803	22.5	9.5	3.6	6.9
Allergic rhinitis ('hay fever') (J30.1–J30.4)	11	0.1	0.0	0.7	0.0
Chronic sinusitis (J32)	141	0.7	0.2	0.5	–0.2
COPD (J40–J47)	6,661	31.2	15.6	3.9	11.6
Asthma (J45–J46)	2540	11.9	3.9	2.4	2.3
Pneumoconiosis (J60–J64)	0	0.0	0.0	n.a.	n.a.
Total (J00–J99)(h)	**21,371**	**100**	**39.3**	**2.6**	**24.1**
			Persons(c)		
Influenza (J09–J11)	760	1.8	0.6	2.7	0.4
Pneumonia (J12–J18)	9,646	22.9	10.1	3.4	7.2
Allergic rhinitis ('hay fever') (J30.1–J30.4)	21	0.0	0.0	0.7	–0.0
Chronic sinusitis (J32)	246	0.6	0.2	0.5	–0.2
COPD (J40–J47)	12,092	28.6	15.0	3.5	10.7
Asthma (J45–J46)	4,429	10.5	3.1	1.9	1.4
Pneumoconiosis (J60–J64)	4	0	0	2.1	0
Total (J00–J99)(h)	**42,209**	**100**	**39.4**	**2.4**	**23.0**

(continued)

Table 1.04.10 (continued): Hospitalisations of Indigenous persons for principal diagnosis of diseases of the respiratory system, by type of respiratory disease and sex, Australia, 2011–12 to 2012–13(a)(b)

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Persons data includes sex not stated and indeterminate.

(d) Proportion of male, female and total hospitalisations of Indigenous persons in the period 2011–12 to 2012–13.

(e) Directly age-standardised using the 2001 Australian standard population.

(f) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(g) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(h) Categories will not add to total due to inclusion of other respiratory diseases in the total.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.11a: Age-standardised hospitalisation separations for diseases of the respiratory system, Qld, WA, SA and NT, 1998–1999 to 2012–2013[a][b]

	Indigenous separations			Non-Indigenous separations		
	Males	**Females**	**Persons[c]**	**Males**	**Females**	**Persons[c]**
1998–99	5,886	5,792	11,678	58,751	50,169	108,920
1999–00	5,892	5,599	11,491	59,558	51,035	110,595
2000–01	5,723	5,597	11,320	59,061	50,239	109,300
2001–02	5,538	5,295	10,834	60,696	51,459	112,156
2002–03	5,420	5,474	10,894	58,507	50,376	108,883
2003–04	5,874	5,781	11,655	59,548	51,242	110,790
2004–05	5,354	5,509	10,863	58,938	50,282	109,220
2005–06	5,463	5,687	11,150	61,757	54,746	116,503
2006–07	5,163	5,451	10,614	59,319	51,689	111,008
2007–08	5,805	5,769	11,574	66,502	58,190	124,692
2008–09	5,909	5,986	11,895	68,217	61,125	129,342
2009–10	6,366	6,445	12,811	70,096	62,088	132,184
2010–11	6,742	7,025	13,767	71,146	64,057	135,203
2011–12	7,128	7,288	14,416	74,197	66,715	140,913
2012–13	6,889	7,058	13,947	78,017	70,418	148,435
Annual change[d]	86	115.0	201	1,300.5	1,410.6	2,711.1
Per cent change[e]	22.4	31.1	26.7	33.0	42.6	37.4

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
2. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10 codes J00–J99.
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.11b: Age-standardised hospitalisation rates for diseases of the respiratory system, Qld, WA, SA and NT, 1998–1999 to 2012–2013[(a)(b)]

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	**Females**	**Persons**[(c)]	**Males**	**Females**	**Persons**[(c)]
1998–99	49.5	53.6	51.5	18.7	14.9	16.6
1999–00	48.6	51.5	50.1	18.8	15.0	16.7
2000–01	45.3	48.6	47.1	18.3	14.5	16.2
2001–02	45.5	44.4	44.9	18.5	14.6	16.4
2002–03	44.5	46.4	45.5	17.5	14.0	15.6
2003–04	47.0	46.6	46.7	17.5	14.0	15.6
2004–05	45.5	45.0	45.0	16.9	13.5	15.1
2005–06	44.6	45.5	45.0	17.4	14.4	15.8
2006–07	40.3	41.4	40.7	16.2	13.3	14.6
2007–08	45.2	43.1	43.9	17.7	14.6	16.0
2008–09	44.5	43.5	43.7	17.6	14.9	16.2
2009–10	44.6	43.6	43.9	17.6	14.9	16.2
2010–11	48.4	48.2	48.0	17.6	15.0	16.2
2011–12	50.3	46.9	48.1	17.9	15.3	16.5
2012–13	46.1	45.1	45.3	18.3	15.7	16.9
Annual change[(d)]	—	–0.4	–0.3	–0.1	0.1	—
Per cent change[(e)]	–1.1	–11.4	–7.3	–4.3	4.9	0.5

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10 codes J00–J99.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.11c: Age-standardised hospitalisation rate ratios and rate differences for diseases of the respiratory system, Qld, WA, SA and NT, 1998–1999 to 2012–2013(a)(b)

	Rate ratio(c)			Rate difference(d)		
	Males	**Females**	**Persons(e)**	**Males**	**Females**	**Persons(e)**
1998–99	2.6	3.6	3.1	30.8	38.6	34.8
1999–00	2.6	3.4	3.0	29.8	36.5	33.4
2000–01	2.5	3.3	2.9	27.0	34.1	30.9
2001–02	2.5	3.0	2.7	27.0	29.8	28.6
2002–03	2.5	3.3	2.9	27.0	32.4	29.9
2003–04	2.7	3.3	3.0	29.5	32.6	31.1
2004–05	2.7	3.3	3.0	28.5	31.5	29.9
2005–06	2.6	3.2	2.9	27.3	31.1	29.2
2006–07	2.5	3.1	2.8	24.1	28.0	26.1
2007–08	2.6	2.9	2.7	27.5	28.5	27.9
2008–09	2.5	2.9	2.7	26.8	28.6	27.5
2009–10	2.5	2.9	2.7	27.0	28.7	27.7
2010–11	2.8	3.2	3.0	30.9	33.1	31.8
2011–12	2.8	3.1	2.9	32.5	31.7	31.6
2012–13	2.5	2.9	2.7	27.9	29.4	28.4
Annual change(f)	n.a.	n.a.	n.a.	—	–0.4	–0.3
Per cent change(g)	n.a.	n.a.	n.a.	1.0	–18.1	–11.3

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(d) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(e) Persons data includes sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10 codes J00–J99.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.12: Children aged 0–4 years, hospitalisation rates, rate ratios and rate differences for, diseases of the respiratory system Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Indigenous separations	Non-Indigenous separations	Indigenous no. per 1,000	Non-Indigenous no. per 1,000	Rate ratio[c]	Rate difference[d]
1998–99	4,868	23,034	117.2	52.3	2.2	64.9
1999–00	4,751	23,244	112.2	53	2.1	59.2
2000–01	4,592	22,510	106.1	51.5	2.1	54.6
2001–02	4,202	22,726	95.6	52.1	1.8	43.5
2002–03	4,289	21,061	96.5	48.2	2	48.4
2003–04	4,569	22,470	101.7	51.2	2	50.5
2004–05	3,648	21,145	80.4	47.8	1.7	32.6
2005–06	3,726	20,675	81.4	46	1.8	35.4
2006–07	3,584	19,648	77.7	42.4	1.8	35.3
2007–08	3,781	24,170	81.2	50	1.6	31.2
2008–09	3,846	24,484	81.6	48.5	1.7	33.1
2009–10	4,094	25,198	86.1	48.4	1.8	37.7
2010–11	4,118	24,506	86.9	46.4	1.9	40.5
2011–12	4,410	25,553	93.5	47.6	2	45.9
2012–13	4,233	26,205	89.3	47.6	1.9	41.7
Annual change[e]	–43.8	243.2	–1.9	–0.4	n.a.	–1.5
Per cent change[f]	–13.7	15.9	–25.0	–10.9	n.a.	–38.6

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(d) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(e) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(f) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10 codes J00–J99.
4. Principal diagnosis code used unless specified otherwise.
5. Due an anomaly in the 2011 population estimate for children aged 0–4, based on the 2011 Census, the average of three years population data centred around the reporting year has been used as the denominator for both Indigenous and non-Indigenous rates.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.13: Age-standardised hospitalisation rates, rate ratios and rate differences for diseases of the respiratory system , NSW, Vic, Qld, WA, SA and NT, 2004–2005 to 2012–2013[(a)(b)]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(c)]	Per cent change[(d)]
Indigenous separations											
Males	7,320	7,780	7,384	8,253	8,436	9,040	9,495	10,235	10,187	397.4	44.8
Females	7,561	7,943	7,686	8,309	8,603	9,266	9,982	10,638	10,329	411.8	45.3
Persons[(e)]	14,882	15,723	15,070	16,562	17,039	18,306	19,477	20,873	20,516	809.1	45.0
Non-Indigenous Australian separations											
Males	157,959	161,021	159,056	173,617	175,441	178,404	185,290	191,347	190,376	4,631.7	23.7
Females	135,592	141,341	138,465	152,520	157,247	158,247	166,477	172,229	170,889	4,926.7	29.2
Persons[(e)]	293,564	302,364	297,521	326,138	332,688	336,653	351,769	363,579	361,266	9,557.7	26.3
Indigenous rate (separations per 1,000)											
Males	36.0	36.6	33.5	36.4	36.3	37.1	39.3	42.2	40.3	0.8	18.1
Females	36.0	37.2	34.2	37.2	37.3	38.0	40.8	41.4	39.3	0.7	14.9
Persons[(e)]	35.8	36.8	33.7	36.7	36.7	37.5	39.9	41.5	39.6	0.7	16.3
Non-Indigenous Australian rate (separations per 1,000)											
Males	17.6	17.6	17.0	18.1	17.9	17.8	18.1	18.3	17.7	0.1	3.5
Females	13.9	14.3	13.8	14.8	14.9	14.8	15.3	15.5	15.0	0.2	10.3
Persons[(e)]	15.6	15.8	15.2	16.3	16.3	16.2	16.6	16.8	16.3	0.1	6.9
Rate ratio[(f)]											
Males	2.0	2.1	2.0	2.0	2.0	2.1	2.2	2.3	2.3	n.a.	n.a.
Females	2.6	2.6	2.5	2.5	2.5	2.6	2.7	2.7	2.6	n.a.	n.a.
Persons[(e)]	2.3	2.3	2.2	2.2	2.3	2.3	2.4	2.5	2.4	n.a.	n.a.

(continued)

Table 1.04.13 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences for diseases of the respiratory system, NSW, Vic, Qld, WA, SA and NT, 2004–2005 to 2012–2013[a][b]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[c]	Per cent change[d]
Rate difference[g]											
Males	18.4	19.0	16.4	18.2	18.4	19.4	21.3	23.9	22.5	0.7	33.2
Females	22.1	22.9	20.5	22.4	22.4	23.2	25.5	25.9	24.3	0.5	17.9
Persons[e]	20.2	21.0	18.5	20.4	20.4	21.3	23.4	24.8	23.3	0.6	23.9

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(e) Persons data includes sex not stated and indeterminate.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10 codes J00–J99.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.14: Children aged 0–4, hospitalisation rates, rate ratios and rate differences for, diseases of the respiratory system NSW, Vic, Qld, WA, SA and NT, 2004–2005 to 2012–13[(a)(b)]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(c)]	Per cent change[(d)]
Indigenous separations	5,012	5,286	5,067	5,533	5,674	5,897	5,982	6,472	6,369	186.3	30.1
Non-Indigenous Australian separations	52,412	52,822	52,075	61,367	60,488	61,779	61,943	63,615	62,256	1,531.7	23.3
Indigenous rate (separations per 1,000)	66.7	69.7	66.0	71.3	72.1	74.3	75.4	81.8	80.2	1.9	22.8
Non-Indigenous Australian rate (separations per 1,000)	45.6	45.6	43.9	49.9	47.6	47.4	46.9	47.5	45.5	0.2	2.6
Rate ratio[(e)]	1.5	1.5	1.5	1.4	1.5	1.6	1.6	1.7	1.8	n.a.	n.a.
Rate difference[(f)]	21.1	24.1	22.2	21.3	24.5	26.9	28.5	34.3	34.6	1.7	70.2

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Due an anomaly in the 2011 population estimate for children aged 0–4, based on the 2011 Census, the average of three years population data centred around the reporting year has been used as the denominator for both Indigenous and non-Indigenous rates.
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10 codes J00–J99.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.15: Children aged 0–4, hospitalisation rates, rate ratios and rate differences for invasive pneumococcal disease, Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[c]	Per cent change[d]
Indigenous separations	61	43	33	28	27	21	14	15	16	16	11	15	27	21	14	–2.1	–76.6
Non-Indigenous separations	123	144	173	181	167	151	121	37	37	67	46	66	57	61	39	–9.8	–82.3
Indigenous no. per 1,000	1.5	1.0	0.8	0.6	0.6	0.5	0.3	0.3	0.3	0.3	0.2	0.3	0.6	0.4	0.3	–0.1	–82.4
Non-Indigenous no. per 1,000	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	–	–88.4
Rate ratio[e]	5.3	3.1	1.9	1.5	1.6	1.4	1.1	4.0	4.3	2.5	2.6	2.5	5.3	3.9	4.2	n.a.	n.a.
Rate difference[f]	1.2	0.7	0.4	0.2	0.2	0.1	0.04	0.2	0.3	0.2	0.1	0.2	0.5	0.3	0.2	–	–78.1

(a) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory. Data are reported by place of residence of the patient.

(b) Data are reported for Qld, WA, SA and NT only. Hospitalisation data for these jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

(e) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(f) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

Notes

1. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions ICD-10-AM codes G00.1 (Hospitalisations for pneumococcal meningitis), A40.3 (pneumococcal septicaemia) and J13 (streptococcus pneumoni).
2. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Due to an anomaly in the 2011 population estimate for children aged 0–4, the average of three years population data centred around the reporting year has been used as the denominator for both Indigenous and non-Indigenous rates.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.16: Children aged 0–4, hospitalisation rates, rate ratios and rate differences for invasive pneumococcal disease, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a][b]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[c]	Per cent change[d]
Indigenous separations	21	19	23	18	17	19	36	24	18	0.5	20.3
Non-Indigenous separations	263	100	97	155	136	146	145	125	108	–7.6	–35.5
Indigenous no. per 1,000	0.3	0.3	0.3	0.2	0.2	0.2	0.5	0.3	0.2	—	13.4
Non-Indigenous no. per 1,000	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	—	–47.8
Rate ratio[e]	1.2	2.9	3.7	1.8	2.0	2.1	4.1	3.2	2.9	n.a.	n.a.
Rate difference[f]	0.1	0.2	0.2	0.1	0.1	0.1	0.3	0.2	0.1	—	96.2

(a) Data are from public and most private hospitals. Data excludes private hospitals in the Northern Territory. Data are reported by place of residence of the patient.

(b) Data are reported for NSW, Vic Qld, WA, SA and NT only. Hospitalisation data for these jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(e) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(f) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

Notes

1. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions ICD-10-AM codes G00.1 (Hospitalisations for pneumococcal meningitis), A40.3 (pneumococcal septicaemia) and J13 (streptococcus pneumoni).
2. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Due to an anomaly in the 2011 population estimate for children aged 0–4, the average of three years population data centred around the reporting year has been used as the denominator for both Indigenous and non-Indigenous rates.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.04.17: Invasive pneumococcal disease notification rate, by age group and Indigenous status, Australia, 2011–2013[(a)(b)(c)]

	Number		Rate per 100,000			
	Indig.	Other[(d)]	Indig.	Other[(d)]	Rate ratio[(e)]	Rate difference[(f)]
0–4	106	558	21.3	6.6	3.2*	14.6*
5–14	94	235	9.9	1.5	6.7*	8.4*
15–24	68	145	8.2	0.8	10.0*	7.4*
25–34	95	283	10.5	0.7	15.1*	9.8*
35–44	137	457	27.9	2.5	11.4*	25.5*
45–54	120	482	30.8	2.7	11.5*	28.1*
55–64	74	675	31.7	4.4	7.2*	27.3*
65+	51	1,675	1.3	1.3	1.0	0.0
Total age-standardised[(g)]	**745**	**4,510**	**44.7**	**6.5**	**6.9***	**38.2***

* Represents results with statistically significant differences in the Indigenous/other comparisons at the $p < 0.05$ level.

(a) Calender year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Rates are calculated using the sum of notifications divided by the sum of the populations for the relevant years.

(c) Data are reported for all states in Australia including New South Wales, Victoria, Queensland, Western Australia, South Australia, Tasmania, the Northern Territory and the Australian Capital Territory. All these jurisdictions are considered to have adequate levels of Indigenous identification in these data in 2011–2013.

(d) 'Other' includes notifications for non-Indigenous Australians and those for whom Indigenous status was not stated.

(e) Notification rate for Indigenous divided by notification rate for Other.

(f) Notification rate for Indigenous minus notification rate for Other.

(g) Directly age-standardised using the Australian 2001 standard population using five year age groups up to 65+.

Source: AIHW analysis of NNDSS data.

Table 1.04.18: Notification rates for invasive pneumococcal disease by clinical presentation and Indigenous status, Australia, 2011–13[(a)(b)(c)]

	No.		Proportion (%)		No. per 100,000[(b)(c)]			
Clinical presentation	Indig.	Other[(d)]	Indig.	Other[(d)]	Indig.	Other[(d)]	Rate ratio[(e)]	Rate difference[(f)]
Respiratory diseases	468	2,290	17.0	83.0	28.7	3.2	9.0*	25.5*
Other clinical presentations	257	1,582	14.0	86.0	14.7	2.3	6.5*	12.5*
Unknown clinical presentations	16	464	3.3	96.7	1.0	0.7	1.4	0.3
Total[(g)]	**745**	**4,510**	**14.2**	**85.8**	**44.7**	**6.5**	**6.9***	**38.2***

(a) Calender year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Rates are calculated using the sum of notifications divided by the sum of the populations for the relevant years.

(c) Directly age-standardised using the Australian 2001 standard population using 5 year age groups up to 65+.

(d) 'Other' includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(e) Notification rate for Indigenous divided by notification rate for Other.

(f) Notification rate for Indigenous minus notification rate for Other.

(g) Total includes persons with clinical presentation not stated.

Source: AIHW analysis of NNDSS data.

Data quality issues

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013a). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013b).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the

2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014a).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

National Hospital Morbidity Database

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is ‘as reported’ by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013c). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

National Notifiable Diseases Surveillance System

Notifications

Incidence of sexually transmissible infections is an indicator of unsafe sexual practices.

Notification statistics do not measure the incidence or prevalence of these infections in the community. NNDSS data represent only a proportion of the total cases occurring in the community, that is only those cases for which health care was sought, a test conducted and a diagnosis made, followed by a notification to health authorities. Under-reporting of these infections can occur at a number of stages:

- a person infected may not have symptoms
- a person may not seek medical care
- no testing performed
- a false negative result may occur
- there may be a positive test result but for some reason a notification may not occur
- the case may not be reported to the NNDSS (for more information see Figure 1 in NNDSS 2008).

The level of under-reporting can vary by disease, jurisdiction and over time. The method of surveillance can vary between jurisdictions with different requirements for notification by medical practitioners, laboratories and hospitals. These can also change over time.

Notification statistics can provide insights into the health of the population which has been diagnosed with a notifiable illness and changes over time.

Notification statistics do not necessarily capture the mode of transmission, NNDSS data on the diseases discussed in this measure are known to include infections acquired through non-sexual modes of transmission. For example, although data on hepatitis C is included in this measure, sexual transmission is not considered the main route of transmission, hepatitis C primarily occurs among those with a history of injecting drug use.

Due to the high proportion of asymptomatic presentations of STI infections, diagnoses are heavily influenced by testing patterns. High rates of STI diagnoses in Indigenous populations may be due to higher levels of screening and not necessarily associated with increased levels of transmission among Indigenous persons.

Under-identification

The incompleteness of Indigenous identification means the number of notifications recorded as Indigenous is likely to be an under-estimate of Indigenous notifications rates.

The completeness of Indigenous identification in notifiable disease registries varies between the states and territories and by disease. Information on the occurrence of sexually transmitted infections is included in this measure if information on Indigenous status was reported for at least 50% of diagnoses in a state or territory health jurisdiction for the period 1996–98 to 2011–13 (for time series data) or 2011–13 (for current period). Based on this cut-off, Western Australia, South Australia, Tasmania and the Northern Territory were assessed to have adequate identification for chlamydia, syphilis, gonorrhoea, hepatitis B and hepatitis C. Of the remaining states and territories: Queensland and Victoria had adequate identification for syphilis, gonorrhoea and chlamydia; the Australian Capital Territory had adequate identification for syphilis, gonorrhoea and hepatitis B; and New South Wales had adequate identification for syphilis only.

Numerator and denominator

Rate and ratio calculations rely on good population estimates. The changes in the completeness of identification of Indigenous Australians in notification records may take place at different rates from changes in the identification of Indigenous Australians in the population estimates. Denominators used here are sourced from *Experimental estimates and projections: Aboriginal and Torres Strait Islander Australians 1996 to 2026* (ABS 2014b).

AIDS and HIV notifications

National surveillance for newly diagnosed HIV infection is coordinated by the Kirby Institute, in collaboration with state and territory health authorities, the Australian Government Department of Health, the Australian Institute of Health and Welfare and other collaborating networks in surveillance for HIV, viral hepatitis and sexually transmissible infections.

Cases of HIV infection are notified to the National HIV Registry on the first occasion of diagnosis in Australia, either by the diagnosing laboratory (Australian Capital Territory and Tasmania), by doctor notification (Western Australia) or by a combination of laboratory and doctor sources (New South Wales, Northern Territory, Queensland, South Australia and Victoria). Information sought at notification of HIV infection included State/Territory of diagnosis, name code (based on the first 2 letters of the family name and the first 2 letters of the given name), sex, date of birth, Indigenous status, date of HIV diagnosis, CD4+ cell count at diagnosis, source of exposure to HIV and evidence of newly acquired HIV infection.

Information on Indigenous status was routinely sought at diagnosis of HIV infection in the Northern Territory, Queensland, South Australia, Tasmania and Western Australia from 1985. Information on Indigenous status was available for cases of HIV infection newly diagnosed in New South Wales from January 1992, from June 1998 in Victoria and from January 2005 in the Australian Capital Territory. Nationally, information on Indigenous status at diagnosis of HIV infection was sought prospectively from May 1995. For HIV diagnoses before 1995, Indigenous status was obtained retrospectively through health authorities. In 2000–2009, Indigenous status was reported at HIV diagnosis by state and territory health authorities other than the Australian Capital Territory before January 2005 and Victoria before June 1998 in 98% of Australian-born cases (Guthrie et al. 2000; The Kirby Institute 2014).

List of symbols used in tables

n.a.	not available
–	rounded to zero (including null cells)
0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 5 of 68

Detailed analyses

1.05 Circulatory disease

This measure reports on prevalence, incidence and deaths caused by circulatory disease, as well as the number of hospital separations with a principal diagnosis of circulatory disease for Aboriginal and Torres Strait Islander people.

Introduction

This is no. 5 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- National Mortality Database
- Australian Aboriginal and Torres Strait Islander Health Survey
- Bettering the Evaluation and Care of Health survey
- National Hospital Morbidity Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Age-standardised rates and ratios have been used as a measure of morbidity in the Indigenous Australian population relative to non-Indigenous Australians. Ratios of this type illustrate differences between the rates of morbidity among Indigenous and non-Indigenous Australians, taking into account differences in age distributions.

Time series analyses may be affected by changes in the quality of Indigenous identification over time.

The following data are presented for this measure:

- Deaths, see tables 1.23.1, 1.23.8 and 1.23.18
- Self-reported prevalence, see tables 1.05.1–4
- General practitioner encounters, see Table 1.05.5
- Hospitalisations and procedures, see tables 1.05.6–12 and 3.06.12.

For more information related to circulatory diseases, see measures 1.23, 2.18 and 3.06. See also 'Other related information' at the end of this measure.

Deaths

Current period

In the period 2008–12 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- Circulatory disease was the leading cause of death for Indigenous Australians, accounting for 26% of all deaths (2,958 cases). It was also the leading cause of death for non-Indigenous Australians, with more than 160,000 deaths (32% of the total).
- The age-standardised mortality rate for circulatory disease for Indigenous Australians was 286 per 100,000, compared with 192 per 100,000 for non-Indigenous Australians.
- After adjusting for age, Indigenous Australians were 1.5 times as likely as non-Indigenous Australians to die of circulatory disease. The gap was 94 per 100,000 (Table 1.23.1).
- The leading causes of circulatory disease deaths for Indigenous Australians were ischaemic heart disease (55%) and cerebrovascular causes such as stroke (17%) (Table 1.23.8).

Trend

In the period between 1998 and 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The mortality rate for Indigenous Australians from circulatory disease dropped 40%, from 462 to 283 per 100,000. The rate for non-Indigenous Australians dropped 38%, from 292 to 175 per 100,000.
- The gap between Indigenous and non-Indigenous Australians decreased significantly by 43% (from 169 to 108 per 100,000) (Table 1.23.18).

Self-reported prevalence

Current period

In 2012–13:

- 13% of Indigenous Australians aged 2 and over had a circulatory condition (Table 1.05.1).
- After adjusting for age, Indigenous Australians were 1.2 times as likely as non-Indigenous Australians to have a circulatory condition.
- The proportion of people reporting circulatory conditions was highest among those aged 55 and over for both Indigenous and non-Indigenous Australians (45% and 46%, respectively). The largest difference was in the 25–34 age group, where Indigenous Australians were 2.2 times as likely as non-Indigenous Australians to have a circulatory condition (Table 1.05.2).
- Indigenous Australians living in remote areas had higher rates of circulatory conditions than those in non-remote areas (18% compared with 11%) (Table 1.05.1).

General practitioner encounters

Current period

In the period April 2008 to March 2013:

- Approximately 8% of problems managed by GPs in encounters with Indigenous Australians were circulatory conditions.
- After adjusting for age, circulatory problems were managed at a rate of 197 per 1,000 encounters with Indigenous Australians, compared with 172 per 1,000 for other Australians.
- The age-adjusted rate of management of ischaemic heart disease in Indigenous Australians was almost twice that in non-Indigenous Australians (20 per 1,000 encounters compared with 11 per 1,000). This represents a significant rate difference of 9 per 1,000 encounters (Table 1.05.5).

Hospitalisations and procedures

Current period

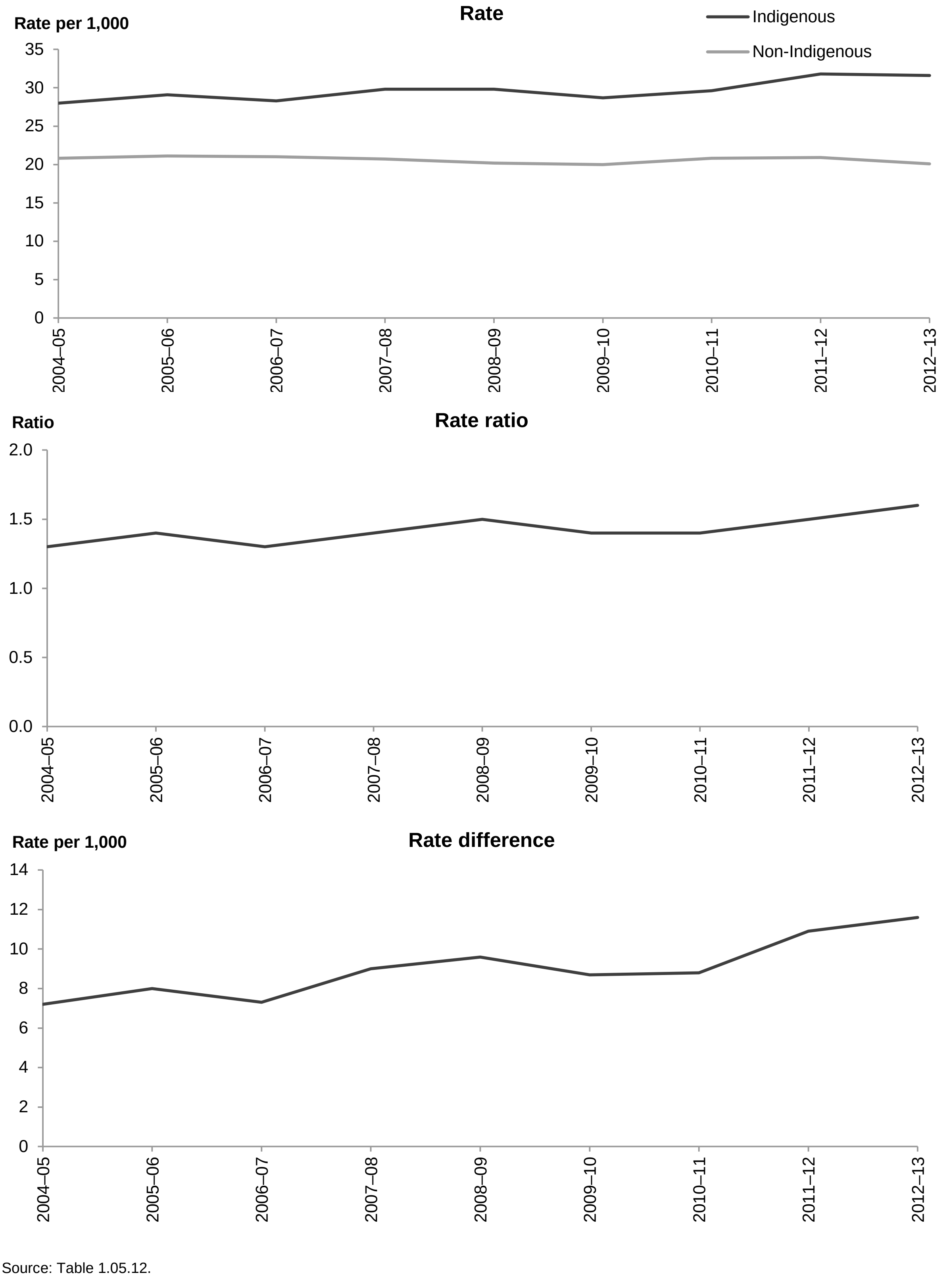
In the 2 years 2011–12 and 2012–13:

- There were over 22,500 hospitalisations of Indigenous Australians for circulatory disease, a rate of 17 per 1,000. After adjusting for age, Indigenous Australians were 1.5 times as likely as non-Indigenous Australians to be hospitalised for circulatory disease. The rate difference was 11 per 1,000 (Table 1.05.6).
- The most common principal diagnoses in hospitalisations for circulatory conditions in Indigenous Australians were ischaemic heart disease (40%) and pulmonary and other forms of heart disease (31%) (Table 1.05.9).
- Among patients hospitalised for coronary heart disease, Indigenous Australians were nearly half as likely as non-Indigenous Australians to receive coronary angiography or revascularisation (rate ratio of 0.6 for each procedure), after age differences were taken into account (Table 3.06.12).

Trend

In the period from 2004–05 to 2012–13 in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The hospitalisation rate for Indigenous Australians with circulatory disease increased by 12% (from 28 per 1,000 to 32 per 1,000). The rate difference increased by 55% (from 7 to 12 per 1,000) (Table 1.05.12, Figure 1.05.1).



Source: Table 1.05.12.

Figure 1.05.1: Hospitalisation rates, rate ratios and rate differences between Indigenous and non-Indigenous Australians from diseases of the circulatory system, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13

Table 1.05.1: Indigenous persons (aged 2 and over) reporting heart/circulatory conditions, by remoteness, by age, sex and state/territory, 2012–13(a)

	Remoteness						Overall population distribution
	Non-remote		Remote		Australia		
	Number	Rate(b)	Number	Rate(b)	Number	Rate(b)	Per cent(c)
Age							
2–14	3,046	1.9	1,150†	3.0†	4,196	2.1	32.6
15–24	4,541	4.4*	2,194	8.6*	6,735	5.3*	21.0
25–34	6,325	9.6*	3,139	15.2*	9,464	10.9*	14.3
35–44	9,394	15.7*	4,590	25.7*	13,984	18.0*	12.8
45–54	11,711	25.1*	5,298	39.6*	17,009	28.3*	9.9
55+	18,648	42.4*	6,758	53.2*	25,406	44.9*	9.3
Sex							
Males	23,629	9.9*	10,008	15.6*	33,638	11.1*	49.8
Females	30,036	12.5	13,120	20.3	43,155	14.2	50.2
State/territory							
NSW	23,228	12.7*	2,079	24.0*	25,307	13.3*	31.4
Vic	4,334	10.0*	. .	. .	4,334	10.0*	7.2
Qld	13,898	10.0*	6,519	20.0*	20,417	11.9*	28.2
SA	3,231	11.6*	989	16.8*	4,221	12.5*	5.6
WA	3,972	8.5*	5,505	17.6*	9,477	12.2*	12.8
Tas	3,109	14.3	320‡	43.5‡	3,429	15.2	3.7
NT	1,402	11.7*	7,715	15.5*	9,117	14.7	10.2
ACT	491	8.8*	. .	. .	491	8.8*	0.9
Total per cent	**. .**	**11.2**	**. .**	**17.9***	**. .**	**12.7***	**100.0**
Total number	**53,665**	**. .**	**23,128**	**. .**	**76,793**	**. .**	**606,915**

* Represents statistically significant differences at the $p < 0.05$ level. Differences between rates were tested within each remoteness category, using 2–14 as the reference category for Age, females as the reference category for Sex, and Tas as the reference category for State/territory. Differences between the overall rates for remoteness categories were also tested, using non–remote as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) People who reported having a current heart/circulatory problem which has lasted, or is expected to last, for 6 months or more.

(b) Rate per 100.

(c) Distribution of total Indigenous population.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.05.2: Persons (aged 2 and over) reporting heart/circulatory conditions, by remoteness, Indigenous status, age, sex and state/territory, 2012–13(a)(b)

	Remoteness												
	Non-remote			Remote			Australia					Overall population distribution	
	Indigenous	Non-Indigenous	Rate ratio(c)	Indigenous	Non-Indigenous	Rate ratio(c)	Indigenous	Non-Indigenous	Rate ratio(c)	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	Rate(d)									Number		Per cent(e)	
Age(f)													
2–14	1.9	n.p.	. .	3.0†	n.p.	. .	2.1	1.1	1.9	4,196	36,821	32.6	16.5
15–24	4.4	n.p.	. .	8.6	n.p.	. .	5.3	2.8	1.9	6,735	81,908	21.0	14.0
25–34	9.6	4.9	2.0	15.2	4.1‡	3.7	10.9	4.9	2.2	9,464	155,307	14.3	15.0
35–44	15.7	10.2	1.5	25.7	16.0†	1.6	18.0	10.2	1.8	13,984	316,037	12.8	14.6
45–54	25.1	19.0	1.3	39.6	22.7	1.7	28.3	19.0	1.5	17,009	567,210	9.9	14.1
55+	42.4	46.1	0.9	53.2	52.0	1.0	44.9	46.1	1.0	25,406	2,511,982	9.3	25.8
Sex													
Males	16.8	15.4	1.1	23.1	20.8	1.1	18.3	15.4	1.2	33,638	1,720,463	49.8	49.8
Females	19.1	16.6	1.2	28.1	18.4	1.5	21.1	16.6	1.3	43,155	1,948,803	50.2	50.2
State/territory													
NSW	19.2	n.p.	. .	32.8	n.p.	. .	19.9	16.5	1.2	25,307	1,242,594	31.4	32.5
Vic	15.5	n.p.	. .	. .	n.p.	. .	15.5	15.6	1.0	4,334	899,840	7.2	25.5
Qld	17.4	16.2	1.1	27.1	25.2	1.1	19.6	16.3	1.2	20,417	731,871	28.2	19.9
SA	19.5	15.7	1.2	27.5	19.3†	1.4	20.9	15.8	1.3	4,221	285,254	5.6	7.3
WA	15.3	14.2	1.1	24.7	19.3	1.3	19.3	14.4	1.3	9,477	327,033	12.8	10.3
Tas	21.3	18.8	1.1	36.1†	21.1†	1.7	22.5	18.8	1.2	3,429	103,230	3.7	2.2
NT	16.7	12.6	1.3	22.9	11.3	2.0	21.7	12.3	1.8	9,117	16,024	10.2	0.7
ACT	16.5	18.4	0.9	. .	. .	. .	16.5	18.4	0.9	491	63,418	0.9	1.6
All	**18.0**	**16.0**	**1.1**	**25.7**	**19.6**	**1.3**	**19.7**	**16.0**	**1.2**	**. .**	**. .**	**100.0**	**100.0**
Total number	**53,665**	**3,620,787**	**. .**	**23,128**	**48,478**	**. .**	**76,793**	**3,669,266**	**. .**	**76,793**	**3,669,266**	**606,915**	**21,102,289**

(continued)

Table 1.05.2 (continued): Persons (aged 2 and over) reporting heart/circulatory conditions, by remoteness, Indigenous status, age, sex and state/territory, 2012–13[(a)(b)]

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting they have a current heart or circulatory condition which has lasted, or is likely to last, for 6 months or more.

(b) Data are directly age-standardised to the 2001 standard population by 10 year age groups up to 55+.

(c) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(d) Persons reporting heart/circulatory conditions per 100 persons.

(e) Distribution of total population.

(f) Data for specific age groups are not age-standardised, only the totals.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.05.3: Selected socioeconomic and health characteristics by Indigenous persons (15 years and over) reporting heart/circulatory conditions, 2012–13

	Heart/ circulatory problems[(a)]	No heart/ circulatory problems	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
SEIFA[(d)]					
1st quintile (most disadvantaged)	20.1	79.9	100.0	214,140	52.4
5th quintile (most advantaged)	9.8	90.2	100.0	17,168	4.2
Ratio most disadvantaged/most advantaged	2.1*	0.9	1.0	12.5	12.5
Employment					
Employed	14.4*	85.6	100.0	186,246	45.5
Unemployed	11.7	88.3	100.0	48,692	11.9
Not in the labour force	23.0*	77.0	100.0	174,003	42.5
Ratio unemployed/employed	0.8*	1.0	1.0	0.3	0.3
Has non-school qualification[(e)]					
Yes	17.2	82.8	100.0	166,000	40.6
No	18.1	81.9	100.0	242,941	59.4
Ratio no/yes	1.1*	1.0	1.0	1.5	1.5
Highest year of school completed					
Year 12	11.5	88.5	100.0	101,295	24.8
Year 9 or below[(f)]	26.8	73.2	100.0	121,511	28.8
Ratio Year 9 or below/Year 12	2.3*	0.8	1.0	1.2	1.2
Smoker status					
Current smoker[(g)]	17.7	82.3	100.0	178,720	43.7
Non-smoker[(h)]	17.8	82.2	100.0	230,221	56.3
Ratio smoker/non-smoker	1.0	1.0	1.0	0.8	0.8
Adequate daily vegetable intake[(i)]					
Yes	22.4	77.6	100.0	19,633	4.8
No	17.5	82.5	100.0	389,308	95.2
Ratio no/yes	0.8*	1.1	1.0	19.8	19.8
Adequate daily fruit intake[(j)]					
Yes	18.1	81.9	100.0	171,847	42.0
No	17.5	82.5	100.0	237,094	58.0
Ratio no/yes	1.0*	1.0	1.0	1.4	1.4
Obese[(k)]					
Yes	25.8	74.2	100.0	128,145	37.4
No	13.6	86.4	100.0	214,639	62.6
Ratio yes/no	1.9*	0.9	1.0	0.6	0.6
Total number[(l)]	*62,229*	*280,555*	*342,783*	*342,783*	*342,783*

(continued)

Table 1.05.3 (continued): Selected socioeconomic and health characteristics by Indigenous persons (15 years and over) reporting heart/circulatory conditions, 2012–13

	Heart/ circulatory problems[a]	No heart/ circulatory problems	Total		Overall population distribution
	Per cent[b]		Per cent[b]	Number	Per cent[c]
Self-assessed health status					
Excellent/very good/good	12.7	87.3	100.0	309,881	75.8
Fair/poor	33.7	66.3	100.0	99,060	24.2
Ratio fair, poor/excellent, very good, good	2.7*	0.8	1.0	0.3	0.3
Diabetes[m][n]					
Yes	44.6	55.4	100.0	48,255	11.8
No	14.2	85.8	100.0	360,686	88.2
Ratio yes/no	3.1*	0.6	1.0	0.1	0.1
Kidney disease[n]					
Yes	47.7	52.3	100.0	9,993	2.4
No	17.0	83.0	100.0	398,948	97.6
Ratio yes/no	2.8*	0.6	1.0	0.0	0.0
Measured high blood pressure[o]					
Yes	31.6	68.4	100.0	64,236	20.4
No	16.3	83.7	100.0	251,053	79.6
Ratio yes/no	1.9*	0.8	1.0	0.3	0.3
Total number[p]	*61,311*	*253,978*	*315,288*	*315,288*	*315,288*
Total number of persons 15+	**72,597**	**336,344**	**408,941**	**408,941**	**408,941**

* Represents statistically significant differences at the p < 0.05 level. Only 'Heart/circulatory problems' column tested.

(a) Self-reported data consisting of persons reporting they have a current heart/circulatory condition which has lasted, or is expected to last, for 6 months or more.

(b) Percentages add within rows.

(c) Distribution of total population.

(d) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(e) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED) (includes e.g. Bachelor degree or higher, diploma, advanced diploma, certificate).

(f) Year 9 or below includes never attended school.

(g) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(h) Includes ex-smoker and those who have never smoked.

(i) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 years and over, with the exception of 18–49 year old males who eat 6 serves.

(j) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 years and over.

(k) Body Mass Index greater than 30.0 for people aged 18 years and over. For information on the calculation of BMI scores for people aged 15–17 years, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001).

(l) Total excludes measurement not taken.

(m) Includes Type 1 and Type 2 diabetes, and type unknown. Includes persons who reported they had diabetes but that it was not current at the time of interview.

(n) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(o) Measured blood pressure data collected for persons 18 years and over. High blood pressure is a measurement of 140/90 mmHg or higher.

(p) Excludes measurement not taken and valid reading not obtained.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.05.4: Indigenous persons (15 years and over) reporting heart/circulatory conditions, by selected household and health risk factors, 2012–13

	Heart/circulatory problems[(a)]	No heart/circulatory problems	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Equivalised gross household income[(d)]					
1st quintile (lowest)	19.7	80.3	100.0	140,304	42.7
4th/5th quintile (highest)	14.9	85.1	100.0	55,728	17.0
Ratio lowest/highest	1.3*	0.9*	1.0	2.5	2.5
Total number	**59,012**	**269,678**	. .	**328,690**	**328,690**
Financial stress—whether household could raise $2,000 in an emergency[(d)]					
Yes	15.7	84.3	100.0	177,097	46.2
No	19.5	80.5	100.0	206,614	53.8
Ratio yes/no	0.8*	1.0*	1.0	0.9	0.9
Total number	**68,215**	**315,496**	. .	**383,711**	**383,711**
Household had day/s without money for basic living expenses in last 12 months					
Yes	18.3	81.7	100.0	164,764	40.5
No	17.5	82.5	100.0	241,932	59.5
Ratio yes/no	1.0*	1.0*	1.0	0.7	0.7
Total number	**72,359**	**334,337**	. .	**406,696**	**406,696**
Housing tenure type[(e)]					
Owner	18.7	81.3	100.0	124,490	30.6
Renter	17.4	82.6	100.0	281,001	69.0
Ratio renter/owner	0.9*	1.0*	1.0	2.3	2.3
Total number	**72,359**	**334,652**	. .	**407,011**	**407,011**
Lives in overcrowded household[(f)]					
Yes	15.7	84.3	100.0	81,548	20.1
No	18.3	81.7	100.0	325,148	79.9
Ratio yes/no	0.9*	1.0*	1.0	0.3	0.3
Total number	**72,359**	**334,337**	. .	**406,696**	**406,696**
Alcohol consumption					
Abstained from alcohol in last 12 months[(g)]	19.6	80.4	100.0	108,024	26.4
Short-term/single occasion risk[(h)]					
Yes	16.2	83.8	100.0	219,176	53.6
No	19.6	80.4	100.0	74,582	18.2
Ratio yes/no	0.8*	1.0*	1.0	2.9	2.9
Physical activity[(i)]					
Met guidelines[(j)]	15.4	84.6	100.0	117,125	41.4
Did not meet guidelines[(k)]	18.8	81.2	100.0	165,910	58.6

(continued)

Table 1.05.4 (continued): Indigenous persons (15 years and over) reporting heart/circulatory conditions, by selected household and health risk factors, 2012–13

	Heart/circulatory problems[(a)]	No heart/circulatory problems	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Ratio did not meet/met guidelines	1.2*	1.0*	1.0	1.4	1.4
Total number	**49,306**	**233,729**	**. .**	**283,035**	**283,035**
Disability status[(l)]					
Has profound, severe or moderate core activity limitation	36.2*	63.8*	100.0	51,009	12.5
Has a schooling/employment restriction only	23.2*	76.8*	100.0	44,580	10.9
Has unspecified limitation or restriction	24.5*	75.5*	100.0	88,239	21.6
Total with disability/long-term health condition	**27.4**	**72.6**	**100.0**	**183,828**	**45.0**
No disability/long-term health condition	9.9	90.1	100.0	225,113	55.0
Ratio disability/no disability	2.8*	0.8*	1.0	0.8	0.8
Psychological distress (Kessler 5)[(m)(n)]					
Low/moderate	18.1	81.9	100.0	252,230	69.8
High/very high	22.7	77.3	100.0	109,134	30.2
Ratio high/very high:low/moderate	1.3*	0.9*	1.0	0.4	0.4
Total number[(o)]	**70,337**	**291,027**	**. .**	**361,364**	**361,364**
Stressors experienced in last 12 months[(p)]					
No stressors	14.7	85.3	100.0	107,171	26.3
Experienced one or more stressor	18.9	81.1	100.0	300,159	73.7
Ratio one or more/no stressors	1.3*	1.0*	1.0	2.8	2.8
Total number	**72,547**	**335,673**	**. .**	**408,220**	**408,220**
Long term health conditions[(q)]					
One	5.7*	94.3*	100.0	76,185	18.6
Two	13.9*	86.1*	100.0	63,404	15.5
Three or more	31.4	68.6	100.0	189,444	46.3
Ratio three or more/one condition	5.5*	0.7*	1.0	2.5	2.5
Respiratory disease[(r)]					
Yes	21.4	78.6	100.0	149,805	36.6
No	15.6	84.4	100.0	259,136	63.4
Ratio yes/no	1.4*	0.9*	1.0	0.6	0.6
Cancer[(s)]					
Yes	34.7	65.3	100.0	5,550	1.4
No	17.5	82.5	100.0	403,391	98.6
Ratio yes/no	2.0*	0.8*	1.0	0.01	0.01
Total number of persons 15+	**72,617**	**336,324**	**. .**	**408,941**	**408,941**

(continued)

Table 1.05.4 (continued): Indigenous persons (15 years and over) reporting heart/circulatory conditions, by selected household and health risk factors, 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested. For those with disability or long-term health condition, level of disability/long term health condition was also tested with ‘Total with disability/long-term health condition’ used as the reference category. Number of long term health conditions were also tested with ‘Three or more’ as the reference category. Overall population distribution columns not tested.

(a) Self-reported data consisting of persons reporting they have a current heart or circulatory condition which has lasted, or is likely to last, for 6 months or more.

(b) Percentages add within rows.

(c) Distribution of total population. Percentages add within columns.

(d) Excludes ‘not stated’ and ‘not known’.

(e) Total includes ‘other’ and ‘life tenure scheme’.

(f) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(g) Abstainer includes those who have never consumed alcohol.

(h) Includes those who drank alcohol. Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(i) Physical activity data collected from persons 18 years and over; and non-remote areas only.

(j) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(k) Includes ‘not known’.

(l) Self-reported data consisting of persons who reported having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities. Only current difficulties with education and/or employment were collected. Respondents aged 65 years and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(m) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25.

(n) Total population is 18 years and over.

(o) Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined. For NATSIHS excludes ‘no score’.

(p) Stressors experienced by self, family or friends.

(q) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(r) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitus, and other diseases of the respiratory system.

(s) Persons ever told by a doctor or nurse they have cancer (malignant neoplasms), still current (including cancer in remission).

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

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Table 1.05.5: Circulatory problems(a) managed by general practitioners, by Indigenous status of the patient, BEACH survey years April 2008–March 2009 to April 2012–March 2013 inclusive(b)(c)

	Number		Per cent		Crude rate (no. per 1,000 encounters)			Age-standardised rate (no. per 1,000 encounters)(d)							
Problem managed	Indig.	Other(e)	Indig.	Other(e)	Indig.	95% LCL(f)	95% UCL(g)	Indig.	95% LCL(f)	95% UCL(g)	Other(e)	95% LCL(f)	95% UCL(g)	Rate ratio(h)	Rate diff.(i)
Hypertension (K86, K87)	471	43,978	4.0	5.8	63.8	54.7	72.9	99.5	85.2	113.7	90.2	88.3	92.2	1.1	9.2
Ischaemic heart disease (K74, K76)	94	5,445	0.8	0.7	12.7	9.8	15.7	20.3*	14.5*	26.1*	11.2*	10.7*	11.6*	1.8*	9.2*
Heart failure (K77)	29	3,037	0.2	0.4	3.9	2.0	5.9	8.6	4.2	13.0	6.2	5.9	6.5	1.4	2.4
Cardiac check-up (K30, K31)	52	5,120	0.4	0.7	7.0	4.4	9.7	8.3	4.9	11.6	10.5	9.9	11.1	0.8	–2.2
Atrial fibrillation/flutter (K78)	45	6,434	0.4	0.8	6.1	3.6	8.6	15.6	7.5	23.7	13.2	12.6	13.7	1.2	2.5
Total circulatory problems(K00–K99)	*950*	*84,034*	*8.1*	*11.0*	*128.7*	*114.4*	*143.1*	*196.5*	*171.7*	*221.4*	*172.4*	*169.4*	*175.4*	*1.1*	*24.1*
Other problems managed	10,739	680,662	91.9	89.0	1455.1	1411.5	1498.8	1488.7*	1437.4*	1540.1*	1404.3*	1396.6*	1412.1*	1.1*	84.4*
Total problems	**11,689**	**764,696**	**100.0**	**100.0**	**1583.9**	**1534.0**	**1633.8**	**1685.3***	**1627.0***	**1743.5***	**1576.7***	**1567.6***	**1585.8***	**1.1***	**108.5***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Classified according to ICPC-2 chapter codes (Classification Committee of the World Organization of Family Doctors (WICC) 1998).

(b) Data from five combined BEACH years April 2008–March 2009 to April 2012–March 2013 inclusive.

(c) Data for Indigenous and other Australians have not been weighted.

(d) Directly age-standardised rate (no. per 1,000 encounters) using total BEACH encounters in the period as the standard. Figures do not add to 100 as more than one problem can be managed at each encounter.

(e) 'Other' includes encounters with non-Indigenous patients and those with patients for whom Indigenous status was not stated.

(f) LCL = lower confidence interval.

(g) UCL = upper confidence interval.

(h) Rate ratio Indigenous: Other.

(i) Rate difference Indigenous rate minus Other rate.

Source: Analyses conducted by the Family Medicine Research Centre, University of Sydney, of BEACH data collected by that Centre.

Table 1.05.6: Age-specific hospitalisation rates for a principal diagnosis of circulatory disease, by Indigenous status and sex, Australia, 2011–12 to 2012–13[a]

									All ages[b]	
	0–4	**5–14**	**15–24**	**25–34**	**35–44**	**45–54**	**55–64**	**65+**	**Crude**	**Age std.**[c]
Males										
Indigenous	1.5	2.3	2.9	8.4	25.6	51.0	77.3	111.8	17.9	35.3
Non-Indigenous	1.0	1.2	2.2	4.2	10.3	22.6	46.0	114.4	26.3	25.0
Rate ratio[d]	1.5	1.9	1.3	2.0	2.5	2.3	1.7	1.0	0.7	1.4
Rate difference[e]	0.5	1.1	0.7	4.2	15.3	28.4	31.3	–2.7	–8.5	10.4
Females										
Indigenous	0.9	2.2	2.5	6.7	17.8	36.7	60.1	97.3	15.1	27.9
Non-Indigenous	0.7	1.0	2.0	3.9	8.0	13.5	23.8	80.3	19.2	16.3
Rate ratio[d]	1.3	2.3	1.2	1.7	2.2	2.7	2.5	1.2	0.8	1.7
Rate difference[e]	0.2	1.2	0.5	2.8	9.8	23.2	36.3	17.0	–4.0	11.6
Persons[f]										
Indigenous	1.2	2.2	2.7	7.6	21.5	43.6	68.4	103.7	16.5	31.3
Non-Indigenous	0.9	1.1	2.1	4.1	9.1	18.1	34.8	96.0	22.7	20.4
Rate ratio[d]	1.4	2.1	1.3	1.9	2.4	2.4	2.0	1.1	0.7	1.5
Rate difference[e]	0.4	1.2	0.6	3.5	12.4	25.6	33.6	7.7	–6.2	10.9

(a) Data includes public and private hospitals in all jurisdictions.

(b) All age data includes age not stated.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes I00–I99.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.05.7: Hospitalisations for principal diagnosis of diseases of the circulatory system, by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b][c][d]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Ratio[f]	Difference[g]
NSW								
Males	3,234	15.2	31.1	188,639	26.8	24.6	1.3	6.6
Females	2,801	13.2	25.3	136,628	19.1	15.6	1.6	9.7
Persons[h]	6,035	14.2	28.0	325,267	22.9	19.9	1.4	8.2
Vic								
Males	661	13.7	27.8	146,863	26.6	25.4	1.1	2.3
Females	555	11.4	23.0	114,043	20.2	17.2	1.3	5.9
Persons[h]	1,216	12.5	25.4	260,907	23.4	21.1	1.2	4.3
Qld								
Males	3,405	17.7	38.1	115,769	26.5	25.9	1.5	12.2
Females	3,035	15.6	31.1	85,068	19.4	17.4	1.8	13.7
Persons[h]	6,440	16.6	34.3	200,837	23.0	21.5	1.6	12.8
WA								
Males	1,939	21.7	42.2	58,415	24.7	25.5	1.7	16.7
Females	1,580	17.4	32.0	40,145	17.3	16.0	2.0	16.0
Persons[h]	3,519	19.5	36.7	98,560	21.0	20.5	1.8	16.2
SA								
Males	645	17.0	31.4	43,216	27.0	23.3	1.3	8.1
Females	576	14.9	24.4	32,433	19.9	15.1	1.6	9.4
Persons[h]	1,221	16.0	27.7	75,649	23.4	18.9	1.5	8.7
Tas								
Males	n.p.	8.9	18.9	n.p.	23.1	18.6	1.02	0.3
Females	n.p.	6.0	11.4	n.p.	16.1	12.2	0.9	–0.8
Persons[h]	n.p.	7.4	15.1	n.p.	19.6	15.3	0.99	–0.1
NT								
Males	n.p.	27.7	44.5	n.p.	20.2	25.8	1.7	18.7
Females	n.p.	23.3	34.4	n.p.	10.4	14.9	2.3	19.5
Persons[i]	n.p.	25.5	39.1	n.p.	15.6	20.9	1.9	18.2
ACT								
Males	n.p.	13.0	28.9	n.p.	19.6	21.7	1.3	7.2
Females	n.p.	6.5	14.3	n.p.	13.6	13.7	1.04	0.6
Persons[i]	n.p.	9.9	21.3	n.p.	16.6	17.5	1.2	3.8

(continued)

Table 1.05.7 (continued): Hospitalisations for principal diagnosis of diseases of the circulatory system, by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b][c][d]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Ratio[f]	Difference[g]
Australia								
Males	**12,188**	**17.9**	**35.3**	**577,574**	**26.3**	**25.0**	**1.4**	**10.4**
Females	**10,392**	**15.1**	**27.9**	**424,304**	**19.2**	**16.3**	**1.7**	**11.6**
Persons[h]	**22,580**	**16.5**	**31.3**	**1,001,879**	**22.7**	**20.4**	**1.5**	**10.9**

(a) Data include public and private hospital in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2012): ICD-10-AM codes I00–I99.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+. As different age-groupings were used, rates for Tasmania and the Australian Capital Territory cannot be compared with the rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.05.8: Hospitalisations for principal diagnosis of diseases of the circulatory system, by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[a][b]

	Indigenous		Non-Indigenous			
	Number	**No. per 1,000**(c)	**Number**	**No. per 1,000**(c)	**Ratio**(d)	**Difference**(e)
Major cities	5,119	22.7	651,217	19.5	1.2	3.3
Inner regional	4,349	30.5	228,896	22.4	1.4	8.1
Outer regional(f)	5,768	35.8	101,434	21.8	1.6	13.9
Remote(g)	2,942	45.5	11,544	21.3	2.1	24.2
Very remote	4,292	36.4	4,216	21.2	1.7	15.2
Total(h)	**22,580**	**31.3**	**1,001,879**	**20.4**	**1.5**	**10.9**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2012): ICD-10-AM codes I00–I99.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS 2011 Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.05.9: Hospitalisations of Indigenous persons for principal diagnosis of diseases of the circulatory system, by type of circulatory disease and sex, Australia, 2011–12 to 2012–13[(a)(b)]

Principal diagnosis	Number	Per cent[(c)]	No per 1,000[(d)]	Ratio[(e)]	Difference[(f)]
			Males		
Ischaemic heart disease (I20–I25)	5,165	42.4	14.9	1.8	6.7
Acute myocardial infarction (I21)	*2,441*	*20.0*	*6.9*	*2.4*	*4.0*
Subsequent myocardial infarction (I22)	*12*	*0.1*	—	*n.p.*	—
Pulmonary heart disease and other forms of heart disease (I26–I52)	3,706	30.4	11.6	1.4	3.2
Cerebrovascular disease (I60–I69)	867	7.1	2.7	1.4	0.8
Stroke (I60–I64)	*782*	*6.4*	*2.5*	*1.5*	*0.9*
Acute rheumatic fever and chronic rheumatic heart disease (I00–I09)	433	3.6	0.5	5.6	0.4
Hypertension disease (I10–I15)	276	2.3	0.7	2.5	0.4
Other diseases of the circulatory system (I70–I99)[(g)]	1,741	14.3	4.8	0.8	–1.2
Total (I00–I99)	**12,188**	**100.0**	**35.3**	**1.4**	**10.4**
			Females		
Ischaemic heart disease (I20–I25)	3,799	36.6	10.2	2.9	6.7
Acute myocardial infarction (I21)	*1,650*	*15.9*	*4.5*	*3.4*	*3.2*
Subsequent myocardial infarction (I22)	*16*	*0.2*	—	*n.p.*	—
Pulmonary heart disease and other forms of heart disease (I26–I52)	3,358	32.3	9.7	1.7	3.8
Cerebrovascular disease (I60–I69)	859	8.3	2.7	1.8	1.2
Stroke (I60–I64)	*731*	*7.0*	*2.3*	*1.9*	*1.1*
Acute rheumatic fever and chronic rheumatic heart disease (I00–I09)	534	5.1	0.8	7.3	0.6
Hypertension disease (I10–I15)	378	3.6	1.0	2.4	0.6
Other diseases of the circulatory system (I70–I99)[(g)]	1,464	14.1	3.6	0.7	–1.3
Total (I00–I99)	**10,392**	**100.0**	**27.9**	**1.7**	**11.6**

(continued)

Table 1.05.9 (continued): Hospitalisations of Indigenous persons for principal diagnosis of diseases of the circulatory system, by type of circulatory disease and sex, Australia, 2011–12 to 2012–13(a)(b)

Principal diagnosis	Number	Per cent(c)	No per 1,000(d)	Ratio(e)	Difference(f)
			Persons(j)		
Ischaemic heart disease (I20–I25)	8,964	39.7	12.4	2.2	6.6
Acute myocardial infarction (I21)	*4,091*	*18.1*	*5.6*	*2.7*	*3.5*
Subsequent myocardial infarction (I22)	*28*	*0.1*	—	*n.p.*	—
Pulmonary heart disease and other forms of heart disease (I26–I52)	7,064	31.3	10.6	1.5	3.5
Cerebrovascular disease (I60–I69)	1,726	7.6	2.7	1.6	1.0
Stroke (I60–I64)	1,513	6.7	2.4	1.7	1.0
Acute rheumatic fever and chronic rheumatic heart disease (I00–I09)	967	4.3	0.6	6.6	0.5
Hypertension disease (I10–I15)	654	2.9	0.9	2.4	0.5
Other diseases of the circulatory system (I70–I99)(g)	3,205	14.2	4.1	0.8	*–1.3*
Total (I00–I99)	**22,580**	**100.0**	**31.3**	**1.5**	**10.9**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2012): ICD-10-AM codes I00–I99.

(c) Proportion of male, female and total hospitalisations of Indigenous persons in the period 2011–12 to 2012–13.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(g) This category includes disease of arteries, arterioles and capillaries, diseases of veins, lymphatic vessels and lymph nodes and other unspecified disorders of the circulatory system.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.05.10: Hospitalisations of Indigenous persons for principal diagnosis of circulatory disease, by additional diagnoses of hospitalisation, Australia, 2011–12 to 2012–13[a][b]

	Reported with a principal diagnosis of circulatory disease									
Additional diagnoses of hospitalisation	**Ischaemic heart disease (I20–I25)**	**Acute myocardial infarction (I21)**	**Subsequent myocardial infarction (I22)**	**Pulmonary heart disease/other heart disease (I26–I52)**	**Cerebro-vascular disease (I60–I69)**	***Stroke (I60–I64)***	**Acute rheumatic fever/chronic rheumatic heart disease (I00–I09)**	**Hypertensive disease (I10–115)**	**Other circulatory diseases (I70–I99)[c]**	**All circulatory diseases**
	Per cent[d]									
Contact with health services and factors influencing health status (includes dialysis) (Z00–Z99)	74.4	74.9	78.6	65.2	64.7	64.2	41.4	56.4	53.6	65.9
Diseases of the circulatory system (I00–I99)	76.6	77.3	89.3	50.9	61.7	62.3	33.0	13.6	25.7	56.5
Endocrine, nutritional and metabolic diseases (E00–E90)	40.5	40.3	75.0	41.2	40.4	42.2	13.3	42.1	23.6	37.2
Diseases of the genitourinary system (N00–N99)	14.8	14.9	32.1	22.5	18.6	19.8	7.3	28.6	13.2	17.3
Symptoms, signs and abnormal clinical and laboratory findings (R00–R99)	10.7	10.4	10.7	19.1	51.9	55.2	11.4	18.2	14.1	17.2
Diseases of the respiratory system (J00–J99)	9.4	9.3	17.9	19.6	11.0	12.2	10.4	6.0	3.9	11.9
Mental and behavioural disorders (F00–F99)	9.5	10.2	10.7	15.9	16.5	17.3	3.9	8.7	7.8	11.5
Diseases of the nervous system (G00–G99)	1.9	2.0	0.0	4.1	54.0	58.1	1.6	4.1	2.7	6.7
Certain infectious and parasitic diseases (A00–B99)	4.9	5.0	3.6	9.7	11.3	11.9	14.5	4.6	9.9	8.0
Diseases of the blood and disorders involving immune mechanism (D50–D89)	5.8	5.6	14.3	8.1	6.5	6.6	11.5	4.9	7.1	6.9
Diseases of the digestive system (K00–K93)	4.3	4.5	0.0	7.9	7.9	8.7	4.9	3.8	12.3	6.8

(continued)

Table 1.05.10 (continued): Hospitalisations of Indigenous persons for principal diagnosis of circulatory disease, by additional diagnoses of hospitalisation, Australia, 2011–12 to 2012–13[a][b]

	Reported with a principal diagnosis of circulatory disease									
Additional diagnoses of hospitalisation	**Ischaemic heart disease (I20–I25)**	**Acute myocardial infarction (I21)**	**Subsequent myocardial infarction (I22)**	**Pulmonary heart disease/other heart disease (I26–I52)**	**Cerebro-vascular disease (I60–I69)**	***Stroke (I60–I64)***	**Acute rheumatic fever/chronic rheumatic heart disease (I00–I09)**	**Hypertensive disease (I10–115)**	**Other circulatory diseases (I70–I99)**[c]	**All circulatory diseases**
	Per cent[d]									
Injury and poisoning and other consequences of external causes (S00–T98)	4.8	4.5	7.1	4.6	7.4	7.6	4.2	5.8	6.2	5.2
Diseases of the eye and adnexa (H00–H59)	0.5	0.5	0.0	0.8	9.8	10.4	0.2	2.1	0.5	1.3
Other[e]	5.0	5.2	10.7	11.6	13.6	13.7	14.2	7.2	14.3	9.5
Total number	**8,964**	**7,555**	**28**	**7,064**	**1,726**	**1,513**	**967**	**654**	**3,205**	**22,580**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2012).

(c) Includes diseases of arteries, arterioles and capillaries, diseases of veins, lymphatic vessels and lymph nodes and other unspecified disorders of the circulatory system.

(d) Per cent is equal total number of each additional diagnosis divided by total number of principal diagnosis in each column.

(e) Includes: diseases of the musculoskeletal system and connective tissue; diseases of the skin and subcutaneous tissue; neoplasms; congenital malformations, deformations and chromosomal abnormalities; diseases of the ear and mastoid process; pregnancy, childbirth and the puerperium; and certain conditions originating in the perinatal period.

Notes

1. Sum of components may exceed 100% as more than one additional diagnosis can be reported for each hospitalisation.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.05.11a: Age-standardised hospitalisation separations, Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Indigenous separations			Non-Indigenous separations		
	Males	**Females**	**Persons[c]**	**Males**	**Females**	**Persons[c]**
1998–99	2,242	2,181	4,423	80,879	60,078	140,958
1999–00	2,347	2,249	4,596	83,049	61,940	144,989
2000–01	2,277	2,141	4,418	81,964	62,044	144,008
2001–02	2,383	2,359	4,742	83,047	63,183	146,230
2002–03	2,509	2,276	4,785	82,762	61,996	144,758
2003–04	2,679	2,354	5,033	81,711	61,125	142,836
2004–05	2,688	2,636	5,324	83,256	62,589	145,845
2005–06	2,980	2,661	5,641	90,031	65,451	155,482
2006–07	2,805	2,674	5,479	93,036	66,926	159,962
2007–08	2,999	2,772	5,771	95,310	68,071	163,381
2008–09	2,939	2,875	5,814	95,111	69,308	164,419
2009–10	3,238	2,976	6,214	96,360	70,748	167,108
2010–11	3,449	3,147	6,596	104,975	76,213	181,188
2011–12	3,925	3,212	7,137	109,825	79,410	189,235
2012–13	3,900	3,513	7,413	110,555	79,574	190,129
Annual change[d]	115.7	90.3	206.0	2,181.1	1,366.3	3,547.4
Per cent change[e]	77.9	62.0	70.0	40.1	33.2	37.1

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2012) and previous editions: ICD-10-AM codes I00–I99.
2. Principal diagnosis code used unless specified otherwise.
3. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.05.11b: Age-standardised hospitalisation rates for diseases of circulatory system, Qld, WA, SA and NT, 1998–99 to 2012–13[(a)(b)]

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	Females	Persons[(c)]	Males	Females	Persons[(c)]
1998–99	34.2	36.0	34.9	27.3	17.5	22.1
1999–00	36.3	35.6	35.8	27.4	17.5	22.1
2000–01	33.8	31.6	32.6	26.2	17.0	21.4
2001–02	34.8	32.9	33.8	25.7	16.9	21.1
2002–03	36.3	31.9	34.0	24.9	16.1	20.3
2003–04	38.2	30.1	33.8	23.8	15.5	19.5
2004–05	34.5	32.5	33.5	23.5	15.5	19.3
2005–06	38.1	32.6	35.3	24.7	15.9	20.1
2006–07	34.9	31.1	32.9	24.8	15.8	20.1
2007–08	37.5	31.3	34.2	24.6	15.7	20.0
2008–09	34.0	31.5	32.7	24.0	15.6	19.6
2009–10	36.3	29.9	32.8	23.6	15.6	19.4
2010–11	35.3	30.8	33.0	25.1	16.4	20.5
2011–12	40.0	29.8	34.5	25.5	16.6	20.9
2012–13	37.9	31.6	34.6	24.9	16.2	20.4
Annual change[(d)]	0.2	–0.3	–0.1	–0.1	–0.1	–0.1
Per cent change[(e)]	7.7	–12.1	–2.5	–8.0	–6.9	–7.2

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2012) and previous editions: ICD-10-AM codes I00–I99.
4. Principal diagnosis code used unless specified otherwise.
5. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.05.11c: Age-standardised hospitalisation rate ratios and rate differences for diseases of circulatory system, Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Rate ratio[c]			Rate difference[d]		
	Males	**Females**	**Persons[e]**	**Males**	**Females**	**Persons[e]**
1998–99	1.3	2.1	1.6	6.9	18.6	12.8
1999–00	1.3	2.0	1.6	8.9	18.1	13.7
2000–01	1.3	1.9	1.5	7.6	14.6	11.3
2001–02	1.4	1.9	1.6	9.1	16.0	12.8
2002–03	1.5	2.0	1.7	11.4	15.7	13.8
2003–04	1.6	1.9	1.7	14.4	14.5	14.4
2004–05	1.5	2.1	1.7	10.9	17.0	14.2
2005–06	1.5	2.1	1.8	13.4	16.8	15.2
2006–07	1.4	2.0	1.6	10.2	15.3	12.8
2007–08	1.5	2.0	1.7	12.9	15.6	14.2
2008–09	1.4	2.0	1.7	10.0	15.8	13.1
2009–10	1.5	1.9	1.7	12.6	14.3	13.4
2010–11	1.4	1.9	1.6	10.2	14.4	12.5
2011–12	1.6	1.8	1.7	14.5	13.2	13.6
2012–13	1.5	1.9	1.7	13.0	15.4	14.2
Annual change[f]	n.a.	n.a.	n.a.	0.3	–0.2	0.1
Per cent change[g]	n.a.	n.a.	n.a.	55.0	–17.1	5.2

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(d) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(e) Persons data includes sex not stated and indeterminate

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2012) and previous editions: ICD-10-AM codes I00–I99.
4. Principal diagnosis code used unless specified otherwise.
5. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.05.12: Age-standardised hospitalisation rates, rate ratios and rate differences from diseases of circulatory system, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13(a)(b)

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change(c)	Per cent change(d)
Indigenous separations											
Males	3,861	4,182	4,172	4,460	4,545	4,819	5,190	5,866	5,854	257.0	54.9
Females	3,596	3,681	3,817	4,087	4,266	4,300	4,612	4,851	5,230	197.5	45.4
Persons(e)	7,457	7,863	7,989	8,547	8,811	9,119	9,802	10,717	11,084	454.5	50.3
Non-Indigenous Australian separations											
Males	234,368	243,886	249,423	252,647	250,390	254,617	271,403	279,624	276,244	5,344.1	18.1
Females	176,364	181,108	185,057	186,445	186,635	189,935	201,134	206,125	203,526	3,655.7	16.6
Persons(e)	410,745	424,995	434,482	439,093	437,025	444,553	472,539	485,750	479,770	8,999.0	17.5
Indigenous rate (separations per 1,000)											
Males	29.7	31.4	30.5	32.3	31.8	32.1	32.3	36.1	34.9	0.6	17.2
Females	26.3	26.8	26.3	27.5	27.9	25.9	27.2	27.9	28.8	0.2	6.7
Persons(e)	28.0	29.1	28.3	29.8	29.8	28.7	29.6	31.8	31.6	0.4	11.6
Non-Indigenous Australian rate (separations per 1,000)											
Males	25.6	26.0	25.9	25.6	24.8	24.5	25.5	25.5	24.5	–0.1	–4.0
Females	16.5	16.6	16.6	16.4	16.1	16.0	16.6	16.6	16.1	—	–1.7
Persons(e)	20.8	21.1	21.0	20.7	20.2	20.0	20.8	20.9	20.1	–0.1	–2.9
Rate ratio(f)											
Males	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.4	n.a.	n.a.
Females	1.6	1.6	1.6	1.7	1.7	1.6	1.6	1.7	1.8	n.a.	n.a.
Persons(e)	1.3	1.4	1.3	1.4	1.5	1.4	1.4	1.5	1.6	n.a.	n.a.

(continued)

Table 1.05.12 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences from diseases of circulatory system, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13(a)(b)

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change(c)	Per cent change(d)
Rate difference(g)											
Males	4.1	5.4	4.5	6.7	7.1	7.6	6.8	10.6	10.4	0.8	157.1
Females	9.9	10.2	9.7	11.1	11.9	9.9	10.6	11.3	12.7	0.3	20.9
Persons(e)	7.2	8.0	7.3	9.0	9.6	8.7	8.8	10.9	11.6	0.5	54.6

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(e) Persons data includes sex not stated and indeterminate.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2012) and previous editions: ICD-10-AM codes I00–I99.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Data quality issues

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013a). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013b).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the

2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see
<http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013c). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Bettering the Evaluation and Care of Health survey

The Bettering the Evaluation and Care of Health (BEACH) survey collects information about encounters with general practitioners (GPs), including: GP and patient characteristics; patient reasons for the visit; problems managed; and treatments provided. The survey has been conducted annually since April 1998. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. Each participating GP provides details of 100 consecutive patient encounters. Although the questionnaire contains an Indigenous identifier, it is unknown whether all GPs ask their patients this question.

In a sub-study of approximately 9,000 patients, Supplementary Analysis of Nominated Data, it was found that if the question on Indigenous status was asked within the context of a series of questions about origin and cultural background, 1.3% identified as Aboriginal and Torres Strait Islander. This is twice the rate routinely recorded in BEACH, indicating that BEACH may under-estimate the number of encounters with Indigenous Australians.

Under the National Indigenous Reform Agreement, governments have agreed to the implementation of *National best practice guidelines for collecting Indigenous status in health data* *sets* (AIHW 2010a), which include recommended strategies for local service providers such as GPs and practice nurses to improve Indigenous identification data. General practices and Aboriginal and Torres Strait Islander health services that meet accreditation requirements are eligible for financial incentives when they do the following activities: sign on to the Practice Incentives Program—Indigenous Health Incentive (PIP IHI); obtain consent from their Indigenous clients to be registered for chronic disease management through the IHI; and provide a targeted level of care for each registered patient. Participation in the PIP IHI also provides eligibility for other initiatives under Medicare.

A Voluntary Indigenous Identifier was introduced into the Medicare database from November 2002. By July 2014, 415,730 people had identified as Aboriginal, Torres Strait Islander, or both.

National Hospital Morbidity Database

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010b). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 6 of 68

Detailed analyses

1.06 Acute rheumatic fever and rheumatic heart disease

This measure reports on the incidence and prevalence of acute rheumatic fever and rheumatic heart disease among Aboriginal and Torres Strait Islander people.

Introduction

This is no. 6 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

Data related to this measure come from:

- National Hospital Morbidity Database
- Rheumatic Heart Disease Program registers

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Rheumatic Heart Disease Control Program registers have been established in the Northern Territory, Queensland and Western Australia. A register for South Australia is under development. The NT RHD register has been operating in the Top End since 1997 and in Central Australia since 2001 and currently provides the strongest source of data on ARF and RHD. Comparisons between jurisdictions should not be made as registers are at different stages of coverage and completion. Data for Other Australians is not currently available from the Western Australian register.

Data from the Top End program covers the West Top end including Wadeye; Nauiyu (Daly) and the Tiwi Islands; the Eastern Top end including Maningrida, Warruwi and Minjilang; the South Eastern Top End including Gunbarrlunja and Jabiru; greater Darwin including Batchelor and Belyuen; and Darwin urban.

Registrations data are only estimates of incidence and prevalence because not all cases of ARF or RHD may be reported. Here, new registrations are used to estimate incidence, and total registrations are used to estimate prevalence.

The 2011 estimated resident Indigenous populations for the Northern Territory, the Top End and Central Australia have been used as the denominator for rates for these regions. This is because data for the Top End and Central Australia are available from the ABS for Census years only. Caution should therefore be used in interpreting these rates. Crude rates per 1,000 are calculated using the total number of registrations for 2010–2013 divided by the summed 30 June 2010, 2011, 2012 and 2013 populations based on the 2011 Census (series B estimates and projections).

Time series analyses may be affected by improved diagnosis and changes in the quality of Indigenous identification over time.

For more information relating to ARF and RHD, see 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Incidence of acute rheumatic fever (as estimated by data on new registrations), see tables 1.06.1–5
- Prevalence and incidence of rheumatic heart disease (as estimated by data on total registrations and new registrations), see tables 1.06.6–12
- Hospitalisations for acute rheumatic fever and rheumatic heart disease, see Table 1.06.13
- Data on adherence to preventative care (secondary prophylaxis), see Table 1.06.14.

Incidence of acute rheumatic fever

Current period

During the 4 years 2010 to 2013 in Queensland, Western Australia and the Northern Territory combined:

- There were 743 new or recurrent cases of ARF registered for Indigenous Australians, and 44 new or recurrent cases registered for other Australians (0.5 per 1,000 compared with less than 0.1 per 1,000, respectively).
- 94% of new or recurrent cases of ARF were for Indigenous Australians. Other Australians accounted for only 6% (Table 1.06.1).
- The rate of new registrations of ARF was highest among Indigenous Australians aged 5–14 at 1.2 per 1,000. This age group accounted for over half (52%) of all new and recurrent ARF cases registered among Indigenous Australians, while those aged 15–24 accounted for over one-quarter (Table 1.06.2).

Trend

- Over the period 2006 to 2013, the rate of new registrations of ARF in the Northern Territory did not change significantly, going from 0.7 to 1.2 per 1,000. There was no significant change in rates for any age group (Table 1.06.4).
- Over the period 2010 to 2013, there was no significant change in the rate of new registrations of ARF in Queensland, Western Australia and the Northern Territory combined. The rate was 0.4 per 1,000 in 2010 and 0.5 per 1,000 in 2013 (Table 1.06.5).

Prevalence and incidence of rheumatic heart disease

Current period

The data in this section refer to prevalence (that is, the total registrations of RHD).

As at 1 July 2014 in Queensland:

- There were 1,035 cases of RHD—921 of these (89%) were for Indigenous Australians.
- After adjusting for age, the rate of total RHD registrations was 5.1 per 1,000 among Indigenous Australians, which was 206 times as high as the rate for other Australians (less than 0.1 per 1,000). For Indigenous females, the rate of total RHD registrations was 6.7 per 1,000—239 times as high as other Australian females (Table 1.06.8).

At 31 December 2013 in the Northern Territory:

- There were 1,474 cases of RHD recorded for Indigenous Australians—about two-thirds (963) were for females and one-third (511) for males (Table 1.06.6).
- After adjusting for age, the rate of total RHD registrations among Indigenous Australians was 23 per 1,000—39 times as high as for other Australians (Table 1.06.6).
- The rate of total RHD registrations was highest among those aged 35–44 and 25–34 (32 per 1,000 and 31 per 1,000, respectively). After adjusting for age, rates were higher among females (31 per 1,000) than males (16 per 1,000) (Table 1.06.6).

Trend

The data in this section refer to incidence rates (that is, new registrations of RHD).

- Between 2010 and 2013, in Western Australia, there was a significant increase in the rate of new RHD registrations, from 0.2 to 1.1 per 1,000. This change is likely in part to be due to an increase in improved diagnosis as well as registration (Table 1.06.12).

From 2006 to 2013, in the Northern Territory:

- There was a significant decrease in the rate of new RHD registrations, from 1.3 per 1,000 to 1.0 per 1,000—a decrease of 41% over the period. There were significant decreases in rates among those aged 45 and over (a decrease of 83% over the period) and 15–24 (a 64% decrease) (Table 1.06.10).
- There was a significant decrease in the number of new RHD registrations in the Top End of the Northern Territory, with a 42% decrease over the period. There was no significant trend in Central Australia (Table 1.06.11 and Figure 1.06.1).

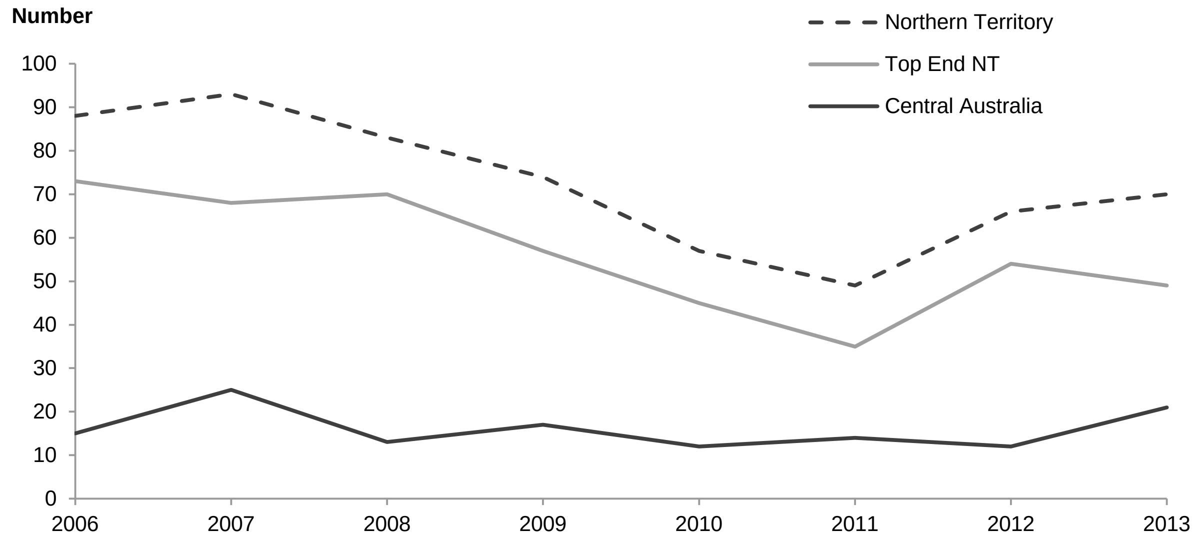
Hospitalisations for acute rheumatic fever and rheumatic heart disease

In 2011–13:

- After adjusting for age, the rate of hospitalisations for Indigenous Australians for ARF or RHD was 6.6 times as high as for non-Indigenous Australians (0.6 and 0.1 per 1,000 respectively) (Table 1.06.13).
- Among Indigenous Australians, age-standardised hospitalisation rates for ARF or RHD varied by jurisdiction, ranging from 0.2 per 1,000 in New South Wale to 3.0 per 1,000 in the Northern Territory (Table 1.06.13).
- Hospitalisation rates for ARF or RHD were higher among Indigenous than non-Indigenous Australians in all jurisdictions for which a comparison could be made. Rate ratios ranged from 21.2 in the Northern Territory to 2.0 in New South Wales (Table 1.06.13).

Adherence to preventative care

- In the Northern Territory in 2013, 43% of Indigenous Australians in the Rheumatic Heart Disease Program met 50% to 80% of their required doses, 33% met more than 80% of their doses and 24% met less than half of their doses. Patterns were similar to this in the Top End of the Northern Territory. However, in Central Australia, there was a higher proportion of Indigenous Australians who met less than half of their doses (32%) (Table 1.06.14).
- Comparisons with other Australians are not possible due to the low number of other Australians in the Rheumatic Heart Disease Program.



Source: Table 1.06.11.

Figure 1.06.1: Numbers of new rheumatic heart disease registrations in the Top End of the Northern Territory, Central Australia and total Northern Territory, Indigenous Australians, 2006 to 2013

Table 1.06.1: Incidence (new and recurrent cases registered)[(a)] of acute rheumatic fever in the Northern Territory, Western Australia, and Queensland, by Indigenous status and sex, 2010–2013[(b)]

	Total number		Per cent[(c)]		Indigenous			Other[(d)]				
	Indigenous	Other[(d)]	Indigenous	Other[(d)]	No. per 1,000[(e)]	95% LCL[(f)]	95% UCL[(g)]	No. per 1,000[(e)]	95% LCL[(f)]	95% UCL[(g)]	Ratio[(h)]	Rate difference[(i)]
NT												
Males	157	5	96.9	3.1	1.1	0.9	1.3	—	—	—	79.2*	1.1*
Females	173	4	97.7	n.p.	1.2	1.1	1.4	n.p.	n.p.	n.p.	n.p.	n.p.
Persons	330	9	97.3	2.7	1.2	1.1	1.3	—	—	—	86.6*	1.2*
WA												
Males	96	2	98.0	n.p.	0.5	0.4	0.7	n.p.	n.p.	n.p.	n.p.	n.p.
Females	121	1	99.2	n.p.	0.7	0.6	0.8	n.p.	n.p.	n.p.	n.p.	n.p.
Persons	217	3	98.6	n.p.	0.6	0.5	0.7	n.p.	n.p.	n.p.	n.p.	n.p.
QLD												
Males	97	18	84.3	15.7	0.3	0.2	0.3	—	—	—	122.4*	0.3*
Females	99	14	87.6	12.4	0.3	0.2	0.3	—	—	—	159.9*	0.3*
Persons	196	32	86.0	14.0	0.3	0.2	0.3	—	—	—	138.8*	0.3*
NT, WA, QLD												
Males	350	25	93.3	6.7	0.5	0.4	0.6	—	—	—	274.3*	0.5*
Females	393	19	95.4	4.6	0.6	0.5	0.6	—	—	—	399.4*	0.6*
Persons	743	44	94.4	5.6	0.5	0.5	0.6	—	—	—	328.5*	0.5*

(continued)

Table 1.06.1 (continued): Incidence (new and recurrent cases registered)(a) of acute rheumatic fever in the Northern Territory, Western Australia, and Queensland, by Indigenous status and sex, 2010–2013(b)

* Represents results with statistically significant differences in the Indigenous/Other comparisons at the $p < 0.05$ level.

(a) Includes initial and recurrent cases for NT and Qld, and initial, recurrent and probable cases for WA.

(b) Calendar year reporting. Data are presented in 4-year groupings because of small numbers each year.

(c) Proportion of total male, female and all persons cases in the period 2010–2013.

(d) Other includes non-Indigenous and not stated.

(e) Crude rates per 1,000 calculated using the total number of registrations for 2010–2013 divided by the summed 30 June 2010, 2011, 2012 and 2013 populations based on the 2011 Census.

(f) LCL = lower confidence limit.

(g) UCL = upper confidence limit.

(h) Rate ratio is Indigenous divided by Other.

(i) Rate difference is Indigenous minus Other.

Note: The South Australian Rheumatic Heart Disease Register was unable to provide data for this report.

Source: AIHW analysis of Northern Territory, Western Australia and Queensland Rheumatic Heart Disease Program data.

Table 1.06.2: Incidence (new and recurrent cases registered)(a) of acute rheumatic fever among Indigenous Australians in the Northern Territory, Western Australia and Queensland, by age group and sex, 2010–2013(b)

	Males					Females					Persons				
	Total number	Per cent	No. per 1,000(c)	95% LCL(d)	95% UCL(e)	Total number	Per cent	No. per 1,000(c)	95% LCL(d)	95% UCL(e)	Total number	Per cent	No. per 1,000(c)	95% LCL(d)	95% UCL(e)
								NT							
0–4	0	n.p.	n.p.	n.p.	n.p.	1	n.p.	n.p.	n.p.	n.p.	1	n.p.	n.p.	n.p.	n.p.
5–14	78	49.7	2.5	1.9	3.0	75	43.4	2.6	2.0	3.1	153	46.4	2.5	2.1	2.9
15–24	54	34.4	1.9	1.4	2.5	51	29.5	1.9	1.4	2.4	105	31.8	1.9	1.6	2.3
25–34	21	13.4	0.9	0.5	1.3	28	16.2	1.2	0.8	1.7	49	14.8	1.1	0.8	1.4
35–44	4	n.p.	n.p.	n.p.	n.p.	15	8.7	0.8	0.4	1.2	19	5.8	0.5	0.3	0.7
45+	0	n.p.	n.p.	n.p.	n.p.	3	n.p.	n.p.	n.p.	n.p.	3	n.p.	n.p.	n.p.	n.p.
Total	**157**	**100.0**	**1.1**	**0.9**	**1.3**	**173**	**100.0**	**1.2**	**1.1**	**1.4**	**330**	**100.0**	**1.2**	**1.1**	**1.3**
								WA							
0–4	3	n.p.	n.p.	n.p.	n.p.	3	n.p.	n.p.	n.p.	n.p.	6	3.1	0.1	0.0	0.3
5–14	61	67.4	1.5	1.1	1.9	58	53.3	1.4	1.0	1.8	119	59.6	1.4	1.2	1.7
15–24	14	14.0	0.4	0.2	0.6	30	22.4	0.9	0.6	1.2	44	18.7	0.6	0.4	0.8
25–34	13	9.3	0.5	0.2	0.8	18	13.1	0.7	0.4	1.0	31	11.4	0.6	0.4	0.8
35–44	5	5.8	0.2	0.0	0.4	11	8.4	0.5	0.2	0.8	16	7.3	0.4	0.2	0.5
45+	0	n.p.	n.p.	n.p.	n.p.	1	n.p.	n.p.	n.p.	n.p.	1	n.p.	n.p.	n.p.	n.p.
Total	**96**	**100.0**	**0.5**	**0.4**	**0.7**	**121**	**100.0**	**0.7**	**0.6**	**0.8**	**217**	**100.0**	**0.6**	**0.5**	**0.7**

(continued)

Table 1.06.2 (continued): Incidence (new and recurrent cases registered)(a) of acute rheumatic fever among Indigenous Australians in the Northern Territory, Western Australia and Queensland, by age group and sex, 2010–2013(b)

	Males					Females					Persons				
	Total number	**Per cent**	**No. per 1,000(c)**	**95% LCL(d)**	**95% UCL(e)**	**Total number**	**Per cent**	**No. per 1,000(c)**	**95% LCL(d)**	**95% UCL(e)**	**Total number**	**Per cent**	**No. per 1,000(c)**	**95% LCL(d)**	**95% UCL(e)**
							QLD								
0–4	5	5.2	0.1	0.0	0.2	4	n.p.	n.p.	n.p.	n.p.	9	4.6	0.1	0.0	0.1
5–14	67	69.1	0.7	0.5	0.9	47	47.5	0.5	0.4	0.7	114	58.2	0.6	0.5	0.7
15–24	20	20.6	0.3	0.1	0.4	31	31.3	0.4	0.3	0.6	51	26.0	0.3	0.2	0.4
25–34	3	n.p.	n.p.	n.p.	n.p.	14	14.1	0.3	0.1	0.4	17	8.7	0.2	0.1	0.2
35–44	2	n.p.	n.p.	n.p.	n.p.	1	n.p.	n.p.	n.p.	n.p.	3	n.p.	n.p.	n.p.	n.p.
45+	0	n.p.	n.p.	n.p.	n.p.	2	n.p.	n.p.	n.p.	n.p.	2	n.p.	n.p.	n.p.	n.p.
Total	**97**	**100.0**	**0.3**	**0.2**	**0.3**	**99**	**100.0**	**0.3**	**0.2**	**0.3**	**196**	**100.0**	**0.3**	**0.2**	**0.3**
							NT, WA, QLD								
0–4	8	2.3	0.1	0.0	0.2	8	2.0	0.1	0.0	0.2	16	2.2	0.1	0.0	0.1
5–14	206	58.9	1.2	1.1	1.4	180	45.8	1.1	1.0	1.3	386	52.0	1.2	1.1	1.3
15–24	88	25.1	0.6	0.5	0.7	112	28.5	0.8	0.7	1.0	200	26.9	0.7	0.6	0.8
25–34	37	10.6	0.4	0.2	0.5	60	15.3	0.6	0.4	0.7	97	13.1	0.5	0.4	0.6
35–44	11	3.1	0.1	0.1	0.2	27	6.9	0.3	0.2	0.4	38	5.1	0.2	0.1	0.3
45+	0	n.p.	n.p.	n.p.	n.p.	6	1.5	0.0	0.0	0.1	6	0.8	0.0	0.0	0.0
Total	**350**	**100.0**	**0.5**	**0.4**	**0.6**	**393**	**100.0**	**0.6**	**0.5**	**0.6**	**743**	**100.0**	**0.5**	**0.5**	**0.6**

(a) Includes initial and recurrent cases for NT and Qld, and initial, recurrent and probable cases for WA.

(b) Calendar year reporting. Data are presented in 4-year groupings because of small numbers each year.

(c) Crude age-specific rates per 1,000 calculated using the total number of registrations for 2010–2013 divided by the summed 30 June 2010, 2011, 2012 and 2013 populations based on the 2011 Census.

(d) LCL = lower confidence limit.

(e) UCL = upper confidence limit.

Note: The South Australian Rheumatic Heart Disease Register was unable to provide data for this report.

Source: AIHW analysis of Northern Territory, Western Australia and Queensland Rheumatic Heart Disease Program data.

Table 1.06.3: Incidence (new and recurrent cases registered) of acute rheumatic fever in the Top End of the Northern Territory, Central Australia and the total Northern Territory, by Indigenous status, 2010–2013(a)

	Total number		Per cent(b)		Indigenous			Other(c)				
	Indig.	**Other(c)**	**Indig.**	**Other(c)**	**No. per 1,000(d)**	**95% LCL(e)**	**95% UCL(f)**	**No. per 1,000(d)**	**95% LCL(e)**	**95% UCL(f)**	**Rate ratio(g)**	**Rate difference(h)**
NT Top End	249	7	97.3	2.7	1.3	1.0	1.6	n.p.	n.p.	n.p.	n.p.	n.p.
Central Australia(i)	81	2	97.6	2.4	1.0	0.6	1.4	n.p.	n.p.	n.p.	n.p.	n.p.
Northern Territory	330	9	97.3	2.7	1.2	0.9	1.5	n.p.	n.p.	n.p.	n.p.	n.p.

* Represents results with statistically significant differences in the Indigenous/Other comparisons at the $p < 0.05$ level.

(a) Calender year reporting. Data are presented in 4-year groupings because of small numbers each year.

(b) Proportion of cases in each region.

(c) Other includes non-Indigenous and not stated.

(d) Crude rates per 1,000 calculated using average annual incidence rate 2010–2013, divided by estimated resident populations for 2011 by SA2, based on the 2011 Census.

(e) LCL = lower confidence limit of age-standardised rate.

(f) UCL = upper confidence limit of age-standardised rate.

(g) Rate ratio is Indigenous divided by Other.

(h) Rate difference is Indigenous minus Other.

(i) Excludes cases in Western Australia and South Australia because of difficulties in ascertaining denominator populations.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program data.

Table 1.06.4: Incidence (new and recurrent cases registered)[(a)] of acute rheumatic fever in the Northern Territory, Indigenous Australians by age group, 2006 to 2013

Age group	2006	2007	2008	2009	2010	2011	2012	2013	Annual change[(b)]	% change over period[(c)]
0–4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
5–14	1.5	3.2	1.7	2.1	1.3	2.2	3.4	3.2	0.2	64.5
15–24	0.9	1.1	1.0	0.9	1.4	1.7	3.1	1.5	0.2	193.7
25–34	0.6	0.7	n.p.	0.5	0.7	1.0	1.7	0.9	0.1	154.8
35–44	n.p.	n.p.	n.p.	n.p.	0.5	0.7	n.p.	0.5	n.p.	n.p.
45+	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total	**0.7**	**1.1**	**0.6**	**0.8**	**0.8**	**1.1**	**1.7**	**1.2**	**0.1**	**93.4**

* Represents significant increases or decreases over the period 2006 to 2013 at the $p < 0.05$ level.

(a) Crude age-specific rates per 1,000 calculated using populations based on the 2011 Census Series B projections and backcasts.

(b) Annual change in rates determined using linear regression analysis.

(c) Per cent change between 2006 and 2013 based on the annual change over the period.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program data.

Table 1.06.5: Incidence (new and recurrent cases registered)[(a)] of acute rheumatic fever[(b)] in the Northern Territory, Western Australia and Queensland, Indigenous Australians by age group, 2010 to 2013

Age group	2010	2011	2012	2013	Annual change[(c)]	% change over period[(d)]
			NT			
0–4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
5–14	1.3	2.2	3.4	3.2	0.7	145.4
15–24	1.4	1.7	3.1	1.5	0.2	31.5
25–34	0.7	1.0	1.7	0.9	0.1	44.3
35–44	0.5	0.7	n.p.	0.5	n.p.	n.p.
45+	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total	**0.8**	**1.1**	**1.7**	**1.2**	**0.2**	**68.5**
			WA			
0–4	n.p.	n.p.	0.6	n.p.	n.p.	n.p.
5–14	0.5	0.9	2.2	2.2	0.6	356.7
15–24	0.5	0.3	0.9	0.7	0.1	96.2
25–34	n.p.	n.p.	0.9	1.0	n.p.	n.p.
35–44	0.5	n.p.	n.p.	0.4	n.p.	n.p.
45+	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total	**0.3**	**0.3**	**0.9**	**0.8**	**0.2**	**249.4**
			QLD			
0–4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
5–14	0.6	0.8	0.7	0.4	–0.1	–36.2
15–24	0.3	0.4	0.4	0.2	–0.1	–36.9
25–34	n.p.	0.3	0.2	n.p.	n.p.	n.p.
35–44	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
45+	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total	**0.2**	**0.3**	**0.3**	**0.2**	**0.0**	**–29.9**
			NT, WA, QLD			
0–4	n.p.	n.p.	0.3	n.p.	n.p.	n.p.
5–14	0.7	1.1	1.6	1.3	0.2	84.6
15–24	0.6	0.7	1.1	0.6	0.0	15.2
25–34	0.2	0.4	0.7	0.5	0.1	123.0
35–44	0.3	0.2	0.2	0.3	0.0	4.4
45+	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Total	**0.4**	**0.5**	**0.7**	**0.5**	**0.1**	**57.9**

* Represents significant increases or decreases over the period 2010 to 2013 at the $p < 0.05$ level.

(a) Crude age-specific rates per 1,000 calculated using populations based on the 2011 Census Series B projections and backcasts.

(b) Includes initial and recurrent cases for NT and QLD, and initial, recurrent and probable cases for WA.

(c) Annual change in rates determined using linear regression analysis.

(d) Per cent change between 2010 and 2013 based on the annual change over the period.

Note: The South Australian Rheumatic Heart Disease Register was unable to provide data for this report.

Source: AIHW analysis of Northern Territory, Western Australia and Queensland Rheumatic Heart Disease Program data.

Table 1.06.6: Prevalence of rheumatic heart disease (total registrations) for Indigenous Australians in the Northern Territory, by age group and sex, as at 31 December 2013

Age at 31 Dec 2013 (in years)	Number	Per cent	No. per 1,000[(a)]	95% LCL[(b)]	95% UCL[(c)]	Rate ratio[(d)]
			Males			
0–14	54	10.6	4.6	3.4	5.9	n.p.
15–24	123	24.1	17.4	14.3	20.5	35.2*
25–34	120	23.5	20.1	16.5	23.7	n.p.
35–44	103	20.2	21.9	17.7	26.2	52.2*
45+	111	21.7	16.7	13.6	19.8	20.6*
Total	**511**	**100.0**	**14.2**	**12.9**	**15.4**	**33.8***
Total ASR[(e)]	**. .**	**. .**	**15.6**	**14.1**	**17.1**	**33.6***
			Females			
0–14	66	6.9	6.1	4.6	7.6	n.p.
15–24	171	17.8	25.3	21.5	29.1	n.p.
25–34	244	25.3	40.9	35.7	46.0	123.6*
35–44	207	21.5	42.4	36.7	48.2	78.2*
45+	275	28.6	38.1	33.6	42.6	21.2*
Total	**963**	**100.0**	**27.0**	**25.3**	**28.8**	**35.2***
Total ASR[(e)]	**. .**	**. .**	**30.9**	**28.8**	**32.9**	**38.5***
			Persons			
0–14	120	8.1	5.3	4.4	6.3	n.p.
15–24	294	19.9	21.3	18.8	23.7	66.5*
25–34	364	24.7	30.5	27.4	33.6	164.5*
35–44	310	21.0	32.4	28.8	36.0	67.7*
45+	386	26.2	27.8	25.1	30.6	22.0*
Total	**1,474**	**100.0**	**20.6**	**19.5**	**21.6**	**35.3***
Total ASR[(e)]	**. .**	**. .**	**23.4**	**22.1**	**24.7**	**38.9***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Crude age-specific rates based on the 2011 Census.

(b) LCL = lower confidence limit.

(c) UCL = upper confidence limit.

(d) Rate ratio Indigenous: Other.

(e) Directly age-standardised using the Australian 2001 standard population by age-groups 0–14, 15–24, 25–34, 35–44, 45+.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program data.

Table 1.06.7: Prevalence of rheumatic heart disease (total registrations) for Indigenous Australians in the Northern Territory and Western Australia, by age group, as at 31 December 2013

Age at 31 Dec 2013 (in years)	Number	Per cent	No. per 1,000[(a)]	95% LCL[(b)]	95% UCL[(c)]	Rate ratio[(d)]
			NT			
0–14	120	8.1	5.3	4.4	6.3	n.p.
15–24	294	19.9	21.3	18.8	23.7	66.5*
25–34	364	24.7	30.5	27.4	33.6	164.5*
35–44	310	21.0	32.4	28.8	36.0	67.7*
45+	386	26.2	27.8	25.1	30.6	22.0*
Total	**1,474**	**100.0**	**20.6**	**19.5**	**21.6**	**35.3***
			WA			
0–14	63	20.7	2.0	1.5	2.5	n.p.[(e)]
15–24	74	24.3	4.0	3.1	4.9	n.p.[(e)]
25–34	60	19.7	4.2	3.1	5.2	n.p.[(e)]
35–44	53	17.4	4.7	3.4	6.0	n.p.[(e)]
45+	55	18.0	3.1	2.3	4.0	n.p.[(e)]
Total	**305**	**100.0**	**3.3**	**2.9**	**3.7**	**n.p.**[(e)]

* Represents results with statistically significant differences in the Indigenous/Other comparisons at the $p < 0.05$ level.

(a) Crude age-specific rates using projected populations based on the 2011 Census.

(b) LCL = lower confidence limit.

(c) UCL = upper confidence limit.

(d) Rate ratio is Indigenous divided by Other.

(e) The Western Australian Rheumatic Heart Disease Register was unable to provide RHD prevalence data for people who were not Indigenous for this report.

Note: The South Australian and Queensland Rheumatic Heart Disease Registers were unable to provide RHD data for this report.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program and Western Australia Rheumatic Heart Disease Program data.

Table 1.06.8: Prevalence of rheumatic heart disease in Queensland, by Indigenous status, sex and age, as at 1 July 2014

	Number		Per cent		Indigenous			Other[(a)]				
	Indigenous	Other[(a)]	Indigenous	Other[(a)]	No. per 1,000[(b)]	95% LCL[(c)]	95% UCL[(d)]	No. per 1,000[(a)]	95% LCL[(b)]	95% UCL[(c)]	Rate ratio[(e)]	Rate difference[(f)]
Males												
0–14	49	8	86.0	14.0	1.3	0.9	1.7	—	—	—	73.5*	1.3*
15–24	120	13	90.2	9.8	5.7	4.7	6.7	—	—	0.1	135.4*	5.6*
25–34	65	5	92.9	7.1	4.7	3.5	5.8	—	—	—	307.5*	4.7*
35–44	53	1	98.1	n.p.	4.7	3.5	6.0	n.p.	n.p.	n.p.	n.p.	n.p.
45+	42	22	65.6	34.4	2.4	1.7	3.1	—	—	—	95.0*	2.4*
Total	**329**	**49**	**87.0**	**13.0**	**3.3**	**2.9**	**3.6**	**—**	**—**	**—**	**151.0***	**3.2***
Total ASR[(g)]					**3.3**	**2.9**	**3.7**	**—**	**—**	**—**	**160.7***	**3.3***
Females												
0–14	46	9	83.6	16.4	1.3	0.9	1.6	—	—	—	60.4*	1.3*
15–24	146	12	92.4	7.6	7.2	6.0	8.4	—	—	0.1	180.0*	7.2*
25–34	159	5	97.0	3.0	11.3	9.5	13.0	—	—	—	733.0*	11.3*
35–44	108	9	92.3	7.7	9.0	7.3	10.8	—	—	—	320.9*	9.0*
45+	133	30	81.6	18.4	6.8	5.6	7.9	—	—	—	206.1*	6.7*
Total	**592**	**65**	**90.1**	**9.9**	**5.8**	**5.3**	**6.3**	**—**	**—**	**—**	**204.1***	**5.8***
Total ASR[(g)]					**6.7**	**6.1**	**7.3**	**—**	**—**	**—**	**238.8***	**6.7***

(continued)

Table 1.06.8 (continued): Prevalence of rheumatic heart disease in Queensland, by Indigenous status, sex and age, as at 1 July 2014

	Number		Per cent		Indigenous			Other(a)				
	Indigenous	**Other(a)**	**Indigenous**	**Other(a)**	**No. per 1,000(b)**	**95% LCL(c)**	**95% UCL(d)**	**No. per 1,000(a)**	**95% LCL(b)**	**95% UCL(c)**	**Rate ratio(e)**	**Rate difference(f)**
Persons												
0–14	95	17	84.8	15.2	1.3	1.0	1.6	—	—	—	66.5*	1.3*
15–24	266	25	91.4	8.6	6.4	5.7	7.2	—	—	0.1	156.7*	6.4*
25–34	224	10	95.7	4.3	8.0	7.0	9.1	—	—	—	523.0*	8.0*
35–44	161	10	94.2	5.8	7.0	5.9	8.0	—	—	—	441.4*	7.0*
45+	175	52	77.1	22.9	4.7	4.0	5.4	—	—	—	161.6*	4.7*
Total	**921**	**114**	**89.0**	**11.0**	**4.5**	**4.2**	**4.8**	**—**	**—**	**—**	**181.3***	**4.5***
Total ASR(g)					**5.1**	**4.7**	**5.4**	**—**	**—**	**—**	**205.7***	**5.0***

* Represents results with statistically significant differences in the Indigenous/Other comparisons at the $p < 0.05$ level.

(a) Other includes non-Indigenous and not stated.

(b) Crude age-specific rates per 1,000 calculated using 30 June 2014 estimated resident populations based on the 2011 Census. Age-standardised rates directly age-standardised using the 2001 Australian standard population by age-groups 0–14, 15–24, 25–34, 35–44, 45+.

(c) LCL = lower confidence limit.

(d) UCL = upper confidence limit.

(e) Rate ratio is Indigenous divided by Other.

(f) Rate difference Indigenous minus Other.

(g) Directly age-standardised using the Australian 2001 standard population.

Source: AIHW analysis of Queensland Rheumatic Heart Disease Program data.

Table 1.06.9: Prevalence of rheumatic heart disease in the Top End of the Northern Territory, Central Australia and the total Northern Territory, by Indigenous status, as at 31 December 2013

	Number		Per cent(a)		Indigenous			Other(b)				
	Indigenous	**Other(b)**	**Indigenous**	**Other(b)**	**No. per 1,000(c)**	**95% LCL(d)**	**95% UCL(e)**	**No. per 1,000(c)**	**95% LCL(d)**	**95% UCL(e)**	**Ratio(f)**	**Rate difference(g)**
NT Top End	1,148	79	93.6	6.4	28.0	26.2	29.8	0.6	0.5	0.7	46.5*	27.4*
Central Australia(h)	326	20	94.2	5.8	18.8	16.5	21.0	0.8	0.4	1.1	24.2*	18.0*
Northern Territory	1,474	99	93.7	6.3	25.2	23.8	26.6	0.6	0.5	0.8	40.0*	24.6*

* Represents results with statistically significant differences in the Indigenous/Other comparisons at the $p < 0.05$ level.

(a) Proportion of total registrations in each region.

(b) Other includes non-Indigenous and not stated.

(c) Directly age-standardised using the Australian 2001 standard population by age-groups 0–14, 15–24, 25–34, 35–44, 45+. Crude age-specific rates for age-standardisation calculated using estimated resident populations for 2011 by SA2 based on the 2011 Census.

(d) LCL = lower confidence limit of age-standardised rate.

(e) UCL = upper confidence limit of age-standardised rate.

(f) Rate ratio is Indigenous divided by Other.

(g) Rate difference is Indigenous minus Other.

(h) Excludes cases in Western Australia and South Australia because of difficulties in ascertaining denominator populations.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program data.

Table 1.06.10: New registrations[(a)] of rheumatic heart disease in the Northern Territory, Indigenous Australians by age group[(b)], 2006 to 2013

Age (years)	2006	2007	2008	2009	2010	2011	2012	2013	Annual change[(c)]	% change over period[(d)]
0–14	n.p.	0.3	0.7	0.5	0.4	0.6	1.3	1.1	0.1[(e)]	223.5[(e)]
15–24	1.9	2.1	1.7	1.9	1.4	0.7	0.9	1.0	–0.2*	–63.6*
25–34	1.8	1.8	1.9	1.4	0.7	0.4	1.3	1.4	–0.1	–46.6
35–44	1.8	2.1	1.6	0.6	1.0	0.7	n.p.	0.9	–0.2	–68.6
45+	2.3	1.8	0.8	1.5	1.0	1.1	0.5	0.4	–0.2*	–82.4*
Total	**1.3**	**1.4**	**1.2**	**1.1**	**0.8**	**0.7**	**0.9**	**1.0**	**–0.1***	**–41.1***

* Represents significant increases or decreases over the period 2006 to 2013 at the $p < 0.05$ level.

(a) Crude age-specific rates per 1,000 calculated using populations based on the 2011 Census Series B projections and backcasts.

(b) All ages are as at 31 December.

(c) Annual change in rates determined using linear regression analysis.

(d) Per cent change between 2006 and 2013 based on the annual change over the period.

(e) Annual and per cent change calculated for the period 2007 to 2013.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program data.

Table 1.06.11: Numbers and rates[(a)] of new rheumatic heart disease registrations in the Top End of the Northern Territory, Central Australia and total Northern Territory, Indigenous Australians, 2006 to 2013

	2006	2007	2008	2009	2010	2011	2012	2013	Annual change[(b)]	% change over period[(c)]
Top End NT										
Number	73	68	70	57	45	35	54	49	–4.2*	–41.6*
Rate per 1,000	1.5	1.4	1.5	1.2	0.9	0.7	1.1	1.0	n.p.	n.p.
Central Australia										
Number	15	25	13	17	12	14	12	21	–0.3	–12.1
Rate per 1,000	0.7	1.2	0.6	0.8	0.6	0.7	0.6	1.0	n.p.	n.p.
Northern Territory										
Number	88	93	83	74	57	49	66	70	–4.5*	–35.8*
Rate per 1,000	1.3	1.4	1.2	1.1	0.8	0.7	1.0	1.0	n.p.	n.p.

* Represents significant increases or decreases over the period 2006 to 2013 at the $p < 0.05$ level.

(a) Crude rates calculated using estimated resident populations for 2011 by SA2, based on the 2011 Census.

(b) Annual change in rates determined using linear regression analysis.

(c) Per cent change between 2006 and 2013 based on the annual change over the period.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program data.

Table 1.06.12: New registrations[(a)] of rheumatic heart disease in the Northern Territory and Western Australia, Indigenous Australians by age group[(b)], 2010 to 2013

Age (years)	2010	2011	2012	2013	Annual change[(c)]	% change over period[(d)]
			NT			
0–14	0.4	0.6	1.3	1.1	0.3	195.1
15–24	1.4	0.7	0.9	1.0	–0.1	–24.9
25–34	0.7	0.4	1.3	1.4	0.3	171.0
35–44	1.0	0.7	n.p.	0.9	n.p.	n.p.
45+	1.0	1.1	0.5	0.4	–0.3	–68.9
Total	**0.8**	**0.7**	**0.9**	**1.0**	**0.1**	**26.7**
			WA			
0–14	n.p.	0.3	0.6	0.9	n.p.	n.p.
15–24	n.p.	0.6	1.6	1.2	n.p.	n.p.
25–34	n.p.	0.8	1.4	1.5	n.p.	n.p.
35–44	0.5	1.1	0.9	1.6	0.3	157.9
45+	n.p.	0.7	1.3	0.9	n.p.	n.p.
Total	**0.2**	**0.6**	**1.1**	**1.1**	**0.3***	**337.5***

* Represents significant increases or decreases over the period 2010 to 2013 at the $p < 0.05$ level.

(a) Crude age-specific rates per 1,000 calculated using populations based on the 2011 Census Series B projections and backcasts.

(b) All ages are as at 31 December.

(c) Annual change in rates determined using linear regression analysis.

(d) Per cent change between 2010 and 2013 based on the annual change over the period.

Note: The South Australian and Queensland Rheumatic Heart Disease Registers were unable to provide data on RHD for this report.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program and Western Australia Rheumatic Heart Disease Program data.

Table 1.06.13: Hospitalisations with a principal diagnosis of acute rheumatic fever or rheumatic heart disease by state and territory of residence, 2011–12 to 2012–13[a][b][c][d]

	Indigenous			Non-Indigenous				
State and territory of residence	**Number**	**Crude rate per 1,000**	**ASR rate per 1000[e]**	**Number**	**Crude rate per 1,000[f]**	**ASR rate per 1000[e][f]**	**Rate ratio[g]**	**Rate difference[h]**
NSW	69	0.2	0.2	1238	0.1	0.1	2.0	0.1
Vic	10	0.1	n.a.	1086	0.1	0.1	n.a.	n.a.
Qld	238	0.6	0.6	1139	0.1	0.1	4.5	0.4
WA	185	1.0	0.8	526	0.1	0.1	7.3	0.7
SA	31	0.4	0.4	456	0.1	0.1	3.9	0.3
Tas	n.p.	—	—	n.p.	0.1	0.0	n.a.	n.a.
NT	n.p.	3.0	2.7	n.p.	0.1	0.1	21.2	2.6
ACT	n.p.	0.4	n.a.	n.p.	0.1	0.1	n.a.	n.a.
Australia	**967**	**0.7**	**0.6**	**4681**	**0.1**	**0.1**	**6.6**	**0.5**

(a) Data include public and private hospitals in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM code I00-I09.

(d) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+. As different age-groupings were used, rates for Tasmania and the Australian Capital Territory cannot be compared with the rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia.

(e) Directly age-standardised using the 2001 Australian standard population.

(f) Data are rounded to 1 decimal place.

(g) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(h) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. There were no separations of Indigenous people resident in Tasmania with these principal diagnoses during 2011–12 to 2012–13.
4. Age-standardised rates for Indigenous Australians in Victoria and the ACT are not calculated because the numbers are smaller than 20.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.06.14: Adherence to secondary prophylaxis in the last 12 months for persons on the ARF/RHD program, 2013

	Number		Per cent	
Percentage of required doses received in previous 12 months	**Indigenous**	**Other[(a)]**	**Indigenous**	**Other[(a)]**
NT Top End				
Less than 50%	212	3	21.9	n.p.
50% to 80%	421	4	43.5	n.p.
Greater than 80%[(b)]	334	4	34.5	n.p.
Central Australia				
Less than 50%	99	1	32.0	n.p.
50% to 80%	121	1	39.2	n.p.
Greater than 80%[(b)]	89	0	28.8	n.p.
Northern Territory				
Less than 50%	311	4	24.4	n.p.
50% to 80%	542	5	42.5	38.5
Greater than 80%[(b)]	423	4	33.2	n.p.

(a) Other includes non-Indigenous and not stated.

(b) Includes people who received one or more doses when none were required.

Note: The South Australian, Western Australian and Queensland Rheumatic Heart Disease Registers were unable to provide data on adherence to treatment for this report.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program data.

Data sources and quality

Rheumatic Heart Disease (RHD) Program registers

Data on the jurisdictional incidence of acute rheumatic fever (ARF) and prevalence of rheumatic heart disease (RHD) come from the Northern Territory, Queensland and Western Australian Rheumatic Heart Disease registers. It is not possible to directly compare these data as the registers are at different stages of establishment and coverage (AIHW 2013a). Consistent national data on the incidence of ARF and the prevalence of RHD was not available for this report, but the establishment of the Data Collection System will enable consistent data collection across the jurisdictions. Further information is available on the RHD Australia website at <http://www.rhdaustralia.org.au/>.

As the Northern Territory RHD register has been operating in the Top End since 1997 and in Central Australia since 2000, it is currently the strongest jurisdictional source of data on the incidence of ARF and prevalence of RHD in Australia. In contrast, the RHD register and control programs in Queensland and Western Australia are at different stages of establishment. Therefore, caution should be exercised when interpreting and comparing ARF incidence and RHD prevalence data across the 3 jurisdictions (AIHW 2013a). The South Australian Rheumatic Heart Disease Register is the most recent to be established and was unable to provide data for this report.

Data limitations

The data on ARF include initial and recurrent cases for the Northern Territory, and initial, recurrent and probable cases for Western Australia and Queensland. For this report, the Western Australian Rheumatic Heart Disease Register was unable to provide RHD prevalence data for people who were not Indigenous. The Western Australian and Queensland Rheumatic Heart Disease Registers were unable to provide data on adherence to secondary prophylaxis for this report.

Registrations do not measure the incidence or prevalence of conditions in a population. Under-reporting of these conditions can occur at a number of stages. A person infected may not feel ill or may not seek medical care. The condition may not be diagnosed or a registration may not occur.

For the Northern Territory, the accurate identification of Indigenous Australians within this data collection is less likely to be a problem. This is due to the high proportion of Indigenous Australians in the Top End of the Northern Territory and in Central Australia, and the predominance of Indigenous Australians with this disease. Where 'other' is used in the tables, it includes 'non-Indigenous' and 'not stated'.

National Hospital Morbidity Database (NHMD)

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013b). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

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References

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 7 of 68 **Detailed analyses**

1.07 High blood pressure

This measure reports on the prevalence (self-reported and measured) of high blood pressure (also referred to as hypertension) among Aboriginal and Torres Strait Islander Australians. It is expressed as a rate by age group and Indigenous status, age-standardised rate, rate ratio and rate difference.

Introduction

This is no. 7 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- Australian Aboriginal and Torres Strait Islander Health Survey
- National Hospital Morbidity Database
- Bettering the Evaluation and Care of Health survey.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Hypertension is high blood pressure. However, high blood pressure can be measured and managed without the diagnosis of hypertension, which requires multiple readings over time.

For more information related to high blood pressure, see measures 1.23, 2.15, 2.16, 2.17, 2.18, 2.19, 2.20 and 2.21. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Prevalence, see tables 1.07.1–8
- Hospitalisations, see tables 1.07.9–11
- General practitioner encounters, see Table 1.07.12.

Prevalence

Current period

In 2012–13:

- Based on both measured and self-reported data from the 2012–13 Health Survey, about 27% of Indigenous Australians aged 18 and over had high blood pressure. After adjusting for age, Indigenous Australians were 1.1 times as likely as non-Indigenous Australians to have high blood pressure. The gap was 4 percentage points (Table 1.07.1).
- Rates of high blood pressure for Indigenous Australians increased with age, from 8% for 18–24 year olds to 53% for Indigenous Australians aged 55 and over (Table 1.07.4).
- Rates of high blood pressure for Indigenous Australians were higher in *Remote* areas (34%) than *Non-remote* areas (25%) (Table 1.07.4, Figure 1.07.1).
- Most Indigenous Australians with measured high blood pressure (79%) had not been previously diagnosed with the condition. This proportion was higher in *Non-remote* areas (85%) than *Remote* areas (65%) (Table 1.07.3). After adjusting for age, the proportion not previously diagnosed was similar to that for non-Indigenous Australians (Table 1.07.2).

Trend

In 2001, 2004–05 and 2012–13:

- The estimated proportion of Indigenous males reporting high blood pressure was 6% in 2001, 7% in 2004–05 and 6% in 2012–13. The proportion estimated of Indigenous females reporting high blood pressure was 8% in 2001, 8% in 2004–05 and 6% in 2012–13 (Table 1.07.8).

Hospitalisations

Current period

In the 2 years 2011–12 and 2012–13:

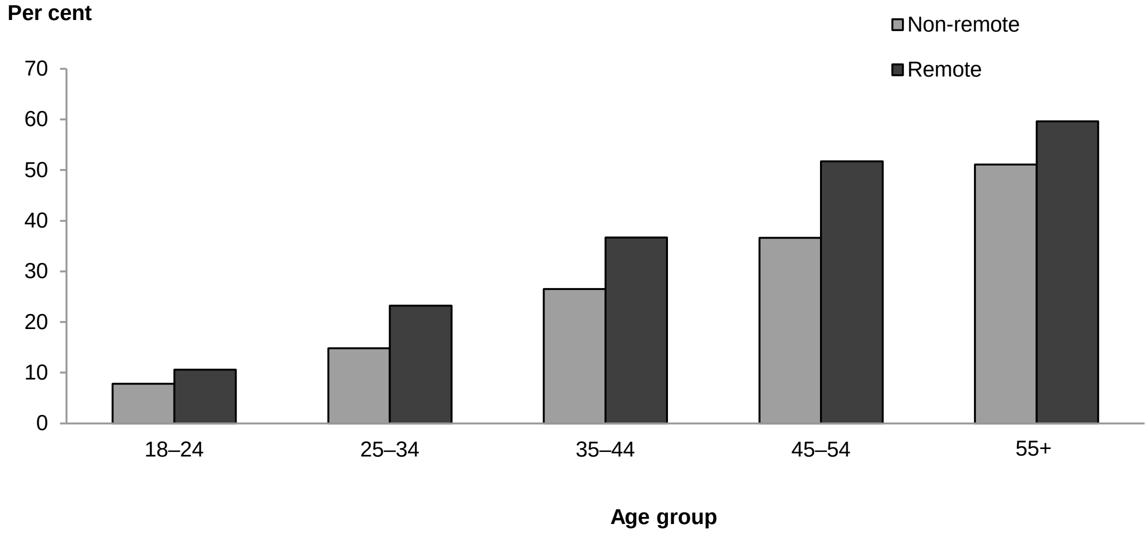
- Indigenous Australians were hospitalised for hypertensive disease at a rate of 0.5 per 1,000. After adjusting for age, the rate was 2.4 times that for non-Indigenous Australians. The rate difference was 0.5 per 1,000.
- Rates of hospitalisation for hypertensive disease for Indigenous Australians increased with age—from 0.2 per 1,000 aged 25–34 to 2.8 per 1,000 for those aged 65 and over. The largest rate difference was in the 55–64 year age group (1.1 per 1,000) (Table 1.07.9).

General practitioner encounters

Current period

From April 2008 to March 2013:

- Hypertension represented 4% of problems managed in encounters with Indigenous Australians. The management rate was 64 per 1,000 encounters. After adjusting for age differences between the two populations the rate was similar for Indigenous and other Australians, with a rate ratio of 1.1 (Table 1.07.12).



Source: Table 1.07.4.

Figure 1.07.1: Indigenous persons (aged 18 and over) with high blood pressure, by remoteness, by age, Australia, 2012–13

Table 1.07.1: High blood pressure, measured and reported, by Indigenous status, persons aged 18 and over, 2012–13[a][b]

	Crude		Age-standardised[c]		
	Indigenous number	Indigenous rate (%)	Indigenous rate (%)	Non-Indigenous rate (%)	Rate ratio[d]
Reported having high blood pressure/hypertension[e]					
Measured blood pressure					
Normal (<120/80 mmHg)	5,256	17.5	17.6	16.2	1.1
Pre-hypertensive (120/80 to <140/90 mmHg)	11,602	38.6	39.4	40.0	1.0
High blood pressure (140/90 mmHg or higher)[f]	13,225	44.0	43.0	43.8	1.0
Total measured	*30,084*	*100.0*	*100.0*	*100.0*	*1.0*
Total reported having high blood pressure/hypertension	**34,687**	**9.5**	**12.7**	**12.5**	**1.0**
Did not report having high blood pressure/hypertension					
Measured blood pressure					
Normal (<120/80 mmHg)	131,822	46.2	40.0	44.6	0.9*
Pre-hypertensive (120/80 to <140/90 mmHg)	102,372	35.9	37.3	36.5	1.0
High blood pressure (140/90 mmHg or higher)[f]	51,010	17.9	22.7	18.9	1.2*
Total measured	*285,204*	*100.0*	*100.0*	*100.0*	*1.0*
Total did not report having high blood pressure/hypertension	**331,181**	**90.5**	**87.3**	**87.5**	**1.0**
Total measured blood pressure					
Normal (<120/80 mmHg)	137,078	43.5	38.1	42.8	0.9*
Pre-hypertensive (120/80 to <140/90 mmHg)	113,974	36.1	37.3	36.2	1.0
High blood pressure (140/90 mmHg or higher)[f]	64,236	20.4	24.6	21.0	1.2*
Total measured	*315,288*	*100.0*	*100.0*	*100.0*	*1.0*
Total prevalence of high blood pressure[g]	***85,697***	***26.8***	***33.1***	***28.9***	***1.1****
Total all persons[h]	**365,868**	**100.0**	**100.0**	**100.0**	**1.0**

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios were tested.

(a) Information on high blood pressure was collected using two methods, a voluntary blood pressure measurement taken by the interviewer and questions on cardiovascular disease, including high blood pressure/hypertension.

(b) Percentages add within columns.

(c) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(d) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous Australians.

(e) People who reported having been told by a doctor or nurse they have high blood pressure/hypertension, and that it was current and long-term (including high blood pressure/hypertension controlled with medication).

(f) Includes the following blood pressure ranges: high (140/90 to <160/110), very high (160/100 to <180/110), and severe (from 180/110).

(g) Prevalence of high blood pressure = total people who reported having high blood pressure/hypertension (regardless of measured blood pressure) + people who did not report having high blood pressure/hypertension but who had a measured blood pressure of 140/90 mmHg or above. The denominators used in calculating prevalence rates exclude those persons who did not report having high blood pressure/hypertension whose blood pressure was not measured.

(h) Includes persons for whom blood pressure measurements were not obtained.

Notes

1. Persons who reported having high blood pressure/hypertension who had normal/low measured blood pressure = managed hypertension.
2. Persons who did not report having high blood pressure/hypertension but who had high measured blood pressure = undiagnosed hypertension.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 Core component) and 2011–12 Australian Health Survey.

Table 1.07.2: High blood pressure, measured and reported[(a)], by Indigenous status, persons aged 18 and over, 2012–13

	Crude		Age-standardised[(b)]		
	Indigenous	Indigenous	Indigenous	Non-Indigenous	Rate ratio[(c)]
	Number	Per cent[(d)]	Per cent[(d)]		
Measured blood pressure					
Normal (<120/80 mmHg)					
Self-reported high blood pressure/hypertension[(e)]	5,256	3.8	8.0	7.7	1.0
Did not self-report high blood pressure/hypertension	131,822	96.2	92.0	92.3	1.0
Total number measured normal blood pressure	**137,078**	**100.0**	**100.0**	**100.0**	**. .**
Pre-hypertensive (120/80 to <140/90 mmHg)					
Self-reported high blood pressure/hypertension[(e)]	11,602	10.2	13.0	12.0	1.1
Did not self-report high blood pressure/hypertension	102,372	89.8	87.0	88.0	1.0
Total number measured pre-hypertensive blood pressure	**113,974**	**100.0**	**100.0**	**100.0**	**. .**
High blood pressure (140/90 mmHg or higher)[(f)]					
Self-reported high blood pressure/hypertension[(e)]	13,225	20.6	20.2	19.2	1.1
Did not self-report high blood pressure/hypertension	51,010	79.4	79.8	80.8	1.0
Total number measured high blood pressure	**64,236**	**100.0**	**100.0**	**100.0**	**. .**
Total prevalence of high blood pressure[(g)]	**85,697**	**26.8**	**33.1**	**28.9**	**1.1***
Total persons 18 and over[(h)]	**365,868**	**. .**	**100.0**	**100.0**	**. .**

* Represents statistically significant differences at the p < 0.05 level. Rate ratios tested.

(a) Information on high blood pressure was collected using two methods, a measured blood pressure and self-report questions on cardiovascular disease, including high blood pressure/hypertension.

(b) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(c) Ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(d) Percentages add within columns.

(e) People who report having been told by a doctor or nurse they have high blood pressure/hypertension (including high blood pressure/hypertension controlled with medication).

(f) Includes the following blood pressure ranges: high (140/90 to <160/110), very high (160/100 to <180/110), and severe (from 180/110).

(g) Prevalence of high blood pressure = total people self-reporting having high blood pressure/hypertension (regardless of measured blood pressure) + people who did not self-report a diagnosis of having hypertension but who had a measured blood pressure of 140/90 mmHg or above. The denominators used in calculating prevalence rates exclude those persons who did not report having high blood pressure/hypertension whose blood pressure was not measured.

(h) Includes persons for whom blood pressure measurements were not obtained.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 Core component) and 2011–12 Australian Health Survey.

Table 1.07.3: High blood pressure, measured and reported, by sex and remoteness areas, Indigenous persons (aged 18 and over), 2012–13

	Remoteness							Total	
	Major cities	Inner regional	Outer regional	Total non-remote	Remote	Very remote	Total remote	Crude	Age standardised[(a)]
					Per cent[(b)]				
Males									
High measured blood pressure[(c)]	22.4	18.5	23.7	21.6	28.6	26.3	27.1	22.9*	26.8*
Reported hypertensive disease[(d)]	9.4†	20.4†	17.0†	14.2	36.6	26.1	30.0	18.6	18.7
No reported hypertensive disease	90.6	79.6	83.0	85.8	63.4	73.9	70.0	81.4	81.3
Total number hypertensive disease	**11,893**	**6,078**	**7,561**	**25,533**	**3,606**	**6,226**	**9,832**	**35,364**	**. .**
Females									
High measured blood pressure[(c)]	16.6	17.5	18.3	17.3	18.9	20.5	19.9	17.9	22.6
Reported hypertensive disease[(d)]	16.2	14.9†	18.0	16.4	48.3	39.0	42.1	23.0	21.5
No reported hypertensive disease	83.8	85.1	82.0	83.6	51.7	61.0	57.9	77.0	78.5
Total number hypertensive disease	**9,453**	**5,602**	**6,393**	**21,448**	**2,450**	**4,973**	**7,423**	**28,871**	**. .**
Persons									
High measured blood pressure[(c)]	19.4	18.0	20.9	19.4	23.7*	23.4*	23.5*	20.4	24.6
Reported hypertensive disease[(d)]	12.4	17.8	17.4	15.2	41.3*	31.8*	35.2*	20.6	20.2
No reported hypertensive disease	87.6	82.2	82.6	84.8	58.7*	68.2*	64.8*	79.4	79.8
Total number high measured blood pressure	**21,346**	**11,680**	**13,954**	**46,981**	**6,056**	**11,199**	**17,255**	**64,236**	**. .**

(continued)

Table 1.07.3 (continued): High blood pressure, measured and reported, by sex and remoteness areas, Indigenous persons (aged 18 and over), 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Differences between remoteness categories were tested for persons only, using 'Total non-remote' as the reference category. Differences between males and females in the Total columns were tested, using females as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(b) 'High measured blood pressure' are population rates per 100. 'Reported and 'no reported' are percentages which add within columns.

(c) Measured blood pressure data collected for persons aged 18 and over. High blood pressure is a measurement of 140/90 mmHg or higher.

(d) People reporting that they have been diagnosed with hypertension by a doctor or nurse, which may be controlled with medication. A person is defined as having high blood pressure if their systolic blood pressure is greater than or equal to 140mmHg and/or their diastolic blood pressure is greater than or equal to 90mmHg.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 Core component).

Table 1.07.4: Indigenous persons (aged 18 and over) with high blood pressure, by remoteness, by age, sex and state/territory, 2012–13[(a)]

	Remoteness						Overall population distribution
	Non-remote		Remote		Australia		
	Number	Rate[(b)]	Number	Rate[(b)]	Number	Rate[(b)]	Per cent[(c)]
Age							
18–24	4,632	7.8	1,692	10.6	6,324	8.4	23.1
25–34	8,362	14.8*	4,333	23.2*	12,695	16.9*	23.7
35–44	13,762	26.5*	5,944	36.7*	19,705	28.9*	21.3
45–54	14,771	36.6*	6,465	51.7*	21,236	40.1*	16.4
55+	18,652	51.1*	7,085	59.6*	25,737	53.2*	15.5
Sex							
Males	32,135	26.9*	13,322	36.0*	45,458	29.1*	48.9
Females	28,043	22.4	12,197	32.0	40,239	24.6	51.1
State/territory							
NSW	23,386	25.3*	2,167	42.7*	25,553	26.2*	31.1
Vic	4,509	21.1*	. .	. .	4,509	21.1*	7.2
Qld	16,134	22.3*	7,841	40.5*	23,976	26.1*	27.5
SA	4,585	31.9	1,011	34.0	5,596	32.2	5.7
WA	6,077	26.0*	5,735	32.6	11,813	28.8*	13.0
Tas	3,266	28.8*	253‡	47.4*‡	3,519	29.7*	3.7
NT	1,525	23.3*	8,511	28.7*	10,036	27.8*	10.8
ACT	697	23.4*	. .	. .	697	23.4*	1.0
Total per cent	**. .**	**24.6**	**. .**	**33.9***	**. .**	**26.8***	**100.0**
Total persons aged 18+ with self-reported and/or measured high blood pressure	**60,178**	**. .**	**25,519**	**. .**	**85,697**	**. .**	**365,868**

* Represents statistically significant differences at the $p < 0.05$ level. Differences between rates were tested within each remoteness category, using 18–24 as the reference category for Age, females as the reference category for Sex, and SA as the reference category for State/territory. Differences between the overall rates for remoteness categories were also tested, using non-remote as the reference category.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Prevalence of high blood pressure = total people who reported having high blood pressure/hypertension (regardless of measured blood pressure) + people who did not report having high blood pressure/hypertension but who had a measured blood pressure of 140/90 mmHg or above. The denominators used in calculating prevalence rates exclude those persons who did not report having high blood pressure/hypertension whose blood pressure was not measured.

(b) Rate per 100.

(c) Distribution of total Indigenous population. Percentages add within columns.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 Core component).

Table 1.07.5: Selected socioeconomic and health characteristics by Indigenous persons (aged 18 and over) with high blood pressure, 2012–13

	Has high blood pressure[(a)]	Does not have high blood pressure	Total[(b)]		Overall population distribution
	Per cent[(c)]		Per cent[(c)]	Number	Per cent[(d)]
SEIFA[(e)]					
1st quintile (most disadvantaged)	28.0	72.0	100.0	170,365	52.8
5th quintile (most advantaged)	21.5	78.5	100.0	14,034	4.3
Ratio most disadvantaged/most advantaged	1.3*	0.9*	1.0	12.1	12.3
Employment					
Employed	24.6	75.4	100.0	155,743	48.1
Unemployed	18.4*	81.6*	100.0	36,280	11.3
Not in the labour force	31.9*	68.1*	100.0	127,868	40.6
Ratio unemployed/employed	0.7*	1.1*	1.0	0.2	0.2
Has non-school qualification[(f)]					
Yes	25.1	74.9	100.0	140,736	43.9
No	28.1	71.9	100.0	179,156	56.1
Ratio no/yes	1.1*	1.0*	1.0	1.3	1.3
Highest year of school completed					
Year 12	17.8	82.2	100.0	86,834	27.1
Year 9 or below[(g)]	37.6	62.4	100.0	90,989	28.6
Ratio Year 9 or below/Year 12	2.1*	0.8*	1.0	1.0	1.1
Smoker status					
Current smoker[(h)]	23.6	76.4	100.0	150,089	46.6
Non-smoker	29.6	70.4	100.0	169,803	53.4
Ratio smoker/non-smoker	0.8*	1.1*	1.0	0.9	0.9
Adequate daily vegetable intake[(i)]					
Yes	24.7	75.3	100.0	14,552	4.6
No	26.9	73.1	100.0	305,339	95.4
Ratio no/yes	1.1*	1.0*	1.0	21.0	20.7
Adequate daily fruit intake[(j)]					
Yes	27.3	72.7	100.0	130,967	41.2
No	26.4	73.6	100.0	188,925	58.8
Ratio no/yes	1.0*	1.0*	1.0	1.4	1.4
Obese[(k)]					
Yes	37.2	62.8	100.0	120,295	39.8
No	18.3	81.7	100.0	183,144	60.2
Ratio yes/no	2.0*	0.8*	1.0	0.7	0.7
Total number[(l)]	**78,316**	**225,124**	**100.0**	**303,439**	**310,956**

(continued)

Table 1.07.5 (continued): Selected socioeconomic and health characteristics by Indigenous persons (aged 18 and over) with high blood pressure, 2012–13

	Has high blood pressure[(a)]	Does not have high blood pressure	Total[(b)]		Overall population distribution
	Per cent[(c)]		Per cent[(c)]	Number	Per cent[(d)]
Self-assessed health status					
Excellent/very good/good	21.9	78.1	100.0	236,571	74.0
Fair/poor	40.5	59.5	100.0	83,320	26.0
Ratio fair, poor/excellent, very good, good	1.8*	0.8*	1.0	0.4	0.4
Heart/circulatory problems[(m)]					
Yes	63.4	36.6	100.0	65,914	19.4
No	17.3	82.7	100.0	253,978	80.6
Ratio yes/no	3.7*	0.4*	1.0	0.3	0.2
Diabetes[(n)]					
Yes	50.9	49.1	100.0	41,130	13.1
No	23.2	76.8	100.0	278,761	86.9
Ratio yes/no	2.2*	0.6*	1.0	0.1	0.2
Kidney disease[(o)]					
Yes	57.1	42.9	100.0	8,505	2.7
No	26.0	74.0	100.0	311,386	97.3
Ratio yes/no	2.2*	0.6*	1.0	0.0	0.0
Total persons aged 18+ with self-reported and/or measured high blood pressure	**85,697**	**234,194**	**. .**	**319,891**	**365,868**

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested. For employment, 'Not in the labour force' was also tested against 'Employed'. Overall population distribution and Total columns not tested.

(a) Prevalence of high blood pressure = total people who reported having high blood pressure/hypertension (regardless of measured blood pressure) + people who did not report having high blood pressure/hypertension but who had a measured blood pressure of 140/90 mmHg or above. The denominators used in calculating prevalence rates exclude those persons who did not report having high blood pressure/hypertension and whose blood pressure was not measured or a valid blood pressure reading was not obtained.

(b) Excludes measurement not taken and valid reading not obtained.

(c) Percentages add within rows.

(d) Distribution of total Indigenous population. Percentages add within columns.

(e) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(f) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED) (includes Bachelor degree or higher, diploma, advanced diploma, certificate).

(g) Year 9 or below includes never attended school.

(h) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(i) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 and over, with the exception of 18–49 year old males who eat 6 serves.

(j) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 and over.

(k) Body Mass Index greater than 30.0 for people aged 18 and over. For information on the calculation of BMI scores for people aged 15–17, see the Glossary in AATSIHS Updated Results 2012–13 (4727.0.55.006).

(l) Totals and population distributions exclude measurement not taken.

(m) Self reported data consisting of persons reporting they have a current heart or circulatory condition which has lasted, or is likely to last, for six months or more.

(n) Self-reported data consisting of persons reporting diabetes which has lasted, or is expected to last, for six months or more. Includes Type 1 and Type 2 diabetes, type unknown, and persons who reported they had diabetes but that it was not current at the time of interview.

(o) Self-reported data consisting of persons reporting kidney disease which has lasted or is expected to last, for six months or more.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 Core component).

Table 1.07.6: Selected household and health risk factors by Indigenous persons (aged 18 and over), with high blood pressure, 2012–13

	Has high blood pressure[a]	Does not have high blood pressure	Total		Overall population distribution
	Per cent[b]		Per cent[b]	Number	Per cent[c]
Equivalised gross household income[d]					
1st quintile (lowest)	27.6	72.4	100.0	108,930	42.5
4th/5th quintile (highest)	24.4	75.6	100.0	46,127	17.7
Ratio lowest/highest	1.1	1.0	1.0	2.4	2.4
Total number	**65,430**	**190,206**	**. .**	**255,637**	**292,747**
Financial stress - whether household could raise $2,000 in an emergency[d]					
Yes	23.9	76.1	100.0	136,783	46.2
No	27.0	73.0	100.0	162,135	53.8
Ratio yes/no	0.9	1.0	1.0	0.8	0.9
Total number	**76,461**	**222,458**	**. .**	**298,919**	**342,917**
Household had day/s without money for basic living expenses in last 12 months[e]					
Yes	25.5	74.5	100.0	129,770	40.4
No	26.4	73.6	100.0	186,652	59.6
Ratio yes/no	1.0	1.0	1.0	0.7	0.7
Total number	**82,290**	**234,133**	**. .**	**316,422**	**364,108**
Housing tenure type[e][f]					
Owner	27.7	72.3	100.0	94,977	30.3
Renter	25.2	74.8	100.0	220,745	69.3
Ratio renter/owner	0.9	1.0	1.0	2.3	2.3
Total number	**82,290**	**234,202**	**. .**	**316,491**	**364,177**
Lives in overcrowded household[e][g]					
Yes	21.2	78.8	100.0	62,497	19.6
No	27.2	72.8	100.0	253,925	80.4
Ratio yes/no	0.8	1.1	1.0	0.2	0.2
Total number	**82,290**	**234,133**	**. .**	**316,422**	**364,108**
Alcohol consumption					
Abstained from alcohol in last 12 months[h]	30.0	70.0	100.0	70,928	22.7
Short-term/single occasion risk[i]					
Yes	24.3	75.7	100.0	184,628	57.1
No	25.9	74.1	100.0	57,429	18.3
Ratio yes/no	0.9	1.0	1.0	3.2	3.1
Physical activity[j]					
Met guidelines[k]	21.4	78.6	100.0	101,640	41.4
Did not meet guidelines[l]	25.3	74.7	100.0	141,006	58.6

(continued)

Table 1.07.6 (continued): Selected household and health risk factors by Indigenous persons (aged 18 and over), with high blood pressure, 2012–13

	Has high blood pressure[(a)]	Does not have high blood pressure	Total		Overall population distribution
Ratio did not meet/met guidelines	1.2	1.0	1.0	1.4	1.4
Total number	**57,393**	**185,254**	**. .**	**242,647**	**283,035**
Disability status[(m)]					
Has profound, severe or moderate core activity limitation[(n)]	35.5	64.5	100.0	41,067	13.4
Has a schooling/employment restriction only[(o)]	30.5	69.5	100.0	35,798	10.9
Has unspecified limitation or restriction	30.3	69.7	100.0	74,332	22.5
Total with disability/long-term health condition	**31.7**	**68.3**	**100.0**	**151,196**	**46.8**
No disability/long-term health condition	21.0	79.0	100.0	166,358	53.2
Ratio disability/no disability	1.5	0.9	1.0	0.9	0.9
Psychological distress (Kessler 5)[(p)]					
Low/moderate	26.6	73.4	100.0	218,830	69.8
High/very high	25.0	75.0	100.0	96,271	30.2
Ratio high, very high/low, moderate	0.9	1.0	1.0	0.4	0.4
Total number[(q)]	**82,223**	**232,878**	**. .**	**315,101**	**361,364**
Stressors experienced in last 12 months[(r)]					
No stressors	28.9	71.1	100.0	76,486	25.0
Experienced one or more stressor	25.2	74.8	100.0	240,195	74.8
Ratio one or more/no stressors	0.9	1.1	1.0	3.1	3.0
Total number[(s)]	**82,823**	**234,554**	**. .**	**317,377**	**365,429**
Long term health conditions[(t)]					
One	19.5	80.5	100.0	56,195	17.6
Two	24.2	75.8	100.0	49,963	15.6
Three or more	33.6	66.4	100.0	159,633	49.4
Ratio three or more/one condition	1.7	0.8	1.0	2.8	2.8
Respiratory disease[(u)]					
Yes	27.0	73.0	100.0	119,056	37.6
No	25.6	74.4	100.0	198,499	62.4
Ratio yes/no	1.1	1.0	1.0	0.6	0.6
Total persons aged 18+ with self-reported and/or measured high blood pressure	**82,875**	**234,680**	**. .**	**317,554**	**365,868**

(continued)

Table 1.07.6 (continued): Selected household and health risk factors by Indigenous persons (aged 18 and over), with high blood pressure, 2012–13

(a) Prevalence of high blood pressure = total people who reported having high blood pressure/hypertension (regardless of measured blood pressure) + people who did not report having high blood pressure/hypertension but who had a measured blood pressure of 140/90 mmHg or above. The denominators used in calculating prevalence rates exclude those persons who did not report having high blood pressure/hypertension whose blood pressure was not measured. Data in this table may not align with other tables in this measure, because data for this table were sourced from the 2012–13 NATSIHS component of the AATSIHS, whereas data for other tables were sourced from the 2012–13 Core component of the AATSIHS.

(b) Percentages add within rows.

(c) Distribution of total population. Percentages add within columns.

(d) Excludes 'not stated' and 'not known'.

(e) Excludes 'not stated'.

(f) Total includes 'other' and 'life tenure scheme'.

(g) Households requiring at least 1 additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(h) Abstainer includes those who have never consumed alcohol.

(i) Includes those who drank alcohol. Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk, this is 5 or more standard drinks on any day over last 12 months.

(j) Physical activity data collected from persons aged 18 and over and *Non-remote* areas only.

(k) 150 minutes of moderate/vigorous physical activity from 5 or more sessions over a week.

(l) Includes 'Don't know' responses.

(m) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for 6 months or more and restricts everyday activities.

(n) Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty or uses aids or equipment with any core activities (self-care, mobility or communication). A person's overall level of core activity limitation is determined by their highest level of limitation in any of these activities.

(o) Only current difficulties with education and/or employment were collected. Respondents aged 65 and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned 'schooling/employment restriction only' had they been asked the question.

(p) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25.

(q) Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(r) Stressors experienced by self, family or friends.

(s) Excludes 'refusal' and 'don't know'.

(t) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for 6 months or more.

(u) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitis and other diseases of the respiratory system.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 NATSIHS component).

Table 1.07.7: Persons (aged 18 and over) with high blood pressure, by remoteness, Indigenous status, age, sex and state/territory, 2012–13[a][b]

	Remoteness											Overall population distribution	
	Non-remote			Remote			Australia						
	Indigenous	Non-Indigenous	Rate ratio[c]	Indigenous	Non-Indigenous	Rate ratio[c]	Indigenous	Non-Indigenous	Rate ratio[c]	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	Rate[d]									Number		Per cent[e]	
Age[f]													
18–24	7.8	5.7	1.4	10.6	n.p.	. .	8.4	5.7	1.5	6,324	108,935	23.1	12.9
25–34	14.8	9.8	1.5	23.2	5.5‡	4.2	16.9	9.7	1.7	12,695	269,710	23.7	18.8
35–44	26.5	17.9	1.5	36.7	30.1	1.2	28.9	18.0	1.6	19,705	482,411	21.3	18.1
45–54	36.6	32.3	1.1	51.7	49.7	1.0	40.1	32.5	1.2	21,236	846,378	16.4	17.6
55+	51.1	57.3	0.9	59.6	51.3	1.2	53.2	57.3	0.9	25,737	2,751,007	15.5	32.5
Sex													
Males	32.5	30.9	1.1	41.7	38.2	1.1	34.7	31.0	1.1	45,458	2,333,913	48.9	49.7
Females	29.3	26.9	1.1	38.6	24.2	1.6	31.5	26.8	1.2	40,239	2,124,529	51.1	50.3
State/territory													
NSW	30.5	29.4	1.0	47.4	38.5†	1.2	31.4	29.5	1.1	25,553	1,503,858	31.1	33.1
Vic	28.0	29.5	0.9	. .	. .	. .	28.0	29.5	0.9	4,509	1,112,604	7.2	24.6
Qld	29.7	26.9	1.1	44.9	35.0†	1.3	33.2	27.0	1.2	23,976	824,715	27.5	19.9
SA	39.5	29.8	1.3	41.1	25.1†	1.6	39.9	29.7	1.3	5,596	355,318	5.7	7.4
WA	31.5	28.2	1.1	37.3	31.2	1.2	34.4	28.3	1.2	11,813	446,145	13.0	10.5
Tas	35.3	32.9	1.1	34.5‡	29.8†	1.2	35.8	33.0	1.1	3,519	123,012	3.7	2.2
NT	28.0	24.1	1.2	36.4	25.8	1.4	34.5	24.5	1.4	10,036	21,472	10.8	0.7
ACT	33.7	29.9	1.1	. .	. .	. .	33.7	29.9	1.1	697	71,318	1.0	1.7
All	**30.9**	**28.9**	**1.1**	**40.2**	**31.4**	**1.3**	**33.1**	**28.9**	**1.1**	**. .**	**. .**	**100.0**	**100.0**
Total number	**60,178**	**4,407,626**		**25,519**	**50,816**		**85,697**	**4,458,442**		**85,697**	**4,458,442**	**365,868**	**14,764,939**

(continued)

Table 1.07.7 (continued): Persons (aged 18 and over) with high blood pressure, by remoteness, Indigenous status, age, sex and state/territory, 2012–13[(a)(b)]

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Prevalence of high blood pressure = total people reporting having high blood pressure/hypertension (regardless of measured blood pressure) + people who did not report having high blood pressure/hypertension but who had a measured blood pressure of 140/90 mmHg or above. The denominators used in calculating prevalence rates exclude those persons who did not report having high blood pressure/hypertension whose blood pressure was not measured.

(b) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(c) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(d) Persons with high blood pressure per 100 persons.

(e) Distribution of total population.

(f) Data for specific age groups are not age-standardised, only the totals.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 Core component) and 2011–12 Australian Health Survey.

Table 1.07.8: Indigenous persons reporting hypertension (high blood pressure)(a), by sex and remoteness, 2001, 2004–05 and 2012–13

	2001		2004–05		2012–13(b)	
	Males	**Females**	**Males**	**Females**	**Males**	**Females**
			Rate per 100			
Remote(c)	7.0	10.0	10.0	10.0	10.2	12.5
Non-remote	5.0	7.0	6.0	7.0	4.3	4.2
Total	**6.0**	**8.0**	**7.0**	**8.0**	**5.6**	**6.0**
Total number	**217,893**	**225,012**	**232,362**	**241,948**	**16,848**	**18,280**

(a) Self-reported data consisting of people reporting that they have been told by a doctor or nurse that they have high blood pressure, which may be treated with medication, which has lasted, or is expected to last, for 6 months or more.

(b) Data for 2012–13 is for persons aged 2 and over.

(c) Remote data are not available for the 1995 National Health Survey.

Note: Due to large differences between measured and self-report blood pressure between males and females, data in this table should be used with caution.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 Core component).

Table 1.07.9: Age-specific hospitalisation rates for a principal diagnosis of hypertensive disease, by Indigenous status and sex, Australia, 2011–12 to 2012–13(a)

									All ages(b)	
	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65+	Crude	Age std.(c)
Males										
Indigenous	—	0.1	0.1	0.2	0.7	1.2	1.5	1.9	0.4	0.7
Non-Indigenous	—	—	0.0	0.1	0.2	0.3	0.6	1.2	0.3	0.3
Rate ratio(d)	1.1	4.7	1.7	2.8	4.0	3.8	2.5	1.6	1.3	2.5
Rate difference(e)	—	0.1	0.0	0.1	0.5	0.9	0.9	0.7	0.1	0.4
Females										
Indigenous	—	—	—	0.2	0.9	1.4	1.9	3.6	0.6	1.0
Non-Indigenous	—	—	—	0.1	0.2	0.3	0.5	2.4	0.5	0.4
Rate ratio(d)	1.9	2.3	0.9	3.2	5.8	4.7	3.7	1.5	1.1	2.4
Rate difference(e)	—	—	—	0.2	0.7	1.1	1.4	1.2	0.0	0.6
Persons(f)										
Indigenous	—	0.1	—	0.2	0.8	1.3	1.7	2.8	0.5	0.9
Non-Indigenous	—	—	—	0.1	0.2	0.3	0.5	1.8	0.4	0.4
Rate ratio(d)	1.4	3.6	1.3	3.0	4.9	4.3	3.1	1.5	1.2	2.4
Rate difference(e)	—	0.1	0.0	0.1	0.6	1.0	1.1	1.0	0.1	0.5

(a) Data includes public and private hospitals in all jurisdictions.

(b) All age data includes age not stated.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous Australians.

(e) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous Australians.

(f) Persons data include sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes I10-I15.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.07.10: Hospitalisations of Indigenous persons for principal diagnosis of hypertensive disease, by sex, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
NSW								
Males	68	0.3	0.5	2,126	0.3	0.3	1.9	0.3
Females	108	0.5	1.0	3,508	0.5	0.4	2.6	0.6
Persons[(h)]	176	0.4	0.8	5,634	0.4	0.3	2.3	0.5
Vic								
Males	14	0.3	0.5	1,527	0.3	0.3	1.8	0.2
Females	11	0.2	0.4	2,817	0.5	0.4	1.05	0.0
Persons[(h)]	25	0.3	0.5	4,344	0.4	0.4	1.3	0.1
Qld								
Males	84	0.4	1.0	1,954	0.4	0.4	2.3	0.6
Females	111	0.6	1.1	2,920	0.7	0.6	1.8	0.5
Persons[(h)]	195	0.5	1.0	4,874	0.6	0.5	2.0	0.5
WA								
Males	65	0.7	1.2	563	0.2	0.2	4.8	0.9
Females	69	0.8	1.3	858	0.4	0.3	3.9	1.0
Persons[(h)]	134	0.7	1.3	1,421	0.3	0.3	4.2	1.0
SA								
Males	11	0.3	0.4	445	0.3	0.2	1.8	0.2
Females	22	0.6	0.8	838	0.5	0.4	2.2	0.5
Persons[(h)]	33	0.4	0.7	1,283	0.4	0.3	2.0	0.3
Tas								
Males	n.p.	0.2	0.3	n.p.	0.2	0.1	1.9	0.1
Females	n.p.	0.2	0.3	n.p.	0.3	0.2	1.2	0.0
Persons[(h)]	n.p.	0.2	0.3	n.p.	0.2	0.2	1.4	0.1
NT								
Males	n.p.	0.4	0.7	n.p.	0.2	0.2	4.2	0.5
Females	n.p.	0.7	1.2	n.p.	0.2	0.3	3.7	0.9
Persons[(h)]	n.p.	0.6	0.9	n.p.	0.2	0.2	3.8	0.7
ACT								
Males	n.p.	0.2	0.3	n.p.	0.2	0.2	1.4	0.1
Females	n.p.	0.0	0.0	n.p.	0.3	0.3	0.0	–0.3
Persons[(h)]	n.p.	0.1	0.1	n.p.	0.2	0.2	0.5	–0.1

(continued)

Table 1.07.10 (continued): Hospitalisations of Indigenous persons for principal diagnosis of hypertensive disease, by sex, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
Australia								
Males	**276**	**0.4**	**0.7**	**6,844**	**0.3**	**0.3**	**2.5**	**0.4**
Females	**378**	**0.6**	**1.0**	**11,275**	**0.5**	**0.4**	**2.4**	**0.6**
Persons[(h)]	**654**	**0.5**	**0.9**	**18,119**	**0.4**	**0.4**	**2.4**	**0.5**

(a) Data include public and private hospitals in all jurisdictions. Number of hospitalisations in NT, ACT and Tas are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes I10-I15.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age standardised rates for NSW, Vic, Qld, WA, SA, NT and Australia have been calculated using the direct method, age standardised by 5 year age groups to 75+. Age standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age standardised by 5 year age group to 65+. As different age-groupings were used, rates for Tasmania and the Australian Capital Territory cannot be compared with the rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous Australians.

(g) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous Australians.

(h) Persons data include sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.07.11: Hospitalisations for hypertensive disease, by Indigenous status and remoteness, Australia, 2011–12 to 2012–13(a)(b)

	Indigenous		Non-Indigenous			
	Number	No. per 1,000(c)	Number	No. per 1,000(c)	Ratio(d)	Difference(e)
Major cities	89	0.3	11,018	0.3	1.05	0
Inner regional	128	0.9	4,083	0.4	2.1	0.5
Outer regional(f)	199	1.2	2,441	0.5	2.2	0.7
Remote(g)	93	1.4	321	0.6	2.2	0.8
Very remote	144	1.4	134	0.7	1.9	0.7
Total(h)	**654**	**0.9**	**18,119**	**0.4**	**2.4**	**0.5**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes I10-I15.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age standardised rate for Indigenous Australians divided by the age standardised rate for non-Indigenous Australians.

(e) Rate difference is the age standardised rate for Indigenous Australians minus the age standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS 2011 Australian Standard Geographical Classification (ASGC) and Australian Statistical Geography Standard (ASGS) and relates to the patient’s usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.07.12: Hypertension[(a)] managed by general practitioners, by Indigenous status, BEACH years April 2008–March 2009 to April 2012–March 2013[(b)(c)]

	Number		Crude rate (no. per 1,000 encounters)			Age-standardised rate (no. per 1,000 encounters)[(d)]							
	Indigenous	Other[(e)]	Indigenous	95% LCL[(f)]	95% UCL[(g)]	Indigenous	95% LCL[(f)]	95% UCL[(g)]	Other[(e)]	95% LCL[(f)]	95% UCL[(g)]	Rate ratio[(h)]	Rate difference[(i)]
Males	192	18,796	66.6	55.1	78.0	90.6	73.0	108.1	95.9	73.0	108.1	0.9	–5.3
Females	273	24,828	61.5	50.9	72.0	103.7	85.5	121.9	86.5	84.4	88.6	1.2	17.3
Persons[(j)(k)]	471	43,978	63.8	54.7	72.9	99.5	85.2	113.7	90.2	88.3	92.2	1.1	9.2

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Classified according to ICPC-2 codes (Classification Committee of the World Organization of Family Doctors (WICC) 2005). ICPC–2 codes: K86, K87.

(b) Data from 5 combined BEACH years April 2008–March 2009 to April 2012–March 2013 inclusive.

(c) Data for Indigenous and other Australians have not been weighted.

(d) Directly age-standardised rate (no. per 1,000 encounters) using total BEACH encounters in the period as the standard. Figures do not add to 100 as more than one problem can be managed at each encounter.

(e) 'Other' includes encounters with non-Indigenous patients and those with patients for whom Indigenous status was not stated.

(f) LCL = lower confidence interval.

(g) UCL = upper confidence interval.

(h) Rate ratio Indigenous:Other.

(i) Rate difference Indigenous rate minus Other rate.

(j) Indigenous Total persons include 7 cases where sex was not recorded.

(k) Other Total persons includes 366 cases where sex was not recorded.

Source: Analyses conducted by the Family Medicine Research Centre, University of Sydney, of BEACH data collected by that Centre.

Data sources and quality

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

National Hospital Morbidity Database (NHMD)

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010a). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

Bettering the Evaluation and Care of Health survey

The Bettering the Evaluation and Care of Health (BEACH) survey collects information about encounters with general practitioners (GPs), including: GP and patient characteristics; patient reasons for the visit; problems managed; and treatments provided. The survey has been conducted annually since April 1998. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. Each participating GP provides details of 100 consecutive patient encounters. Although the questionnaire contains an Indigenous identifier, it is unknown whether all GPs ask their patients this question.

In a sub-study of approximately 9,000 patients, Supplementary Analysis of Nominated Data, it was found that if the question on Indigenous status was asked within the context of a series of questions about origin and cultural background, 1.3% identified as Aboriginal and Torres Strait Islander. This is twice the rate routinely recorded in BEACH, indicating that BEACH may under-estimate the number of encounters with Indigenous Australians.

Under the National Indigenous Reform Agreement, governments have agreed to the implementation of *National best practice guidelines for collecting Indigenous status in health data sets* (AIHW 2010b), which include recommended strategies for local service providers such as GPs and practice nurses to improve Indigenous identification data. General practices and Aboriginal and Torres Strait Islander health services that meet accreditation requirements are eligible for financial incentives when they do the following activities: sign on to the Practice Incentives Program—Indigenous Health Incentive (PIP IHI); obtain consent from their Indigenous clients to be registered for chronic disease management through the IHI; and provide a targeted level of care for each registered patient. Participation in the PIP IHI also provides eligibility for other initiatives under Medicare.

A Voluntary Indigenous Identifier was introduced into the Medicare database from November 2002. By July 2014, 415,730 people had identified as Aboriginal, Torres Strait Islander, or both.

List of symbols used in tables

. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 8 of 68

Detailed analyses

1.08 Cancer

This measure reports on incidence, survival rates, mortality and hospital separations for selected cancers (malignant neoplasms) and for all neoplasms.

Introduction

This is no. 8 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- Australian Cancer Database
- Australian Aboriginal and Torres Strait Islander Health Survey
- National Mortality Database
- Bettering the Evaluation and Care of Health survey
- National Hospital Morbidity Database.

For more information, see ‘Data sources and quality’ at the end of this measure.

Data analysis

Cancer registry data are presented for selected cancers (bowel, lung, digestive system excluding bowel, female breast and cervical cancers) for New South Wales, Queensland, Western Australia and the Northern Territory.

For more information related to mortality, see measure 1.23 (Leading causes of mortality). Also see ‘Other related information’ at the end of this measure.

The following data are presented for this measure:

- Cancer incidence, see tables 1.08.1–7
- Survival and mortality from selected cancers, see tables 1.08.8–9
- GP management of cancer, see Table 1.08.10
- Hospitalisations for cancer, see tables 1.08.11–16.

Cancer incidence

Current period

In the period 2005–09, in New South Wales, Queensland, Western Australia and the Northern Territory combined:

- After adjusting for age, the incidence of cancer was lower in Indigenous Australians (408 per 100,000) than non-Indigenous Australians (440 per 100,000) (Table 1.08.1).
- The rate of cancer incidence was higher in Indigenous Australians compared with non-Indigenous Australians for lung (1.7 times as high), digestive (1.6 times as high) and cervical cancers (2.3 times as high—females only). However the Indigenous rate was lower than the non-Indigenous rate for bowel cancer (rate ratio 0.8) and female breast cancer (rate ratio 0.7) (Table 1.08.1).
- The overall incidence of cancer increased with age for both Indigenous and non-Indigenous Australians, but this varied by type of cancer (Table 1.08.2, Figure 1.08.1).

Survival and mortality rates

Current period

For cancers diagnosed in the period 1997–2007 and followed to 2010:

- The crude cancer survival rate for Indigenous Australians was lower for both males (34%) and females (46%) compared with non-Indigenous males (48%) and females (56%). A similar pattern was seen in all cancer types examined (bowel, lung, digestive system excluding bowel, female breast and cervical cancers). The gap in survival rates between Indigenous and non-Indigenous Australians was largest for cervical cancer (16 percentage points).
- The mean age of diagnosis was lower for Indigenous males and females compared with non-Indigenous males and females for all cancer types examined (Table 1.08.8).

In 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There were 2,340 deaths (20% of all deaths) due to neoplasms (including cancer). The age-standardised rate for Indigenous Australians (224 per 100,000) was significantly higher (1.3 times as high) than the rate for non-Indigenous Australians (178 per 100,000). The gap was 46 per 100,000 (12% of the overall mortality gap) (Table 1.23.1).
- Cancers of the digestive organs (including bowel) and respiratory organs (including lung) were the most common causes of cancer deaths among Indigenous Australians (29% and 26% respectively) (Table 1.08.9).

Trend

Between 2006 and 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The age-standardised rate for Indigenous Australians for deaths due to cancer (malignant neoplasms) increased significantly by 11%, from 203 to 223 per 100,000. There was a significant increase in the gap, from 24 to 53 per 100,000 (Table 1.23.20).

Between 1998 and 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The age-standardised rate for Indigenous Australians for deaths due to cancer (malignant neoplasms) increased significantly by 15%, from 185 to 223 per 100,000. There was a significant increase in the gap, from –9 per 100,000 to 53 per 100,000 (Table 1.23.20).

GP management of cancer

Current period

In the period April 2008–March 2009 to April 2012–March 2013:

- About 0.7% of problems managed by GPs in encounters with Indigenous patients were related to cancer, a rate of 11 per 1,000 encounters. After adjusting for age differences, GPs managed cancer problems in encounters with Indigenous patients at 0.6 times the rate at encounters with other Australians (Table 1.08.10).

Hospitalisations

Current period

In the 2 years 2011–12 and 2012–13:

- Indigenous Australians were hospitalised due to cancer (malignant neoplasms) at a rate of 5 per 1,000. After adjusting for age, the rate difference between Indigenous and non-Indigenous Australians was 6 per 1,000.
- Hospitalisation rates remained relatively stable at around 1 per 1,000 across the age groups up to 34 and afterwards increased with age. Indigenous Australians aged 65 and over had a hospitalisation rate of 42 per 1,000 (Table 1.08.11).

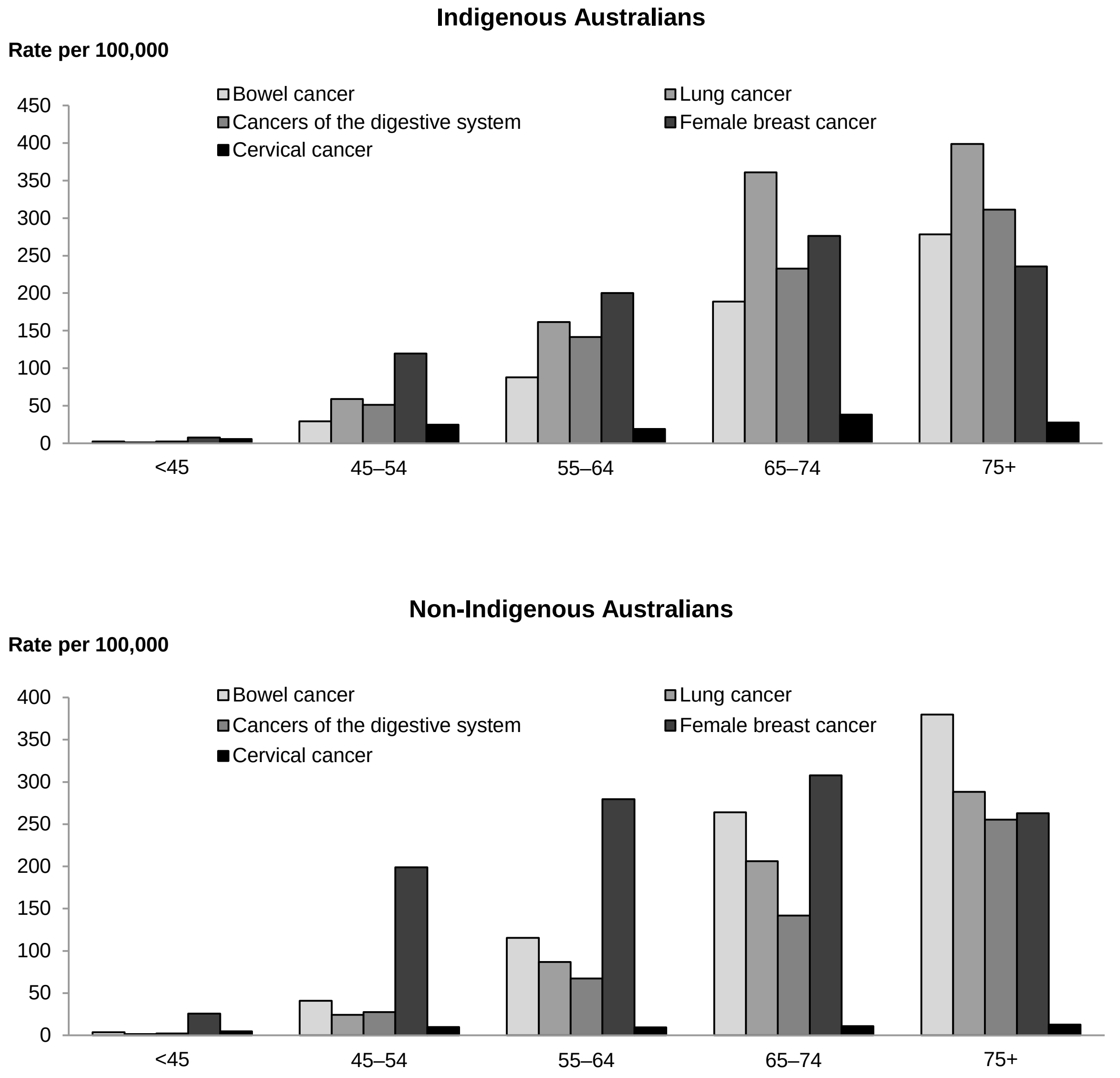
Trend

From 1998–99 to 2012–13 in Queensland, Western Australia, South Australia and the Northern Territory combined:

- The rate of hospitalisation of Indigenous Australians due to cancer increased 20% from 8 per 1,000 to 10 per 1,000. The rate difference changed little (Table 1.08.15, Figure 1.08.2).

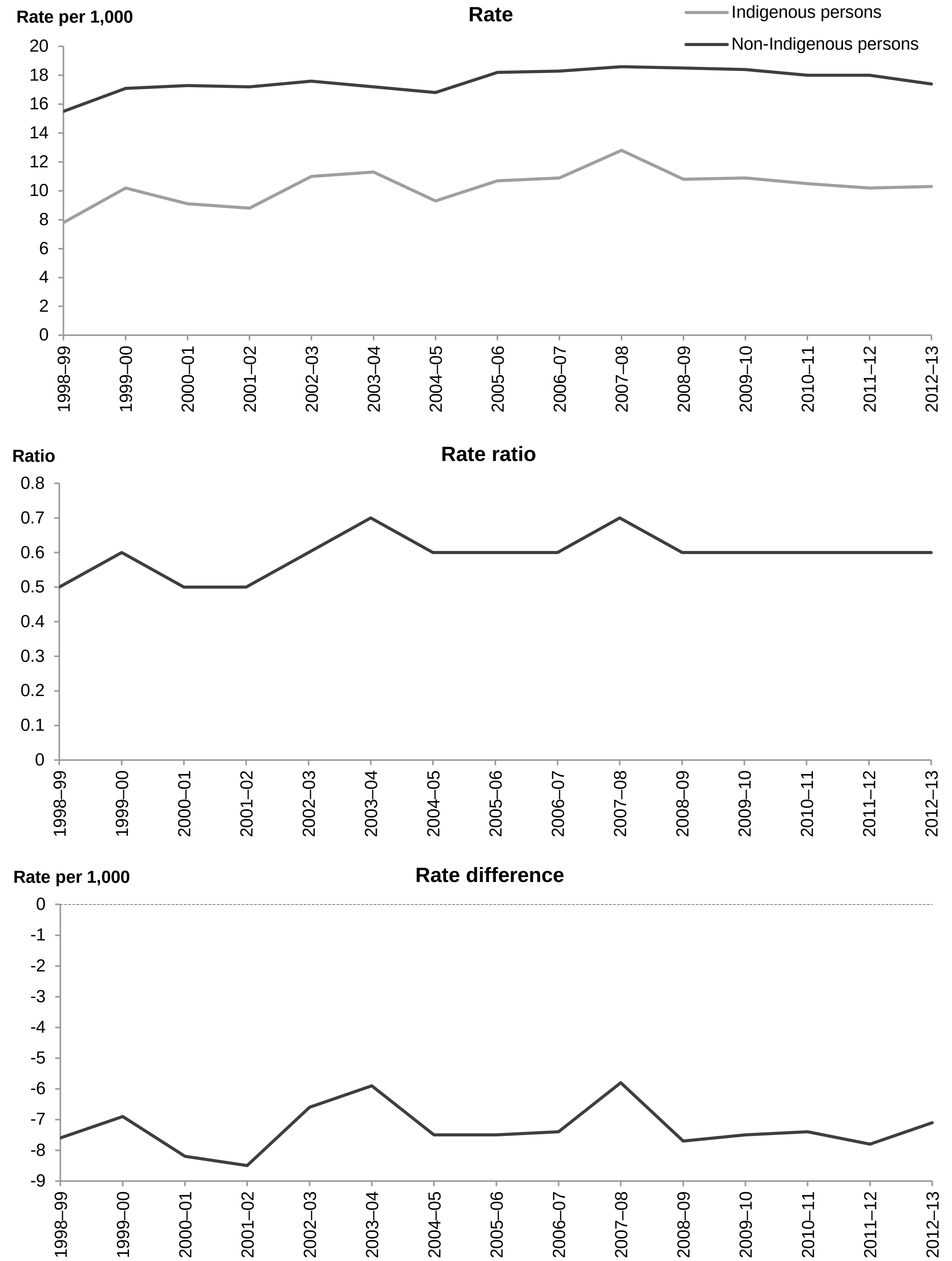
From 2004–05 to 2012–13 in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The rate of hospitalisation of Indigenous Australians due to cancer increased 21% from 8 per 1,000 to 11 per 1,000. The rate difference decreased by 25% (Table 1.08.16, Figure 1.08.3).



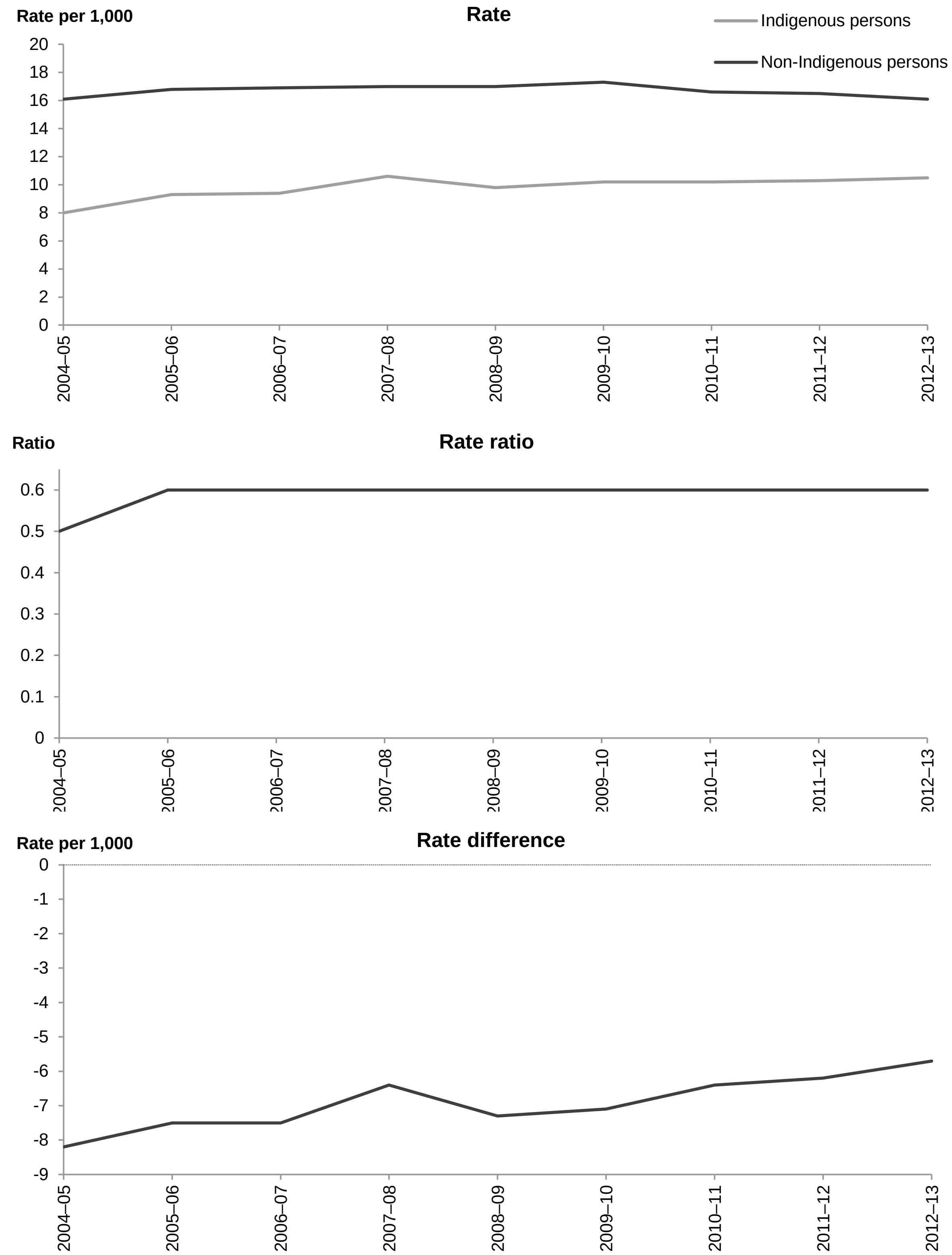
Source: Table 1.08.2.

Figure 1.08.1: Incidence of selected cancers (age-specific rates per 100,000 population), by Indigenous status and age, WA, Qld, NSW, and NT combined, 2005–09



Source: Table 1.08.15.

Figure 1.08.2: Age-standardised hospitalisation rates, rate ratios and rate differences for cancer (malignant neoplasms), Qld, WA, SA and NT, 1998–99 to 2012–13



Source: Table 1.08.16.

Figure 1.08.3: Age-standardised hospitalisation rates, rate ratios and rate differences for cancer (malignant neoplasms), NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13

Table 1.08.1: Incidence of selected cancers, by Indigenous status and sex, WA, Qld, NSW, and NT combined, 2005–09(a)(b)

	Indigenous			Non-Indigenous			Indigenous status not stated				
Cancer type	No.	% all cancers	No. per 100,000(c)	No.	% all cancers	No. per 100,000(c)	No.	%	Rate ratio(d)	Rate difference(e)	Rate difference %(f)
						Males					
Bowel cancer	212	10.6	50.6	22,198	13.1	69.6	1,310	5.5	0.7	–19.0	28.6
Lung cancer	352	17.5	96.1	18,260	10.8	58.0	555	2.9	1.7	38.1	–57.4
Cancers of the digestive system(g)	322	16.0	70.0	14,828	8.7	46.7	422	2.7	1.5	23.3	–35.1
Female breast cancer	—	—	—	—	—	—	—	—	—	—	—
Cervical cancer	—	—	—	—	—	—	—	—	—	—	—
Total cancers	**2,007**	**100.0**	**463.6**	**169,820**	**100.0**	**530.0**	**25,821**	**13.1**	**0.9**	**–66.4**	**100.0**
						Females					
Bowel cancer	179	8.6	38.8	18,004	13.8	49.3	1,195	6.2	0.8	–10.5	–583.3
Lung cancer	293	14.1	58.0	11,283	8.7	30.9	449	3.7	1.9	27.1	1,505.6
Cancers of the digestive system(g)	219	10.5	46.3	9,771	7.5	26.5	401	3.9	1.7	19.8	1,100.0
Female breast cancer	463	22.2	75.9	36,954	28.4	105.7	3,391	8.3	0.7	–29.8	–1,655.6
Cervical cancer	118	5.7	14.9	2,205	1.7	6.6	189	7.5	2.3	8.3	461.1
Total cancers	**2,082**	**100.0**	**367.6**	**130,291**	**100.0**	**365.8**	**16,343**	**11.0**	**1.0**	**1.8**	**100.0**
						Persons					
Bowel cancer	391	9.6	44.3	40,202	13.4	58.8	2,505	5.8	0.8	–14.5	45.5
Lung cancer	645	15.8	74.1	29,543	9.8	43.1	1,004	3.2	1.7	31.0	–97.2
Cancers of the digestive system(g)	541	13.2	57.4	24,599	8.2	36.0	823	3.2	1.6	21.4	–67.1
Female breast cancer	—	—	—	—	—	—	—	—	—	—	—
Cervical cancer	—	—	—	—	—	—	—	—	—	—	—
Total cancers	**4,089**	**100.0**	**408.1**	**300,111**	**100.0**	**440.0**	**42,164**	**12.2**	**0.9**	**–31.9**	**100.0**

(continued)

Table 1.08.1 (continued): Incidence of selected cancers, by Indigenous status and sex, WA, Qld, NSW, and NT combined, 2005–09(a)(b)

(a) Data are reported for New South Wales, Queensland, Western Australia and the Northern Territory only. These 4 states and territories are considered to have adequate levels of Indigenous identification in cancer registry data for this period.

(b) Data are presented for a 5-year period instead of 1 year because of small annual numbers for Indigenous Australians.

(c) Directly age-standardised incidence rates per 100,000, using the 2001 Australian Standard Population, by 5-year age group to 75+.

(d) Rate ratio is the incidence rate for Indigenous Australians divided by the incidence rate for non-Indigenous Australians.

(e) Rate difference is the incidence rate for Indigenous Australians minus the incidence rate for non-Indigenous Australians.

(f) Rate difference per cent is the rate difference for each specific cancer divided by the rate difference for all cancers.

(g) Excluding bowel cancer.

Source: Australian Cancer Database 2010, AIHW.

Table 1.08.2: Incidence of selected cancers (age-specific rates per 100,000 population), by Indigenous status and age, WA, Qld, NSW, and NT combined, 2005–09[a][b][c]

Cancer type	<45	45–54	55–64	65–74	75+	Total[d]
			Indigenous			
Bowel cancer	2.4	29.3	87.7	189.0	278.2	44.3
Lung cancer	1.4	59.1	161.4	360.8	398.6	74.1
Cancers of the digestive system[e]	2.6	51.2	141.5	232.9	311.4	57.4
Female breast cancer	7.9	119.7	200.3	276.1	235.5	75.9
Cervical cancer	5.8	24.8	19.1	38.4	27.7	14.9
Total cancers	**37.0**	**375.4**	**875.8**	**1,685.7**	**2,080.3**	**408.1**
			Non-Indigenous			
Bowel cancer	3.8	40.8	115.3	263.9	379.6	58.8
Lung cancer	1.4	24.4	86.8	206.1	288.2	43.1
Cancers of the digestive system[e]	2.3	27.6	67.4	141.8	255.2	36.0
Female breast cancer	25.6	199.0	279.6	307.8	263.0	105.7
Cervical cancer	4.6	9.9	9.4	10.9	12.7	6.6
Total cancers	**63.9**	**403.0**	**950.2**	**1,739.2**	**2,350.9**	**440.0**

(a) Data are reported for New South Wales, Queensland, Western Australia and the Northern Territory only. These 4 states and territories are considered to have adequate levels of Indigenous identification in cancer registry data for this period.

(b) Data are presented for a 5-year period instead of 1 year because of small annual numbers for Indigenous Australians.

(c) Age-specific rates per 100,000 using the midpoint populations for the relevant years.

(d) Rates total is directly age-standardised using the 2001 Australian Standard Population, by 5-year age group to 75+.

(e) Excluding bowel cancer.

Source: Australian Cancer Database 2010, AIHW.

Table 1.08.3: Incidence of selected cancers by Indigenous status, by state/territory, 2005–09[a][b]

	Indigenous			Non-Indigenous			Indigenous status not stated				
Cancer type	**No.**	**% all cancers**	**No. per 100,000[c]**	**No.**	**% all cancers**	**No. per 100,000[c]**	**No.**	**%**	**Rate ratio[d]**	**Rate difference[e]**	**Rate difference %[f]**
					New South Wales[g][h][i]						
Bowel cancer	173	10.9	50.0	21,479	13.8	57.8	1,495	6.5	0.87	–7.8	47
Lung cancer	252	15.9	71.1	15,347	9.9	41.2	732	4.5	1.73	29.9	–181
Cancers of the digestive system[j]	196	12.4	51.9	13,463	8.7	36.3	589	4.1	1.43	15.6	–95
Female breast cancer	194	12.2	78.7	19,219	12.4	103.3	2,001	9.3	0.76	–24.6	149
Cervical cancer	33	2.1	10.3	1,067	0.7	6.0	119	9.7	1.72	4.3	–26
Total cancers	**1,585**	**100.0**	**406.0**	**155,328**	**100.0**	**422.5**	**25,581**	**14.0**	**0.96**	**–16.5**	**100**
					Queensland[g]						
Bowel cancer	136	10.4	48.1	12,667	13.6	62.0	896	6.5	0.78	–13.9	35
Lung cancer	195	14.9	73.6	9,376	10.0	45.7	239	2.4	1.61	27.9	–69
Cancers of the digestive system[j]	158	12.0	57.1	7,256	7.8	35.5	210	2.8	1.61	21.6	–54
Female breast cancer	157	12.0	79.3	11,541	12.4	109.0	1,163	9.0	0.73	–29.7	74
Cervical cancer	44	3.4	18.6	717	0.8	7.0	62	7.5	2.66	11.6	–29
Total cancers	**1,312**	**100.0**	**414.9**	**93,438**	**100.0**	**455.1**	**15,362**	**14.0**	**0.91**	**–40.2**	**100**

(continued)

Table 1.08.3 (continued): Incidence of selected cancers by Indigenous status, by state/territory, 2005–09[(a)(b)]

	Indigenous			Non-Indigenous			Indigenous status not stated				
Cancer type	**No.**	**% all cancers**	**No. per 100,000[(c)]**	**No.**	**% all cancers**	**No. per 100,000[(c)]**	**No.**	**%**	**Rate ratio[(d)]**	**Rate difference[(e)]**	**Rate difference %[(f)]**
Western Australia[(g)]											
Bowel cancer	48	7.8	37.3	5,762	11.8	56.0	114	1.9	0.67	–18.7	29
Lung cancer	96	15.5	81.3	4,557	9.3	44.7	33	0.7	1.82	36.6	–56
Cancers of the digestive system[(j)]	104	16.8	67.8	3,722	7.6	36.3	24	0.6	1.87	31.5	–48
Female breast cancer	61	9.9	70.4	5,920	12.1	109.6	223	3.6	0.64	–39.2	60
Cervical cancer	19	3.1	12.5	387	0.8	7.5	8	1.9	1.67	5.0	–8
Total cancers	**619**	**100.0**	**407.8**	**48,991**	**100.0**	**473.1**	**1,174**	**2.3**	**0.86**	**–65.3**	**100**
Northern Territory[(g)]											
Bowel cancer	34	5.9	25.0	294	12.5	64.8	0	0.0	0.39	–39.8	61
Lung cancer	102	17.8	79.9	263	11.2	63.7	0	0.0	1.25	16.2	–25
Cancers of the digestive system[(j)]	83	14.5	62.6	158	6.7	34.3	0	0.0	1.83	28.3	–44
Female breast cancer	51	8.9	65.0	274	11.6	88.7	4	1.2	0.73	–23.7	37
Cervical cancer	22	3.8	22.8	34	1.4	11.0	0	0.0	2.07	11.8	–18
Total cancers	**573**	**100.0**	**402.1**	**2,354**	**100.0**	**466.9**	**47**	**1.6**	**0.86**	**–64.8**	**100**
Total[(a)]											
Bowel cancer	391	9.6	44.3	40,202	13.4	58.8	2,505	5.8	0.75	–14.5	45
Lung cancer	645	15.8	74.1	29,543	9.8	43.1	1,004	3.2	1.72	31.0	–97
Cancers of the digestive system[(j)]	541	13.2	57.4	24,599	8.2	36.0	823	3.2	1.59	21.4	–67
Female breast cancer	463	11.3	75.9	36,954	12.3	105.7	3,391	8.3	0.72	–29.8	93
Cervical cancer	118	2.9	14.9	2,205	0.7	6.6	189	7.5	2.26	8.3	–26
Total cancers	**4,089**	**100.0**	**408.1**	**300,111**	**100.0**	**440.0**	**42,164**	**12.2**	**0.93**	**–31.9**	**100**

(continued)

Table 1.08.3 (continued): Incidence of selected cancers by Indigenous status, by state/territory, 2005–09(a)(b)

(a) Data are reported for New South Wales, Queensland, Western Australia and the Northern Territory only. These 4 states and territories are considered to have adequate levels of Indigenous identification in cancer registry data for this period.

(b) Data are presented for a 5-year period instead of 1 year because of small annual numbers for Indigenous Australians.

(c) Directly age-standardised incidence rates per 100,000, using the 2001 Australian Standard Population, by 5-year age group to 75+.

(d) Rate ratio is the incidence rate for Indigenous Australians divided by the incidence rate for non-Indigenous Australians.

(e) Rate difference is the incidence rate for Indigenous Australians minus the incidence rate for non-Indigenous Australians.

(f) Rate difference per cent is the rate difference for each specific cancer divided by the rate difference for all cancers.

(g) Results reported in this table may differ from those in jurisdictional reports because the underlying data may have been extracted from the master databases at different times.

(h) For NSW cancer cases in 2009 the coded cause of death data had not been made available to the Cancer Institute NSW by the time of processing. As death certificate data is used to supplement the cancer registry's information about Indigenous status, this could affect the results presented in the table. Furthermore, due to the lack of data about death certificate only (DCO) cases, the AIHW estimated the number of DCO cases for NSW in 2009. Overall, about 1.7% of all NSW cancer cases for 2009 are estimated DCO cases. These cases are included in the 'Indigenous status not stated' data in the table.

(i) The incidence rates reported for Indigenous Australians in NSW in this table are substantially lower than those previously reported by the Cancer Institute NSW (CINSW). This is due to a revision of the estimate of the size of the Indigenous population by the Australian Bureau of Statistics in which the new estimate is 25% larger than the previous one. It should also be noted that the CINSW imputes Indigenous status for records with unknown status whereas no imputation has been applied in this table.

(j) Excluding bowel cancer.

Source: Australian Cancer Database 2010, AIHW.

Table 1.08.4: Selected population characteristics by proportion of Indigenous persons reporting cancer, by remoteness, 2012–13(a)

	Remoteness						Overall population distribution
	Non-remote		Remote		Australia		
	Number	**Rate(b)**	**Number**	**Rate(b)**	**Number**	**Rate(b)**	**Per cent(c)**
Age							
0–14	n.p.	n.p.	—	—	n.p.	n.p.	35.9
15–24	n.p.	n.p.	160‡	0.6‡	470‡	0.4‡	20.0
25–34	212‡	0.3‡	n.p.	n.p.	267‡	0.3‡	13.6
35–44	530†	0.9†	127‡	0.7‡	657†	0.8†	12.2
45–54	1,275†	2.7†	109‡	0.8‡	1,385†	2.3†	9.4
55+	2,557†	5.8†	214†	1.7†	2,771†	4.9†	8.9
Sex							
Males	2,017	0.8	372†	0.5†	2,389	0.8	49.8
Females	2,953†	1.2†	293†	0.4†	3,246	1.0	50.2
State/territory							
NSW	2,055†	1.1†	102‡	1.1‡	2157†	1.1†	31.5
Vic	477†	1.0†	. .	. .	477†	1.0†	7.2
Qld	1,234†	0.8†	n.p.	n.p.	1,309†	0.7†	28.3
SA	325†	1.1†	n.p.	n.p.	401†	1.1†	5.6
WA	229†	0.5†	300†	0.9†	529†	0.6†	12.8
Tas	346†	1.5†	n.p.	n.p.	365†	1.5†	3.7
NT	262†	2.3†	94‡	0.2‡	356†	0.6†	10.1
ACT	n.p.	n.p.	. .	. .	n.p.	n.p.	0.9
Total per cent	**. .**	**1.0**	**. .**	**0.5†**	**. .**	**0.9**	**100.0**
Total number	**4,970**	**. .**	**665†**	**. .**	**5,635**	**. .**	**638,324**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Persons ever told by a doctor or nurse they have cancer (malignant neoplasms), still current (including cancer in remission).

(b) Indigenous persons reporting cancer per 100 Indigenous persons.

(c) Distribution of total Indigenous population.

Notes

1. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.
2. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.08.5: Persons reporting cancer, by Indigenous status, by age, sex, state/territory and remoteness, 2012–13(a)(b)

						Overall population distribution	
	Indigenous	Non-Indigenous	Rate ratio(c)	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	Rate(d)			Number		Per cent(e)	
Age group (years)(f)							
0–14	n.p.	0.0	. .	n.p.	0	35.9	18.6
15–24	0.4‡	0.2‡	2.0	470‡	5,243‡	20.0	13.6
25–34	0.3‡	0.2†	1.5	267‡	7,173†	13.6	14.6
35–44	0.8†	0.3†	2.7	657†	9,123†	12.2	14.2
45–54	2.3†	1.1	2.1	1,385†	33,486	9.4	13.7
55+	4.9†	4.9	1.0	2,771†	265,476	8.9	25.2
Sex							
Males	1.6	1.6	1.0	2,389	193,155	49.8	49.9
Females	1.7†	1.0	1.7	3,246	127,345	50.2	50.1
State/territory							
NSW	2.0†	1.0	2.0	2,157†	81,170	31.5	32.5
Vic	1.9†	1.5	1.3	477†	91,618	7.2	25.5
Qld	1.3†	1.6	0.8	1,309†	72,503	28.3	19.8
SA	7.1†	1.0	. .	401†	20,263	5.6	7.3
WA	1.2†	1.6	0.8	529†	36,970	12.8	10.3
Tas	2.5†	1.6	1.6	365†	9,426	3.7	2.2
NT	6.3	2.1	. .	356†	2,761	10.1	0.7
ACT	n.p.	1.6	. .	n.p.	5,788	0.9	1.6
Remoteness areas							
Major cities	2.4†	1.3	1.8	2,698†	215,112	35.1	71.6
Inner regional	1.4†	1.4	1.0	1,162†	70,519	22.1	18.9
Outer regional	1.6†	1.4	1.1	1,109†	29,281	21.5	8.4
Total non-remote	*1.9*	*1.3*	*1.5*	*4,970*	*314,911*	*78.7*	*98.8*
Remote	1.0†	2.0†	0.5	349†	5,589†	7.6	1.2
Very remote	5.6†	. .	. .	316†	. .	13.7	. .
Total remote	*0.7†*	*2.0†*	*0.4*	*665†*	*5,589†*	*21.3*	*1.2*
All	**1.6**	**1.3**	**1.2**	**. .**	**—**	**100.0**	**100.0**
Total number	**5,635**	**320,500**	**. .**	**5,635**	**320,500**	**638,324**	**21,622,358**

(continued)

Table 1.08.5 (continued): Persons reporting cancer, by Indigenous status, by age, sex, state/territory and remoteness, 2012–13(a)(b)

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Persons ever told by a doctor or nurse they have cancer (malignant neoplasms), still current (including cancer in remission).

(b) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(c) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(d) Persons reporting cancer per 100 persons.

(e) Distribution of total population.

(f) Data for specific age groups are not age-standardised, only the totals.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.08.6: Indigenous persons (15 years and over) reporting cancer, by selected socioeconomic and health characteristics, 2012–13

	Has cancer[(a)]	Does not have cancer	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
SEIFA[(d)]					
1st quintile (most disadvantaged)	0.9	99.1	100.0	211,804	51.8
5th quintile (most advantaged)	1.5‡	98.5	100.0	15,072	3.7
Ratio most disadvantaged/most advantaged	*0.6*	*1.0*	*1.0*	*14.1*	*14.0*
Employment					
Employed	0.9	99.1	100.0	187,107	45.8
Unemployed	0.8‡	99.2	100.0	50,987	12.5
Not in the labour force	2.0	98.0	100.0	170,847	41.8
Ratio unemployed/employed	*0.9*	*1.0*	*1.0*	*0.3*	*0.3*
Has non-school qualification[(e)]					
Yes	1.4	98.6	100.0	163,249	39.9
No	1.3	98.7	100.0	245,692	60.1
Ratio no/yes	*0.9*	*1.0*	*1.0*	*1.5*	*1.5*
Highest year of school completed					
Year 12	0.9†	99.1	100.0	100,362	24.5
Year 9 or below[(f)]	2.0	98.0	100.0	119,529	29.2
Ratio Year 9 or below/Year 12	*2.2*	*1.0*	*1.0*	*1.2*	*1.2*
Smoker status					
Current smoker[(g)]	1.3	98.7	100.0	175,768	43.0
Non-smoker[(h)]	1.4	98.6	100.0	233,173	57.0
Ratio smoker/non-smoker	*0.9*	*1.0*	*1.0*	*0.8*	*0.8*
Adequate daily vegetable intake[(i)]					
Yes	2.3†	97.7	100.0	20,158	4.9
No	1.3	98.7	100.0	388,783	95.1
Ratio no/yes	*0.6*	*1.0*	*1.0*	*19.3*	*19.4*
Adequate daily fruit intake[(j)]					
Yes	1.4	98.6	100.0	175,227	42.8
No	1.3	98.7	100.0	233,714	57.2
Ratio no/yes	*0.9*	*1.0*	*1.0*	*1.3*	*1.3*
Obese[(k)]					
Yes	1.7†	98.3	100.0	124,997	37.0
No	1.4	98.6	100.0	212,509	63.0
Ratio yes/no	*1.2*	*1.0*	*1.0*	*0.6*	*0.6*
Total number [(l)]	*1.5*	*98.5*	*100.0*	*337,506*	*100.0*

(continued)

Table 1.08.6 (continued): Indigenous persons (15 years and over) reporting cancer, by selected socioeconomic and health characteristics, 2012–13

	Has cancer[(a)]	Does not have cancer	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Self-assessed health status					
Excellent/very good/good	0.8	99.2	100.0	307,649	75.2
Fair/poor	3.0	97.0	100.0	101,292	24.8
Ratio fair, poor/excellent, very good, good	*3.8*	*1.0*	*1.0*	*0.3*	*0.3*
Heart/circulatory disease[(l)]					
Yes	2.7†	97.3	100.0	72,617	17.8
No	1.1	98.9	100.0	336,324	82.2
Ratio yes/no	*2.5*	*1.0*	*1.0*	*0.2*	*0.2*
Diabetes[(m)(n)]					
Yes	2.9†	97.1	100.0	47,898	11.7
No	1.1	98.9	100.0	361,043	88.3
Ratio yes/no	*2.6*	*1.0*	*1.0*	*0.1*	*0.1*
Kidney disease[(l)]					
Yes	2.3‡	97.7	100.0	9,819	2.4
No	1.3	98.7	100.0	399,122	97.6
Ratio yes/no	*1.8*	*1.0*	*1.0*	*0.0*	*0.0*
Total	**1.4**	**98.6**	**100.0**	. .	. .
Total number of persons 15+	**5,550**	**403,391**	. .	**408,941**	**100.0**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Persons ever told by a doctor or nurse they have cancer (malignant neoplasms), still current (including cancer in remission).

(b) Percentages add within rows.

(c) Distribution of total population.

(d) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(e) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED)(includes e.g. Bachelor degree or higher, diploma, advanced diploma, certificate).

(f) Year 9 or below includes never attended school.

(g) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(h) Includes ex-smoker and those who have never smoked.

(i) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 years and over, with the exception of 18–49 year old males who eat 6 serves.

(j) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 years and over.

(k) Body Mass Index greater than 30.0 for people aged 18 years and over. For information on the calculation of BMI scores for people aged 15–17 years, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001).

(l) Total excludes measurement not taken.

(m) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(n) Includes Type 1 and Type 2 diabetes, and type unknown. Includes persons who reported they had diabetes but that it was not current at the time of interview.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.08.7: Selected household and health risk factors by Indigenous persons (15 years and over) reporting cancer 2012–13

	Has cancer[(a)]	Does not have cancer	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Equivalised household income					
1st quintile (lowest)	1.5	98.5	100.0	140,304	42.7
4th/5th quintile (highest)	1.0†	99.0	100.0	55,728	17.0
Ratio lowest/highest	1.5	1.0	1.0	2.5	2.5
Total number[(d)]	**4,829**	**323,861**	**. .**	**328,690**	**328,690**
Financial stress—whether household could raise $2,000 in an emergency					
Yes	1.6	98.4	100.0	177,097	46.2
No	1.5	98.5	100.0	206,614	53.8
Ratio yes/no	1.1	1.0	1.0	0.9	0.9
Total number[(d)]	**5,915**	**377,796**	**. .**	**383,711**	**383,711**
Household had day/s without money for basic living expenses in last 12 months					
Yes	1.6†	98.4	100.0	164,764	40.5
No	1.2	98.8	100.0	241,932	59.5
Ratio yes/no	1.3	1.0	1.0	0.7	0.7
Total number	**5,550**	**401,146**	**. .**	**406,696**	**406,696**
Housing tenure type[(e)]					
Owner	1.6†	98.4	100.0	124,490	30.6
Renter	1.2	98.8	100.0	281,001	69.0
Ratio renter/owner	0.8	1.0	1.0	2.3	2.3
Total number	**5,550**	**401,461**	**. .**	**407,011**	**407,011**
Lives in overcrowded household[(f)]					
Yes	1.0†	99.0	100.0	81,548	20.1
No	1.4	98.6	100.0	325,148	79.9
Ratio yes/no	0.7	1.0	1.0	0.3	0.3
Total number	**5,550**	**401,146**	**. .**	**406,696**	**406,696**
Alcohol consumption					
Abstained from alcohol in last 12 months[(g)]	1.3†	98.7	100.0	108,024	26.4
Short-term/single occasion risk[(h)]					
Yes	1.1†	98.9	100.0	219,176	53.6
No	2.4†	97.6	100.0	74,582	18.2
Ratio yes/no	0.5	1.0	1.0	2.9	2.9

(continued)

Table 1.08.7 (continued): Selected household and health risk factors by Indigenous persons (15 years and over) reporting cancer 2012–13

	Has cancer[(a)]	Does not have cancer	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Physical activity[(i)]					
Met guidelines[(j)]	1.8†	98.2	100.0	117,125	41.4
Did not meet guidelines[(k)]	1.7†	98.3	100.0	165,910	58.6
Ratio did not meet/met guidelines	0.9	1.0	1.0	1.4	1.4
Total number	**4,885**	**278,150**	**. .**	**283,035**	**283,035**
Disability status[(l)]					
Has profound, severe or moderate core activity limitation	3.5†	96.5	100.0	51,009	12.5
Has a schooling/employment restriction only	1.7†	98.3	100.0	44,580	10.9
Has unspecified limitation or restriction	1.7†	98.3	100.0	88,239	21.6
Total with disability/long-term health condition	*2.2*	*97.8*	*100.0*	*183,828*	*45.0*
No disability/long-term health condition	0.6†	99.4	100.0	225,113	55.0
Ratio disability/no disability	3.7	1.0	1.0	0.8	0.8
Psychological distress (Kessler 5)[(m)]					
Low/moderate	1.1	98.9	100.0	252,230	69.8
High/very high	2.5†	97.5	100.0	109,134	30.2
Ratio high/very high:low/moderate	2.3	1.0	1.0	0.4	0.4
Total number	**5,530**	**355,834**	**. .**	**361,364**	**361,364**
Stressors experienced in last 12 months[(n)]					
No stressors	0.6†	99.4	100.0	107,171	26.3
Experienced one or more stressor	1.6	98.4	100.0	300,159	73.5
Ratio one or more/no stressors	2.7	1.0	1.0	2.8	2.8
Total number	**5,550**	**402,670**	**. .**	**408,220**	**408,220**
Long term health conditions[(o)]					
One	0.2‡	99.8	100.0	76,185	18.6
Two	0.8†	99.2	100.0	63,404	15.5
Three or more	2.6	97.4	100.0	189,444	46.3
Ratio three or more/one condition	13.0	1.0	1.0	2.5	2.5
Respiratory disease[(p)]					
Yes	1.3†	98.7	100.0	149,805	36.6
No	1.4	98.6	100.0	259,136	63.4
Ratio yes/no	0.9	1.0	1.0	0.6	0.6
Total number of persons 15+	**5,550**	**403,391**	**. .**	**408,941**	**100**

(continued)

Table 1.08.7 (continued): Selected household and health risk factors by Indigenous persons (15 years and over) reporting cancer 2012–13

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Persons ever told by a doctor or nurse they have cancer (malignant neoplasms), still current (including cancer in remission).

(b) Percentages add within rows.

(c) Distribution of total Indigenous population.

(d) Excludes ‘not known’.

(e) Total includes ‘other’ and ‘life tenure scheme’.

(f) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(g) Abstainer includes those who have never consumed alcohol.

(h) Of those who drank alcohol. Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(i) Physical activity data collected from persons 18 years and over; and non-remote areas only.

(j) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(k) Includes ‘Don’t know’ responses.

(l) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities. Only current difficulties with education and/or employment were collected. Respondents aged 65 years and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(m) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25. Total population is 18 years and over.

(n) Stressors experienced by self, family or friends.

(o) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(p) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitis, and other diseases of the respiratory system.

Notes

1. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.
2. Data exclude not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.08.8: Five-year crude survival(a)(b) for selected cancers by Indigenous status and sex, WA, Qld, NSW, and NT combined, 1999–2007, followed to the end of 2010(c)

	Males					Females				
	Number(d)	Mean age at diagnosis(e)	Crude survival (%)	LCL 95%(f)	UCL 95%(g)	Number(d)	Mean age at diagnosis(e)	Crude survival (%)	LCL 95%(f)	UCL 95%(g)
Bowel cancer										
Indigenous	251	59.6	44.7	38.3	50.8	233	61.5	49.1	42.5	55.4
Non-Indigenous	36,085	68.6	51.8	51.3	52.3	28,968	70.3	54.2	53.6	54.7
Not stated	2,455	67.0	—	—	—	2,257	69.0	—	—	—
Lung cancer										
Indigenous	489	63.0	8.0	5.9	10.5	336	61.9	6.5	4.2	9.3
Non-Indigenous	30,035	70.2	9.5	9.1	9.8	16,232	69.3	13.1	12.6	13.6
Not stated	831	70.5	—	—	—	625	69.1	—	—	—
Cancers of digestive system(h)										
Indigenous	432	60.0	9.8	7.4	12.5	266	62.5	9.8	6.9	13.4
Non-Indigenous	22,623	68.5	15.2	14.8	15.7	15,123	72.0	15.7	15.1	16.2
Not stated	717	66.6	—	—	—	593	69.9	—	—	—
Breast cancer in females										
Indigenous	—	—	—	—	—	655	55.8	69.9	66.1	73.3
Non-Indigenous	—	—	—	—	—	58,703	60.2	81.3	81.0	81.6
Not stated	—	—	—	—	—	7,267	61.2	—	—	—
Cervical cancer										
Indigenous	—	—	—	—	—	201	46.0	51.2	44.1	57.9
Non-Indigenous	—	—	—	—	—	3,845	52.8	67.2	65.7	68.7
Not stated	—	—	—	—	—	432	44.5	—	—	—
Total cancers										
Indigenous	2,714	57.9	34.3	32.5	36.0	2,867	55.9	45.8	44.0	47.6
Non-Indigenous	259,653	67.1	48.2	48.0	48.4	207,881	64.5	56.4	56.2	56.6
Not stated	40,712	63.5	—	—	—	28,358	59.8	—	—	—

(a) The 5-year crude survival rate is the percentage of people who are still alive 5 years after their cancer diagnosis. The rates were calculated by the cohort method based on all diagnoses in 1997–2007, followed to the end of 2010.

(b) The survival rates reported in this table are crude survival rates, which are not the same as and cannot be compared with the more commonly reported relative survival rates. The calculation of relative survival rates by Indigenous status would require life tables for the years 1999–2010 for NSW, Qld, WA and NT combined, stratified by Indigenous status. Such life tables were not available.

(c) Data are reported for New South Wales, Queensland, Western Australia and the Northern Territory only. These four states and territories are considered to have adequate levels of Indigenous identification in cancer registry data for this period.

(d) The number of incident cases diagnosed in 1999–2007 that were used for the survival analysis.

(e) The mean age at diagnosis of the cases used for the survival analysis.

(f) LCL = lower confidence limit.

(g) UCL = upper confidence limit.

(h) Excluding bowel cancer.

Source: Australian Cancer Database 2007, AIHW.

Table 1.08.9: Selected multiple causes of death, by Indigenous status and sex, neoplasms, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
Site of neoplasm	Deaths	% of total deaths	Age-standardised[g] % of total deaths	Deaths	% of total deaths	Age-standardised[g] % of total deaths	Deaths	% of total deaths	Age-standardised[g] % of total deaths	Deaths	% of total deaths	Age-standardised[g] % of total deaths	Crude mean no. of causes[h]	Crude mean no. of causes[h]
							Males							
Digestive organs (C15–C26)	380	6.0	6.5	23,101	9.1	8.7	411	6.5	7.2	26,533	10.4	10.1	2.7	2.5
Respiratory and inthrathoracic organs (C30–C39)	353	5.5	7.2	18,213	7.1	6.9	378	5.9	7.8	20,088	7.9	7.6	2.7	2.6
Bronchus and lung (C34)[i]	322	5.1	6.7	17,367	6.8	6.6	340	5.3	7.1	18,954	7.4	7.2	2.7	2.6
Ill-defined, secondary and unspecified site (C76–C80)	83	1.3	1.6	4,456	1.7	1.7	238	3.7	4.3	16,163	6.3	6.2	2.9	2.7
Lymphoid, haematopoietic and related tissue (C81–C96)	63	1.0	1.3	7,782	3.1	3.0	77	1.2	1.6	10,165	4.0	4.0	3.3	3.0
Female genital organs (C51–C58)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cervix (C53)[i]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Lip, oral cavity and pharynx (C00–C14)	110	1.7	1.6	1,831	0.7	0.7	128	2.0	1.9	2,341	0.9	0.9	2.5	2.5
Breast (C50)	0	0.0	0.0	81	—	—	2	—	n.p.	130	0.1	—	—	2.6
Malignant neoplasms of urinary tract (C64–C68)	39	0.6	0.7	4,646	1.8	1.8	48	0.8	1.0	6,470	2.5	2.5	2.6	2.8

(continued)

Table 1.08.9 (continued): Selected multiple causes of death, by Indigenous status and sex, neoplasms, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
Site of neoplasm	Deaths	% of total deaths	Age-standardised(g) % of total deaths	Deaths	% of total deaths	Age-standardised(g) % of total deaths	Deaths	% of total deaths	Age-standardised(g) % of total deaths	Deaths	% of total deaths	Age-standardised(g) % of total deaths	Crude mean no. of causes(h)	Crude mean no. of causes(h)
Male genital organs (C60–C63)	76	1.2	2.2	11,071	4.3	4.4	117	1.8	3.5	17,379	6.8	7.0	2.8	2.6
Other malignant neoplasms(j)	85	1.3	1.6	12,844	5.0	4.9	105	1.7	2.1	15,686	6.2	6.1	2.7	2.6
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	16	0.3	n.p.	784	0.3	0.3	26	0.4	0.4	1,531	0.6	0.6	3.9	3.3
Total neoplasms	1,205	18.9	23.2	84,809	33.3	32.5	1,334	21.0	26.40	98,555	38.7	38.0	2.7	2.6
All causes	**6,361**	**100.0**	**100.0**	**254,922**	**100.0**	**100.0**	**6,361**	**100.0**	**100.0**	**254,922**	**100.0**	**100.0**	**3.3**	**3.2**
Females														
Digestive organs (C15–C26)	297	5.7	6.2	16,913	7.0	7.1	329	6.3	7.0	19,281	8.0	8.1	2.6	2.4
Respiratory and inthrathoracic organs (C30–C39)	251	4.8	5.0	11,065	4.6	4.7	278	5.3	5.7	11,923	5.0	5.1	2.5	2.4
Bronchus and lung (C34)(i)	247	4.7	4.9	10,847	4.5	4.6	272	5.2	5.5	11,657	4.8	5.0	2.6	2.4
Ill-defined, secondary and unspecified site (C76–C80)	67	1.3	1.5	4,186	1.7	1.7	215	4.1	4.1	13,405	5.6	5.7	2.9	2.7
Lymphoid, haematopoietic and related tissue (C81–C96)	68	1.3	1.5	5,717	2.4	2.4	78	1.5	1.7	7,298	3.0	3.1	3.2	2.9

(continued)

Table 1.08.9 (continued): Selected multiple causes of death, by Indigenous status and sex, neoplasms, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)]

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
Site of neoplasm	**Deaths**	**% of total deaths**	**Age-standardised[(g)] % of total deaths**	**Deaths**	**% of total deaths**	**Age-standardised[(g)] % of total deaths**	**Deaths**	**% of total deaths**	**Age-standardised[(g)] % of total deaths**	**Deaths**	**% of total deaths**	**Age-standardised[(g)] % of total deaths**	**Crude mean no. of causes[(h)]**	**Crude mean no. of causes[(h)]**
Female genital organs (C51–C58)	133	2.5	2.3	5,632	2.3	2.4	162	3.1	3.0	6,488	2.7	2.8	2.7	2.3
Cervix (C53)[(i)]	53	1.0	0.7	809	0.3	0.4	64	1.2	0.9	987	0.4	0.4	2.6	2.4
Lip, oral cavity and pharynx (C00–C14)	24	0.5	0.5	705	0.3	0.3	36	0.7	0.6	893	0.4	0.4	2.6	2.4
Breast (C50)	150	2.9	2.8	9,619	4.0	4.2	192	3.7	3.8	12,855	5.3	5.5	2.5	2.3
Malignant neoplasms of urinary tract (C64–C68)	30	0.6	0.7	2,429	1.0	1.0	33	0.6	0.8	3,092	1.3	1.3	3.1	2.7
Male genital organs (C60–C63)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other malignant neoplasms[(j)]	91	1.7	1.8	7,062	2.9	3.1	105	2.0	2.1	8,988	3.7	3.8	2.8	2.5
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	24	0.5	0.5	872	0.4	0.4	39	0.7	0.8	1,635	0.7	0.7	3.5	3.2
Total neoplasms	1,135	21.6	22.6	64,200	26.7	27.4	1,269	24.2	25.9	73,393	30.5	31.2	2.7	2.5
All causes	**5,251**	**100.0**	**100.0**	**240,860**	**100.0**	**100.0**	**5,251**	**100.0**	**100.0**	**240,860**	**100.0**	**100.0**	**3.4**	**3.2**

(continued)

Table 1.08.9 (continued): Selected multiple causes of death, by Indigenous status and sex, neoplasms, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)]

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
Site of neoplasm	Deaths	% of total deaths	Age-standardised[(g)] % of total deaths	Deaths	% of total deaths	Age-standardised[(g)] % of total deaths	Deaths	% of total deaths	Age-standardised[(g)] % of total deaths	Deaths	% of total deaths	Age-standardised[(g)] % of total deaths	Crude mean no. of causes[(h)]	Crude mean no. of causes[(h)]
Persons														
Digestive organs (C15–C26)	677	5.8	6.4	40,014	8.1	8.0	740	6.4	7.1	45,814	9.2	9.2	2.7	2.4
Respiratory and inthrathoracic organs (C30–C39)	604	5.2	6.0	29,278	5.9	5.8	656	5.6	6.7	32,011	6.5	6.4	2.6	2.5
Bronchus and lung (C34)[(i)]	569	4.9	5.7	28,214	5.7	5.6	612	5.3	6.3	30,611	6.2	6.1	2.6	2.5
Ill-defined, secondary and unspecified site (C76–C80)	150	1.3	1.5	8,642	1.7	1.7	453	3.9	4.2	29,568	6.0	5.9	2.9	2.7
Lymphoid, haematopoietic and related tissue (C81–C96)	131	1.1	1.4	13,499	2.7	2.7	155	1.3	1.7	17,463	3.5	3.5	3.2	2.9
Female genital organs (C51–C58)	133	1.1	1.1	5,632	1.1	1.1	162	1.4	1.5	6,488	1.3	1.3	2.7	2.3
Cervix (C53)[(i)]	53	0.5	0.4	809	0.2	0.2	64	0.6	0.4	987	0.2	0.2	2.6	2.4
Lip, oral cavity and pharynx (C00–C14)	134	1.2	1.1	2,536	0.5	0.5	164	1.4	1.3	3,234	0.7	0.6	2.5	2.5
Breast (C50)	150	1.3	1.4	9,700	2.0	1.9	193	1.7	1.9	12,985	2.6	2.6	2.5	2.4
Malignant neoplasms of urinary tract (C64–C68)	69	0.6	0.7	7,075	1.4	1.4	81	0.7	0.9	9,562	1.9	1.9	2.8	2.7

(continued)

Table 1.08.9 (continued): Selected multiple causes of death, by Indigenous status and sex, neoplasms, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f]

	Underlying cause						**Multiple cause**							
	Indigenous			**Non-Indigenous**			**Indigenous**			**Non-Indigenous**			**Indig.**	**Non-Indig.**
Site of neoplasm	**Deaths**	**% of total deaths**	**Age-standardised[g] % of total deaths**	**Deaths**	**% of total deaths**	**Age-standardised[g] % of total deaths**	**Deaths**	**% of total deaths**	**Age-standardised[g] % of total deaths**	**Deaths**	**% of total deaths**	**Age-standardised[g] % of total deaths**	**Crude mean no. of causes[h]**	**Crude mean no. of causes[h]**
Male genital organs (C60–C63)	76	0.7	1.0	11,071	2.2	2.2	117	1.0	1.7	17,379	3.5	3.5	2.8	2.6
Other malignant neoplasms[i]	176	1.5	1.7	19,906	4.0	4.0	210	1.8	2.1	24,674	5.0	5.0	2.7	2.6
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	40	0.3	0.4	1,656	0.3	0.3	65	0.6	0.6	3,166	0.6	0.6	3.7	3.2
Total neoplasms	2,340	20.2	22.7	149,009	30.1	29.8	2,603	22.4	26.0	171,948	34.7	34.4	2.7	2.6
All causes	**11,612**	**100.0**	**100.0**	**495,782**	**100.0**	**100.0**	**11,612**	**100.0**	**100.0**	**495,782**	**100.0**	**100.0**	**3.4**	**3.2**

(continued)

Table 1.08.9 (continued): Selected multiple causes of death, by Indigenous status and sex, neoplasms, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008-2012.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(h) Mean number of causes is calculated based on the average number of causes of death present for a death with the selected underlying cause of death. This data item provides insight into co-morbidity.

(i) Data presented for bronchus and lung cancer are a subset of data presented for all respiratory and inthrathoracic organs; data presented for cervix cancer are a subset of data presented for all cancers of the female genital organs in this table.

(j) Includes neoplasms of bone and articular cartilage (C40–C41); melanoma and other neoplasms of skin (C43–C44); neoplasms of mesothelial and soft tissue (C45–C49); neoplasms of eye, brain and other parts of central nervous system (C69–C72); neoplasms of thyroid and other endocrine glands (C73–C75); C9 Malignant neoplasms of independent (primary) multiple sites (C97); D45 Polycythaemia vera; D46 Myelodysplastic syndromes; D47.1 Chronic myeloproliferative disease; D47.3 Essential (haemorrhagic) thrombocythaemia.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.08.10: Problems managed relating to cancer[(a)] managed by general practitioners, by Indigenous status of the patient, BEACH survey years April 2008–March 2009 to April 2012–March 2013 inclusive[(b)(c)]

	Number		Per cent		Crude rate (no. per 1,000 encounters)						Age-standardised rate (no. per 1,000 encounters)[(d)]			
Problem managed	**Indig.**	**Other[(e)]**	**Indig.**	**Other[(e)]**	**Indig.**	**95% LCL[(f)]**	**95% UCL[(g)]**	**Other**	**95% LCL[(f)]**	**95% UCL[(g)]**	**Indig.**	**Other[(e)]**	**Ratio[(h)]**	**Rate diff.[(i)]**
Respiratory malignancies (R84)(R85)	5	573	0.04	0.07	0.7	0.0	1.4	1.2	1.1	1.3	0.9	1.2	0.7	–0.3
Lung/brochus/trachea cancer (R84)[(j)]	5	455	0.04	0.06	0.7	0.0	1.4	0.9	0.8	1.0	0.9	0.9	0.9	–0.1
Breast cancer in females (X76)	8	1,305	0.07	0.17	1.1	0.3	1.9	2.7	2.5	2.9	1.9	2.7	0.7	–0.8
Cervical cancer (X75)	10	99	0.09	0.01	1.4	0.3	2.4	0.2	0.2	0.2	1.1	0.2	5.4	0.9
Bowel cancer (D75)	5	702	0.04	0.09	0.7	0.1	1.3	1.4	1.3	1.6	0.8	1.4	0.5	–0.7
Other malignant neoplasm[(k)]	53	10,115	0.45	1.32	7.2	5.1	9.2	20.9	20.1	21.7	12.1*	20.7*	0.6*	–8.7*
Malignant neoplasm total[(l)]	*81*	*12,794*	*0.69*	*1.67*	*11.0*	*8.1*	*13.8*	*26.4*	*25.5*	*27.3*	*16.7**	*26.2**	*0.6**	*–9.5**
Other problems managed	11,608	751,902	99.31	98.33	1,572.9	1,524.0	1,621.8	1,551.8	1,542.9	1,560.8	1,668.5*	1,550.5*	1.1*	118.1*
Total problems	**11,689**	**764,696**	**100.00**	**100.00**	**1,583.9**	**1,534.0**	**1,633.8**	**1,578.3**	**1,569.1**	**1,587.4**	**1,685.3***	**1,576.7***	**1.1***	**108.5***

(continued)

Table 1.08.10 (continued): Problems managed relating to cancer[(a)] managed by general practitioners, by Indigenous status of the patient, BEACH survey years April 2008–March 2009 to April 2012–March 2013 inclusive[(b)(c)]

* Represents results with statistically significant differences in the Indigenous/other Australian comparisons at the $p < 0.05$ level.

(a) Classified according to ICPC-2 codes (Classification Committee of the World Organization of Family Doctors (WICC) 1998).

(b) Data from five combined BEACH years April 2008–March 2009 to April 2012–March 2013 inclusive.

(c) Data for Indigenous and other Australians have not been weighted.

(d) Directly age-standardised rate (no. per 1,000 encounters). Figures do not add to 100 as more than one problem can be managed at each encounter.

(e) 'Other' includes encounters with non-Indigenous patients and those with patients for whom Indigenous status was not stated.

(f) LCL = lower confidence interval.

(g) UCL = upper confidence interval.

(h) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for other Australians.

(i) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for other Australians.

(j) Lung/bronchus/trachea cancer is a subset of respiratory malignancies.

(k) ICPC–2 codes: A79, B72–B74, B74, D74, D76–D77, F74002–03,06, H75002,03, K72002–03, L71, N74, S77, T71, T73001–02, U75–U77 W72, X77, Y77–Y78.

(l) ICPC–2 codes: A79, B72–B74, B74, D74, D75–D77, F74002–03,06, H75002,03, K72002–03, L71, N74, R84–R85, S77, T71, T73001–02, U75–U77 W72, X75–X77, Y77–Y78.

Source: Analyses conducted by the Family Medicine Research Centre, University of Sydney, of BEACH data collected by that Centre.

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Table 1.08.11: Age-specific hospitalisation rates for a principal diagnosis of malignant neoplasms (cancer), by Indigenous status and sex, Australia, 2011–12 to 2012–13[(a)]

	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65+	Total (crude)[(b)] per 1,000	Total (age-standardised)[(c)] per 1,000
Males										
Indigenous	1.4	0.8	1.0	1.6	3.6	10.8	26.7	49.9	5.2	11.9
Non-Indigenous	2.6	1.5	1.4	1.9	4.7	14.3	39.8	98.2	21.2	19.9
Rate ratio[(d)]	0.5	0.5	0.7	0.8	0.8	0.8	0.7	0.5	0.2	0.6
Rate difference[(e)]	–1.2	–0.7	–0.4	–0.3	–1.0	–3.6	–13.1	–48.3	–16.0	–8.0
Females										
Indigenous	1.0	0.8	0.6	1.5	4.6	12.4	19.6	36.2	5.0	9.3
Non-Indigenous	2.1	1.2	1.0	2.4	6.6	15.1	27.3	53.9	15.3	13.2
Rate ratio[(d)]	0.5	0.7	0.6	0.6	0.7	0.8	0.7	0.7	0.3	0.7
Rate difference[(e)]	–1.1	–0.4	–0.4	–0.9	–2.0	–2.7	–7.7	–17.8	–10.3	–3.9
Persons[(f)]										
Indigenous	1.2	0.8	0.8	1.5	4.1	11.6	23.0	42.3	5.1	10.4
Non-Indigenous	2.4	1.3	1.2	2.1	5.7	14.7	33.5	74.4	18.2	16.2
Rate ratio[(d)]	0.5	0.6	0.7	0.7	0.7	0.8	0.7	0.6	0.3	0.6
Rate difference[(e)]	–1.2	–0.6	–0.4	–0.6	–1.5	–3.1	–10.5	–32.1	–13.1	–5.9

(a) Data includes public and private hospitals in all jurisdictions.

(b) All age data includes age not stated.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes: care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes C00–C97, D45, D46, D47.1, D47.3.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.08.12: Hospitalisations for principal diagnosis of cancer (malignant neoplasms) by Indigenous status and sex, and jurisdiction, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
NSW								
Males	1,083	5.1	11.0	130,206	18.5	16.8	0.7	–5.7
Females	1,120	5.3	9.5	94,303	13.2	11.1	0.9	–1.6
Persons[(h)]	2,203	5.2	10.1	224,509	15.8	13.7	0.7	–3.6
Vic								
Males	272	5.6	14.2	126,981	23.0	21.8	0.7	–7.6
Females	294	6.0	11.4	95,971	17.0	14.7	0.8	–3.2
Persons[(h)]	566	5.8	12.5	222,952	20.0	17.9	0.7	–5.3
Qld								
Males	1,003	5.2	13.7	101,521	23.3	22.4	0.6	–8.7
Females	901	4.6	9.5	72,690	16.6	14.9	0.6	–5.4
Persons[(h)]	1,904	4.9	11.2	174,211	19.9	18.4	0.6	–7.1
WA								
Males	429	4.8	11.3	50,871	21.5	22.1	0.5	–10.8
Females	435	4.8	8.3	35,373	15.2	14.1	0.6	–5.8
Persons[(h)]	864	4.8	9.5	86,244	18.4	17.8	0.5	–8.3
SA								
Males	227	6.0	11.4	38,612	24.1	20.5	0.6	–9.1
Females	147	3.8	7.1	27,161	16.6	12.9	0.6	–5.8
Persons[(h)]	374	4.9	8.9	65,776	20.3	16.3	0.5	–7.4
Tas								
Males	n.p.	6.0	11.0	n.p.	21.1	16.7	0.7	–5.7
Females	n.p.	5.5	9.7	n.p.	15.0	11.5	0.8	–1.7
Persons[(h)]	n.p.	5.7	10.3	n.p.	18.0	14.0	0.7	–3.6
NT								
Males	n.p.	5.0	10.1	n.p.	11.7	15.7	0.6	–5.6
Females	n.p.	5.0	8.9	n.p.	7.5	9.5	0.9	–0.6
Persons[(i)]	n.p.	5.0	9.4	n.p.	9.7	12.9	0.7	–3.5
ACT								
Males	n.p.	5.3	14.2	n.p.	11.3	12.6	1.1	1.6
Females	n.p.	2.9	8.8	n.p.	9.6	9.6	0.9	–0.8
Persons[(i)]	n.p.	4.2	11.3	n.p.	10.4	10.9	1.0	0.4

(continued)

Table 1.08.12 (continued): Hospitalisations for principal diagnosis of cancer (neoplasms) by Indigenous status and sex, and jurisdiction, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
Australia								
Males	**3,559**	**5.2**	**11.9**	**465,742**	**21.2**	**19.9**	**0.6**	**–8.0**
Females	**3,404**	**5.0**	**9.3**	**338,256**	**15.3**	**13.2**	**0.7**	**–3.9**
Persons[(h)]	**6,963**	**5.1**	**10.4**	**804,001**	**18.2**	**16.2**	**0.6**	**–5.9**

(a) Data include public and private hospital in all jurisdiction. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes C00–C97, D45, D46, D47.1, D47.3.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+. As different age-groupings were used, rates for Tasmania and the Australian Capital Territory cannot be compared with the rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.08.13: Hospitalisations for principal diagnosis of cancer (malignant neoplasms) by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[(a)(b)]

	Indigenous		Non-Indigenous			
	Number	**No. per 1,000**(c)	**Number**	**No. per 1,000**(c)	**Rate ratio**(d)	**Rate difference**(e)
Major cities	2,296	10.6	538,160	16.0	0.7	–5.4
Inner regional	1,511	10.5	177,063	17.0	0.6	–6.5
Outer regional(f)	1,585	10.8	75,316	15.9	0.7	–5.1
Remote(g)	669	10.9	8,672	15.5	0.7	–4.6
Very remote	879	8.4	2,702	13.1	0.6	–4.7
Total(h)	**6,963**	**10.4**	**804,001**	**16.2**	**0.6**	**–5.9**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes C00–C97, D45, D46, D47.1, D47.3.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS' 2011 Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes: care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.08.14: Hospitalisations of Indigenous persons for principal diagnosis of neoplasms (including cancer), by type of cancer and sex, Australia, 2011–12 to 2012–13(a)(b)(c)

	Males					Females				
Principal diagnosis	**Number**	**Per cent(d)**	**No. per 1,000(e)**	**Rate ratio(f)**	**Rate difference(g)**	**Number**	**Per cent(d)**	**No. per 1,000(e)**	**Rate ratio(f)**	**Rate difference(g)**
Cancer—malignant neoplasms										
Digestive organs (C15–C26)	701	15.0	2.3	0.9	–0.2	460	7.7	1.5	1.0	–0.1
Respiratory and inthrathoracic organs (C30–C39)	448	9.6	1.8	1.7	0.7	424	7.1	1.4	2.4	0.8
Bronchus and lung (C34)(h)	*366*	*7.8*	*1.5*	*1.7*	*0.6*	*396*	*6.7*	*1.3*	*2.4*	*0.8*
Ill-defined, secondary and unspecified site (C76–C80)	502	10.8	1.7	0.9	–0.2	466	7.8	1.3	0.8	–0.3
Lymphoid, haematopoietic and related tissue (C81–C96)	428	9.2	1.0	0.4	–1.6	399	6.7	0.9	0.5	–0.8
Female genital organs (C51–C58)	. .	. .	. .	. .	. .	411	6.9	1.0	1.3	0.2
Cervix (C53)(h)	. .	. .	. .	. .	. .	*139*	*2.3*	*0.3*	*2.1*	*0.2*
Lip, oral cavity and pharynx (C00–C14)	232	5.0	0.6	1.7	0.3	78	1.3	0.2	1.5	0.1
Breast (C50)	5	0.1	0.0	0.9	0.0	503	8.5	1.3	0.7	–0.7
Malignant neoplasms of urinary tract (C64–C68)	176	3.8	0.7	0.6	–0.5	100	1.7	0.3	0.7	–0.1
Male genital organs (C60–C63)	413	8.9	1.5	0.5	–1.5	. .	. .	. .	. .	. .
Other malignant neoplasms(i)	654	14.0	2.3	0.3	–5.0	563	9.5	1.4	0.3	–3.1
Total cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	**3,559**	**76.3**	**11.9**	**0.6**	**–8.0**	**3,404**	**57.3**	**9.3**	**0.7**	**–3.9**
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	**1,104**	**23.7**	**3.0**	**0.5**	**–3.6**	**2,541**	**42.7**	**4.9**	**0.6**	**–3.4**
Total neoplasms	**4,663**	**100.0**	**15.0**	**0.6**	**–11.6**	**5,945**	**100.0**	**14.1**	**0.7**	**–7.3**

(continued)

Table 1.08.14 (continued): Hospitalisations of Indigenous persons for principal diagnosis of neoplasms (including cancer), by type of cancer and sex, Australia, 2011–12 to 2012–13(a)(b)(c)

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010), ICD-10-AM codes C00–C97, D00–D48.

(b) Data includes public and private hospitals in all jurisdictions.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Proportion of male, female and total hospitalisations of Indigenous persons in the period 2011–12 to 2012–13.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(g) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(h) Data presented for bronchus and lung cancer are a subset of data presented for all respiratory and inthrathoracic organs; data presented for cervix cancer are a subset of data presented for all cancers of the female genital organs in this table.

(i) Includes neoplasms of bone and articular cartilage; melanoma and other neoplasms of skin; neoplasms of mesothelial and soft tissue; neoplasms of eye, brain and other parts of central nervous system; neoplasms of thyroid and other endocrine glands; C9 Malignant neoplasms of independent (primary) multiple sites.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.08.15a: Age-standardised hospitalisations for cancer (malignant neoplasms), Qld, WA, SA and NT, 1998–99 to 2012–13[(a)(b)(c)(d)]

	Indigenous separations			Non-Indigenous separations		
	Males	**Females**	**Persons**[(e)]	**Males**	**Females**	**Persons**[(e)]
1998–99	479	537	1,016	55,355	43,770	99,125
1999–00	523	631	1,154	63,451	48,725	112,176
2000–01	514	707	1,221	66,531	50,331	116,862
2001–02	578	561	1,139	67,980	51,759	119,739
2002–03	747	688	1,435	72,251	53,341	125,594
2003–04	747	775	1,522	73,123	53,793	126,916
2004–05	683	737	1,420	73,914	53,238	127,152
2005–06	732	813	1,545	81,559	60,166	141,725
2006–07	853	897	1,750	85,205	61,344	146,549
2007–08	1,000	937	1,937	89,217	63,478	152,695
2008–09	900	903	1,803	91,435	65,096	156,531
2009–10	884	968	1,852	92,868	66,524	159,392
2010–11	928	901	1,829	94,098	66,092	160,191
2011–12	1,044	869	1,913	96,932	67,964	164,898
2012–13	964	961	1,925	95,924	68,253	164,178
Annual change[(f)]	39.1	29.0	68.1	2,940.3	1,740.8	4,681.2
Per cent change[(g)]	109.9	68.9	87.7	69.3	52.9	62.1

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10-AM codes C00–C97, D45, D46, D47.1, D47.3.

(b) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Data are reported for Qld, WA, SA and NT only. Hospitalisation data for these jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(e) Persons data includes sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Note: Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.08.15b: Age-standardised hospitalisation rates, for cancer (malignant neoplasms), Qld, WA, SA and NT, 1998–99 to 2012–13[a][b][c][d]

	Indigenous rate per 1,000[e]			Non-Indigenous rate per 1,000[e]		
	Males	**Females**	**Persons[f]**	**Males**	**Females**	**Persons[f]**
1998–99	8.2	7.4	7.8	18.8	13.0	15.5
1999–00	9.8	10.5	10.2	21.0	14.1	17.1
2000–01	9.0	9.3	9.1	21.4	14.1	17.3
2001–02	9.5	8.1	8.8	21.2	14.1	17.2
2002–03	12.4	9.8	11.0	21.8	14.2	17.6
2003–04	12.5	10.5	11.3	21.4	13.9	17.2
2004–05	10.9	8.2	9.3	21.0	13.4	16.8
2005–06	12.7	9.4	10.7	22.4	14.8	18.2
2006–07	11.8	10.2	10.9	22.7	14.7	18.3
2007–08	14.7	11.3	12.8	23.0	14.8	18.6
2008–09	12.2	9.7	10.8	22.9	14.8	18.5
2009–10	12.0	10.1	10.9	22.7	14.8	18.4
2010–11	12.2	9.3	10.5	22.3	14.3	18.0
2011–12	12.7	8.3	10.2	22.2	14.3	18.0
2012–13	11.8	9.3	10.3	21.3	14.0	17.4
Annual change[g]	0.3	0.04	0.1	0.2	0.1	0.1
Per cent change[h]	37.5	6.6	19.6	10.6	6.1	10.0

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10-AM codes C00–C97, D45, D46, D47.1, D47.3.

(b) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Data are reported for Qld, WA, SA and NT only. Hospitalisation data for these jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(e) Directly age-standardised using the 2001 Australian standard population.

(f) Persons data includes sex not stated and indeterminate.

(g) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(h) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.08.15c: Age-standardised hospitalisation rate ratios and rate differences for cancer (malignant neoplasms), Qld, WA, SA and NT, 1998–99 to 2012–13[a][b][c][d][e]

	Rate ratio[f]			Rate difference[g]		
	Males	**Females**	**Persons[h]**	**Males**	**Females**	**Persons[h]**
1998–99	0.4	0.6	0.5	–10.6	–5.5	–7.6
1999–00	0.5	0.7	0.6	–11.2	–3.6	–6.9
2000–01	0.4	0.7	0.5	–12.4	–4.9	–8.2
2001–02	0.4	0.6	0.5	–11.7	–6.1	–8.5
2002–03	0.6	0.7	0.6	–9.4	–4.4	–6.6
2003–04	0.6	0.8	0.7	–8.9	–3.5	–5.9
2004–05	0.5	0.6	0.6	–10.1	–5.3	–7.5
2005–06	0.6	0.6	0.6	–9.7	–5.4	–7.5
2006–07	0.5	0.7	0.6	–10.9	–4.5	–7.4
2007–08	0.6	0.8	0.7	–8.4	–3.5	–5.8
2008–09	0.5	0.7	0.6	–10.8	–5.1	–7.7
2009–10	0.5	0.7	0.6	–10.7	–4.6	–7.5
2010–11	0.5	0.7	0.6	–10	–5.0	–7.4
2011–12	0.6	0.6	0.6	–9.6	–6	–7.8
2012–13	0.6	0.7	0.6	–9.5	–4.7	–7.1
Annual change[i]	. .	. .	. .	0.1	–0.02	0.01
Per cent change[j]	. .	. .	. .	–13.2	5.1	–2.1

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10-AM codes C00–C97, D45, D46, D47.1, D47.3.

(b) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Data are reported for Qld, WA, SA and NT only. Hospitalisation data for these jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(e) Directly age-standardised using the 2001 Australian standard population.

(f) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(g) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(h) Persons data includes sex not stated and indeterminate.

(i) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(j) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.08.16: Age-standardised hospitalisation rates, rate ratios and rate differences for cancer (malignant neoplasms), NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)(b)(c)(d)]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(e)]	% change over period[(f)]
					Indigenous separations						
Males	1,026	1,131	1,228	1,445	1,396	1,460	1,519	1,703	1,660	80.8	60.2
Females	1,074	1,194	1,290	1,334	1,411	1,530	1,511	1,569	1,675	69.5	49.6
Persons[(g)]	2,100	2,325	2,518	2,779	2,807	2,990	3,030	3,272	3,335	150.3	54.8
					Non-Indigenous separations						
Males	181,160	193,443	201,018	207,504	213,407	222,812	220,646	225,549	224,493	5,403.6	22.9
Females	137,161	145,968	149,180	153,288	156,864	163,178	159,649	162,427	164,063	3,130.2	17.6
Persons[(g)]	318,326	339,411	350,198	360,792	370,271	385,990	380,296	387,978	388,557	8,533.7	20.7
					Indigenous no. per 1,000[(h)]						
Males	9.4	10.8	10.3	12.4	10.8	11.4	11.6	12.1	11.8	0.3	20.1
Females	7.0	8.3	8.8	9.2	8.9	9.3	9.2	9.0	9.5	0.2	21.8
Persons[(g)]	8.0	9.3	9.4	10.6	9.8	10.2	10.2	10.3	10.5	0.2	21.0
					Non-Indigenous no. per 1,000[(h)]						
Males	19.9	20.7	20.9	21.0	21.0	21.3	20.5	20.4	19.7	–0.03	–1.2
Females	13.2	13.7	13.8	13.8	13.8	14.0	13.4	13.3	13.1	–0.03	–1.8
Persons[(g)]	16.1	16.8	16.9	17.0	17.0	17.3	16.6	16.5	16.1	–0.02	–0.9
					Rate ratio[(i)]						
Males	0.5	0.5	0.5	0.6	0.5	0.5	0.6	0.6	0.6	. .	. .
Females	0.5	0.6	0.6	0.7	0.6	0.7	0.7	0.7	0.7	. .	. .
Persons[(g)]	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	. .	. .

(continued)

Table 1.08.16 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences for cancer (malignant neoplasms), NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13(a)(b)(c)(d)

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change(e)	% change over period(f)
					Rate difference(j)						
Males	–10.5	–9.9	–10.6	–8.6	–10.2	–9.9	–8.9	–8.3	–7.9	0.3	–21.7
Females	–6.2	–5.4	–5.0	–4.6	–4.9	–4.7	–4.2	–4.4	–3.6	0.2	–34.5
Persons(g)	–8.2	–7.5	–7.5	–6.4	–7.3	–7.1	–6.4	–6.2	–5.7	0.3	–25.4

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10-AM codes C00–C97, D45, D46, D47.1, D47.3.

(b) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Data are reported for NSW, Vic, Qld, WA, SA and NT only. Hospitalisation data for these jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(e) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(f) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(g) Persons data includes sex not stated and indeterminate.

(h) Directly age-standardised using the 2001 Australian standard population.

(i) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(j) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Data quality issues

Australian Cancer database

Each state and territory cancer registry draws on a number of sources of data to collate information on cancer notifications. Hospital admissions and deaths data allow for the collection and reporting of Indigenous status, whereas there is currently no Indigenous identifier on pathology forms, and inconsistent reporting through referring GPs, specialists and surgeons. Indigenous status is recorded for radiation oncology services in New South Wales, Queensland and the Northern Territory only.

Indigenous identification is incomplete for all cancer registries; however Western Australia, Queensland, New South Wales and the Northern Territory have advised the AIHW that their data are of sufficient quality to report on.

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/393621>.

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013a). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Australian Health Survey

The Australian Health Survey (AHS) combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) together with 2 new elements: a National Nutrition and Physical Activity Survey (NNPAS) and a National Health Measures Survey (NHMS).

For more information see:

- National Health Survey <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4363.0.55.001Main+Features12011-13?OpenDocument>.
- National Aboriginal and Torres Strait Islander Health Survey <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4715.0/>.
- National Nutrition and Physical Activity Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.007~2011-12~Main%20Features~About%20the%20National%20Nutrition%20and%20Physical%20Activity%20Survey~731>.
- National Health Measures Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.005Chapter1102011-12>.

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as

Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013b). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013c).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the 2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see
<http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

Bettering the Evaluation and Care of Health survey

The Bettering the Evaluation and Care of Health (BEACH) survey collects information about encounters with general practitioners (GPs), including: GP and patient characteristics; patient reasons for the visit; problems managed; and treatments provided. The survey has been conducted annually since April 1998. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. Each participating GP provides details of 100 consecutive patient encounters. Although the questionnaire contains an Indigenous identifier, it is unknown whether all GPs ask their patients this question.

In a sub-study of approximately 9,000 patients, Supplementary Analysis of Nominated Data, it was found that if the question on Indigenous status was asked within the context of a series of questions about origin and cultural background, 1.3% identified as Aboriginal and Torres Strait Islander. This is twice the rate routinely recorded in BEACH, indicating that BEACH may under-estimate the number of encounters with Indigenous Australians.

Under the National Indigenous Reform Agreement, governments have agreed to the implementation of *National best practice guidelines for collecting Indigenous status in health data sets* (AIHW 2010a), which include recommended strategies for local service providers such as GPs and practice nurses to improve Indigenous identification data. General practices and Aboriginal and Torres Strait Islander health services that meet accreditation requirements are eligible for financial incentives when they do the following activities: sign on to the Practice Incentives Program—Indigenous Health Incentive (PIP IHI); obtain consent from their Indigenous clients to be registered for chronic disease management through the IHI; and provide a targeted level of care for each registered patient. Participation in the PIP IHI also provides eligibility for other initiatives under Medicare.

A Voluntary Indigenous Identifier was introduced into the Medicare database from November 2002. By July 2014, 415,730 people had identified as Aboriginal, Torres Strait Islander, or both.

National Hospital Morbidity Database

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010b). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of

Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander
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2014 report

Measure 9 of 68 **Detailed analyses**

1.09 Diabetes

This measure reports on the prevalence of diabetes for Aboriginal and Torres Strait Islander people expressed as a rate by age group, age-standardised rate and ratio. It also includes information on deaths, hospitalisations and general practitioner encounters.

Introduction

This is no. 9 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- Australian Aboriginal and Torres Strait Islander Health Survey
- Bettering the Evaluation and Care of Health survey
- National Hospital Morbidity Database
- National Mortality Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Age-standardised rates and ratios have been used as a measure of morbidity in the Indigenous population relative to non-Indigenous Australians. Ratios of this type illustrate differences between the rates of morbidity among Indigenous Australians and those of non-Indigenous Australians, taking into account differences in age distributions.

Haemoglobin A1c (HbA1c) tests act as an indicator of time-averaged blood glucose levels (in the previous 2–3 months). They are used as the best marker of long–term diabetes control (Jones et al. 2011).

A fasting plasma glucose test is a blood test taken after several hours of fasting. It is used to measure blood glucose levels at a singular point in time and helps to diagnose diabetes or pre-diabetes.

For more information related to diabetes, see measure 1.10 (kidney disease). See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Prevalence of diabetes, see tables 1.09.1–2
- Health actions related to diabetes, see tables 1.09.3–4
- Socioeconomic and health characteristics of adults with diabetes, see Table 1.09.5
- General practitioner management, see Table 1.09.6
- Hospitalisations for diabetes, see tables 1.09.7–11
- Deaths related to diabetes, refer to tables 1.23.1 and 1.23.24.

Prevalence of diabetes

Current period

In 2012–13:

- Among Indigenous Australian adults tested for diabetes using a fasting plasma glucose test, 11% were found to have diabetes. This comprised 9.6% of Indigenous adults with known diabetes and 1.5% with diabetes newly diagnosed by the blood test results (ABS 4727.0.55.003: Table 4.3).

In 2012–13, after adjusting for age:

- As determined by the fasting plasma glucose test, the prevalence of diabetes in Indigenous Australians aged 18 and over was 3 times as high as for non-Indigenous Australians (ABS 4727.0.55.003: Table 3.3).

- The gap in the prevalence of diabetes between Indigenous and non-Indigenous Australians increased with age, particularly from age 35 onwards. Among those aged 55 and over, the prevalence was 35% among Indigenous Australians compared with 12% among non-Indigenous Australians, a gap of 26 percentage points (Table 1.09.2, ABS 4727.0.55.003: no 1.3).

General practitioner encounters

Current period

In the period April 2008–March 2009 to April 2012–March 2013:

- Of the 11,689 problems managed in GP encounters with Indigenous patients recorded in the BEACH survey, 5% were diabetes. Among other patients, this proportion was 2%.
- After adjusting for differences in the age structure of the 2 populations, diabetes was managed at a rate of 108 per 1,000 GP encounters among Indigenous patients compared with 38 per 1,000 among other patients—this was 2.8 times as high, representing a significant lead of 70 management occasions per 1,000 encounters.
- The difference between Indigenous and other patients in rates of diabetes management was largely due to the management rate of non-insulin dependent (Type 2) diabetes (103 per 1,000 compared with 35 per 1,000)—this was a significant lead of 68 per 1,000 (Table 1.09.6).

Hospitalisations for diabetes

Current period

In the 2 years 2011–12 to 2012–13:

- After adjusting for age, the rate of hospitalisations for diabetes was 6.4 per 1,000 among Indigenous Australians compared with 1.5 per 1,000 among non-Indigenous Australians—a rate difference of 5 per 1,000 (Table 1.09.7).
- Hospitalisation rates for diabetes among Indigenous Australians generally increased with remoteness, from 4 per 1,000 among those living in *Major cities* to 11 per 1,000 in *Remote* areas. In contrast, the rate among non-Indigenous Australians was similar between remoteness categories (about 1–2 per 1,000) (Table 1.09.9, Figure 1.09.1).
- A total of 6,869 hospitalisations among Indigenous Australians were for diabetes, 61% were for Type 2 diabetes, 17% for Type 1 diabetes and 21% for diabetes during pregnancy (Table 1.09.10).

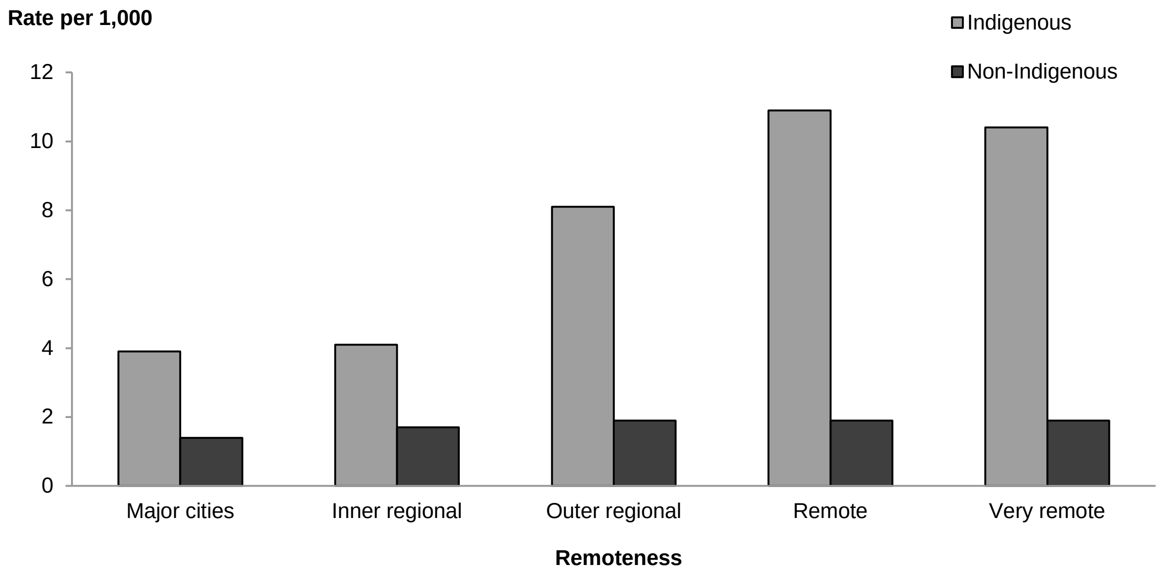
Deaths related to diabetes

Current period

- During the period 2008–12, 8% of deaths of Indigenous Australians were due to diabetes and death rates from diabetes were 6 times the non-Indigenous rate (see Table 1.23.1).
- Diabetes was the second leading cause of the gap in death rates, behind circulatory disease (see Table 1.23.1).

Trend analysis

- There has been no improvement in death rates from diabetes for Indigenous Australians in the last 15 years (see Table 1.23.22).



Source: Table 1.09.9.

Figure 1.09.1: Age-standardised hospitalisation rates for diabetes by Indigenous status and remoteness, Australia, 2011–12 to 2012–13

Table 1.09.1: Indigenous persons (18 and over) reporting diabetes/high sugar levels, by selected household and health risk factors, 2012–13

	Has diabetes/high blood sugar[(a)(b)]	Does not have diabetes/high blood sugar	Total	Has diabetes/high blood sugar[(a)(b)]	Does not have diabetes/high blood sugar	Total
	Per cent			Number		
Equivalised household income						
1st quintile (lowest)	17.8	82.2	100.0	22,119	102,399	124,518
4th/5th quintile (highest)	9.1	90.9	100.0	4,711	46,966	51,676
Ratio lowest/highest	1.9	0.9	1.0	4.7	2.2	2.4
Total number[(c)]	**14.0**	**86.0**	**100.0**	**41,009**	**251,738**	**292,747**
Financial stress - whether household could raise $2,000 in an emergency						
Yes	10.7	89.3	100.0	16,959	141,316	158,276
No	16.1	83.9	100.0	29,636	155,006	184,641
Ratio yes/no	0.7	1.1	1.0	0.6	0.9	0.9
Total number[(c)]	**13.6**	**86.4**	**100.0**	**46,595**	**296,322**	**342,917**
Household had day/s without money for basic living expenses in last 12 months						
Yes	14.8	85.2	100.0	21,723	125,476	147,199
No	13.3	86.7	100.0	28,954	187,955	216,909
Ratio yes/no	1.1	1.0	1.0	0.8	0.7	0.7
Total number[(d)]	**13.9**	**86.1**	**100.0**	**50,678**	**313,431**	**364,108**
Housing tenure type						
Owner	13.4	86.6	100.0	14,727	95,488	110,215
Renter[(e)]	14.2	85.8	100.0	35,913	216,634	252,547
Ratio renter/owner	1.1	1.0	1.0	2.4	2.3	2.3
Total number[(f)]	**13.9**	**86.1**	**100.0**	**50,678**	**313,500**	**364,177**
Lives in overcrowded household[(g)]						
Yes	11.0	89.0	100.0	7,824	63,557	71,380
No	14.6	85.4	100.0	42,854	249,874	292,728
Ratio yes/no	0.7	1.0	1.0	0.2	0.3	0.2
Total number[(d)]	**13.9**	**86.1**	**100.0**	**50,678**	**313,431**	**364,108**
Alcohol consumption						
Abstained from alcohol in last 12 months[(h)]	22.8	77.2	100.0	18,995	64,189	83,184
Short-term/single occasion risk[(i)]						
Yes	9.5	90.5	100.0	19,880	189,100	208,979
No	15.5	84.5	100.0	10,428	56,708	67,136
Ratio yes/no	0.6	1.1	1.0	1.9	3.3	3.1
Physical activity[(j)]						
Met guidelines[(k)]	10.1	89.9	100.0	11,831	105,294	117,125
Did not meet guidelines[(l)]	14.3	85.7	100.0	23,745	142,166	165,910

(continued)

Table 1.09.1 (continued): Indigenous persons (18 and over) reporting diabetes/high sugar levels, by selected household and health risk factors, 2012–13

	Has diabetes/high blood sugar[(a)(b)]	Does not have diabetes/high blood sugar	Total	Has diabetes/high blood sugar[(a)(b)]	Does not have diabetes/high blood sugar	Total
	Per cent			Number		
Ratio did not meet/met guidelines	1.4	1.0	1.0	2.0	1.4	1.4
Total number	**12.6**	**87.4**	**100.0**	**35,575**	**247,459**	**283,035**
Disability status[(m)]						
Has profound, severe or moderate core activity limitation	26.9	73.1	100.0	13,167	35,719	48,886
Has schooling/employment restriction only[(n)]	14.8	85.2	100.0	5,915	34,135	40,050
Has unspecified limitation or restriction	18.9	81.1	100.0	15,592	66,733	82,325
Total with disability/long-term health condition	**20.2**	**79.8**	**100.0**	**34,673**	**136,588**	**171,261**
No disability/long-term health condition	8.2	91.8	100.0	16,040	178,567	194,607
Ratio disability/no disability	2.5	0.9	1.0	2.2	0.8	0.9
Psychological distress (Kessler 5)[(o)]						
Low/moderate	12.6	87.4	100.0	31,753	220,477	252,230
High/very high	16.9	83.1	100.0	18,453	90,681	109,134
Ratio high, very high/low, moderate	1.3	1.0	1.0	0.6	0.4	0.4
Total number[(p)]	**13.9**	**86.1**	**100.0**	**50,206**	**311,158**	**361,364**
Stressors experienced in last 12 months[(q)]						
No stressors	13.6	86.4	100.0	12,468	78,876	91,344
Experienced one or more stressor	13.9	86.1	100.0	38,119	235,270	273,389
Ratio one or more/no stressors	1.0	1.0	1.0	3.1	3.0	3.0
Total number[(l)]	**13.9**	**86.1**	**100.0**	**50,653**	**314,776**	**365,429**
Long term health conditions[(r)]						
One	5.1	94.9	100.0	3,283	60,964	64,247
Two	10.3	89.7	100.0	5,905	51,189	57,094
Three or more	22.8	77.2	100.0	41,210	139,367	180,577
Ratio three or more/one condition	4.5	0.8	1.0	12.6	2.3	2.8
Respiratory disease[(s)]						
Yes	16.3	83.7	100.0	22,449	114,957	137,406
No	12.4	87.6	100.0	28,264	200,198	228,462
Ratio yes/no	1.3	1.0	1.0	0.8	0.6	0.6
Has diabetes/HSL related eye/sight problem						
Yes	. .	. .	. .	11,799	. .	. .
No	. .	. .	. .	21,401	. .	. .
Ratio yes/no	. .	. .	. .	0.6	. .	. .
Total number[(l)]	**. .**	**. .**	**. .**	**41,084**	**. .**	**. .**
Total persons aged 18+	**13.9**	**86.1**	**100.0**	**50,713**	**315,155**	**365,868**

(continued)

Table 1.09.1 (continued): Indigenous persons (18 and over) reporting diabetes/high sugar levels, by selected household and health risk factors, 2012–13

(a) Self-reported data consisting of persons reporting diabetes which has lasted, or is expected to last, for six months or more. Includes Type 1 and Type 2 diabetes, type unknown, and persons who reported they had diabetes but that it was not current at the time of interview.

(b) Self-reported data consisting of persons reporting high sugar levels in blood/urine. Includes persons who reported they had high sugar levels that were current at time of interview but had not, or were not expected to last, for six months or more.

(c) Excludes ‘not stated’ and ‘not known’.

(d) Excludes ‘not stated’.

(e) Includes ‘rent free’.

(f) Total includes ‘Other’ and ‘Life Tenure scheme’.

(g) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(h) Abstainer includes those who have never consumed alcohol.

(i) Includes people who drank alcohol. Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(j) Physical activity data collected from persons living in non-remote areas only.

(k) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(l) Includes ‘don’t know’.

(m) Self-reported data consisting of persons who reported having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities.

(n) Only current difficulties with education and/or employment were collected. Respondents aged 65 and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(o) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25.

(p) Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(q) Stressors experienced by self, family or friends.

(r) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(s) Self reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitis, and other diseases of the respiratory system.

Note: Percentages add within rows. Estimates have been rounded and discrepancies may occur between sums of the component items and totals. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 NATSIHS component).

Table 1.09.2: Persons (18 and over) with diabetes (HbA1c), by remoteness, Indigenous status, age, sex and state/territory, 2012–13[(a)(b)]

	Remoteness											Overall population distribution	
	Non-remote			Remote			Australia						
	Indigenous	Non-Indigenous	Rate ratio[(c)]	Indigenous	Non-Indigenous	Rate ratio[(c)]	Indigenous	Non-Indigenous	Rate ratio[(c)]	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	Rate[(d)]									Number		Per cent[(e)]	
Age[(f)]													
18–24	0.0	. .	. .	2.0†	. .	. .	0.4†	0.2‡	. .	352†	4,824‡	23.1	12.9
25–34	2.1‡	. .	. .	10.7	. .	. .	4.1†	0.8†	. .	3,583†	24,726†	23.7	18.8
35–44	7.5†	. .	. .	21.6	. .	. .	10.8	2.7	. .	8,382	84,739	21.3	18.4
45–54	16.1	. .	. .	36.9	. .	. .	20.7	5.3	. .	12,431	157,732	16.4	17.7
55+	34.9	. .	. .	48.1	. .	. .	37.9	11.6	. .	21,452	635,253	15.5	32.2
Sex													
Males	14.8	. .	. .	25.1	. .	. .	17.2	6.4	2.7	20,302	552,685	48.9	49.3
Females	15.3	. .	. .	29.8	. .	. .	18.6	3.9	4.8	25,899	354,589	51.1	50.7
State/territory													
NSW	15.7	. .	. .	28.2	. .	. .	16.3	5.4	3.0	14,474	320,326	31.1	32.5
Vic	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Qld	10.9†	. .	. .	26.3	. .	. .	15.3	4.8	3.2	10,061	166,899	27.5	19.8
SA	18.5†	. .	. .	23.5†	. .	. .	20.0	6.2	3.2	2,454†	85,389	5.7	7.4
WA	22.0	. .	. .	27.6	. .	. .	24.7	5.1	4.8	9,378	91,656	13.0	10.3
Tas	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
NT	19.6†	. .	. .	29.2	. .	. .	26.8	5.7	4.7	7,366	6,028	10.8	0.7
ACT	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
All	**15.1**	**5.1**	**3.0**	**27.5**	**5.0†**	**5.5**	**17.9**	**5.1**	**3.5**	**12.6**	**5.4**	**100.0**	**100.0**
Total number	**28,725**	**899,166**	**. .**	**17,476**	**8,108†**	**. .**	**46,201**	**907,274**	**. .**	**46,201**	**907,274**	**365,868**	**16,925,902**

(continued)

Table 1.09.2 (continued): Persons (18 and over) with diabetes (HbA1c), by remoteness, Indigenous status, age, sex and state/territory, 2012–13(a)(b)

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Diabetes prevalence is derived using a combination of biomarker test results and self-reported information on diabetes diagnosis and medication use. Total Includes test results not reported. Includes pregnant women.

(b) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(c) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(d) Persons with diabetes (HbA1c) per 100 persons.

(e) Distribution of total population. Excludes persons aged 0–17.

(f) Data for specific age groups are not age-standardised, only the totals.

Note: Data exclude not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.09.3: Health actions, Indigenous persons reporting diabetes/high blood sugar levels, by age group, sex and remoteness, 2012–13

	Age group		Sex		Remoteness		
	0–44	**45+**	**Male**	**Female**	**Non-remote**	**Remote**	**Australia**
Tested for diabetes/high sugar levels (HSL) in the last 3 years							
Yes	142,238	85,341	97,697	129,882	178,704	48,875	227,579
No[(a)]	379,442	31,303	220,261	190,484	323,586	87,159	410,745
Total persons	*521,680*	*116,644*	*317,958*	*320,366*	*502,291*	*136,033*	*638,324*
Actions taken to manage diabetes/HSL in last 2 weeks							
Currently using insulin	3,453	10,972	5,580	8,845	10,529	3,896	14,425
Taken medicine/tablets[(b)]	6,873	24,005	12,712	18,166	20,721	10,157	30,878
Taken vitamin/mineral/natural/herbal supplements	2,121†	6,237	2,969	5,388	6,267	2,091	8,358
Lifestyle action: diet/weight loss/exercise	11,488	27,106	14,753	23,841	27,512	11,081	38,594
Other action taken	579†	2,281	1,061†	1,799	2,142	718†	2,860
No action taken[(c)]	1,644†	1,724†	1,885†	1,483†	2,462†	906†	3,368
Total number persons with current diabetes/HSL[(d)(e)]	*14,320*	*33,742*	*19,293*	*28,769*	*33,810*	*14,252*	*48,062*
Feet checked in last 12 months[(f)]							
Yes	4,680	18,306	8,947	14,039	22,986	n.a.	22,986
No[(g)]	4,679	6,145	4,448	6,376	10,824	n.a.	10,824
Total number persons with current diabetes/HSL in non-remote areas[(d)]	*9,358*	*24,451*	*13,395*	*20,415*	*33,810*	*n.a.*	*33,810*
Blood glucose checked in last 12 months[(f)]							
Yes	8,418	23,777	12,664	19,531	32,195	n.a.	32,195
No[(g)]	941†	674†	731†	884†	1,615†	n.a.	1,615†
Total number persons with current diabetes/HSL in non-remote areas[(d)]	*9,358*	*24,451*	*13,395*	*20,415*	*33,810*	*n.a.*	*33,810*

(continued)

Table 1.09.3 (continued): Health actions, Indigenous persons reporting diabetes/high blood sugar levels, by age group, sex and remoteness, 2012–13

	Age group		Sex		Remoteness		
	0–44	**45+**	**Male**	**Female**	**Non-remote**	**Remote**	**Australia**
Whether had HbA1C test in last 12 months[(f)]							
Yes	5,663	17,568	8,486	14,745	23,231	n.a.	23,231
No	2,801†	4,165	3,355†	3,611	6,966	n.a.	6,966
Don't know	895†	2,718	1,554†	2,059	3,613	n.a.	3,613
Total number persons with current diabetes/HSL in non-remote areas[(d)]	*9,358*	*24,451*	*13,395*	*20,415*	*33,810*	*n.a.*	*33,810*
Total number persons with diabetes/HSL[(h)]	**15,908**	**36,248**	**21,292**	**30,863**	**36,895**	**15,260**	**52,155**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Includes persons who did not know if they'd been screened for diabetes or high sugar levels in the last three years.

(b) Excludes insulin, vitamins and herbal medicines.

(c) Includes not known if action taken.

(d) Excludes persons who stated their diabetes or high sugar levels was not current and those with gestational diabetes.

(e) Multiple responses allowed. Sum of components may be larger than total.

(f) Non-remote only.

(g) Includes don't know.

(h) Includes persons who reported they had diabetes but that it was not current at the time of interview.

Notes

1. Self-reported data consisting of persons reporting diabetes which has lasted, or is expected to last, for six months or more. Includes Type 1 and Type 2 diabetes, type unknown, and persons who reported they had diabetes but that it was not current at the time of interview.
2. Self-reported data consisting of persons reporting high sugar levels in blood/urine. Includes persons who reported they had high sugar levels that were current at time of interview but had not, or were not expected to last, for six months or more.
3. Percentages add within columns. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 NATSIHS component).

Table 1.09.4: Health actions, Indigenous persons reporting diabetes/high blood sugar levels (HSL), by age group, sex and remoteness, 2012–13

	Age group		Sex		Remoteness		
	0–44	**45+**	**Male**	**Female**	**Non-remote**	**Remote**	**Total**
				Per cent			
Tested for diabetes/high sugar levels in the last 3 years							
Yes	27.3	73.2	30.7	40.5	35.6	35.9	35.7
No[(a)]	72.7	26.8	69.3	59.5	64.4	64.1	64.3
Total persons	**521,680**	**116,644**	**317,958**	**320,366**	**502,291**	**136,033**	**638,324**
Actions taken to manage diabetes/HSL in last 2 weeks							
Currently using insulin	24.1	32.5	28.9	30.7	31.1	27.3	30.0
Taken medicine/tablets[(b)]	48.0	71.1	65.9	63.1	61.3	71.3	64.2
Taken vitamin/mineral/natural/herbal supplements	14.8	18.5	15.4	18.7	18.5	14.7	17.4
Lifestyle action: diet/weight loss/exercise	80.2	80.3	76.5	82.9	81.4	77.8	80.3
Other action taken	4.0†	6.8	5.5†	6.3	6.3	5.0†	6.0
No action taken[(c)]	11.5†	5.1†	9.8†	5.2†	7.3	6.4†	7.0
Total number persons with current diabetes/HSL[(d)(e)]	**14,320**	**33,742**	**19,293**	**28,769**	**33,810**	**14,252**	**48,062**
Feet checked in last 12 months[(f)]							
Yes	50.0	74.9	66.8	68.8	68.0	n.a.	68.0
No[(g)]	50.0	25.1	33.2	31.2	32.0	n.a.	32.0
Total number persons with current diabetes/HSL in non-remote areas[(d)]	**9,358**	**24,451**	**13,395**	**20,415**	**33,810**	**n.a.**	**33,810**
Blood glucose checked in last 12 months[(f)]							
Yes	90.0	97.2	94.5	95.7	95.2	n.a.	95.2
No[(g)]	10.1†	2.8†	5.5†	4.3†	4.8†	n.a.	4.8†
Total number persons with current diabetes/HSL in non-remote areas[(d)]	**9,358**	**24,451**	**13,395**	**20,415**	**33,810**	**n.a.**	**33,810**

(continued)

Table 1.09.4 (continued): Health actions, Indigenous persons reporting diabetes/high blood sugar levels (HSL), by age group, sex and remoteness, 2012–13

	Age group		Sex		Remoteness		
	0–44	45+	Male	Female	Non-remote	Remote	Total
				Per cent			
Whether had HbA1C test in last 12 months[f]							
Yes	60.5	71.8	63.4	72.2	68.7	n.a.	68.7
No	29.9	17.0	25.0	17.7	20.6	n.a.	20.6
Don’t know	9.6†	11.1	11.6†	10.1	10.7	n.a.	10.7
Total number persons with current diabetes/HSL in non-remote areas[d]	**9,358**	**24,451**	**13,395**	**20,415**	**33,810**	**n.a.**	**33,810**
Total number persons with diabetes/HSL[h]	**15,908**	**36,248**	**21,292**	**30,863**	**36,895**	**15,260**	**52,155**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Includes persons who did not know if they’d been screened for diabetes or high sugar levels in the last three years.

(b) Excludes insulin, vitamins and herbal medicines.

(c) Includes not known if action taken.

(d) Excludes persons who stated their diabetes or high sugar levels was not current and those with gestational diabetes.

(e) Multiple responses allowed. Sum of components may be larger than total.

(f) Non-remote only.

(g) Includes don’t know.

(h) Includes persons who reported they had diabetes but that it was not current at the time of interview.

Notes

1. Self-reported data consisting of persons reporting diabetes which has lasted, or is expected to last, for six months or more. Includes Type 1 and Type 2 diabetes, type unknown, and persons who reported they had diabetes but that it was not current at the time of interview.
2. Self-reported data consisting of persons reporting high sugar levels in blood/urine. Includes persons who reported they had high sugar levels that were current at time of interview but had not, or were not expected to last, for six months or more.
3. Percentages add within columns. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 NATSIHS component).

Table 1.09.5: Indigenous persons (18 and over) reporting diabetes/high sugar levels, by selected socioeconomic and health characteristics, 2012–13

	Has diabetes/ high blood sugar levels[(a)(b)]		Does not have diabetes/high blood sugar levels		Total number
	Number	**Per cent**	**Number**	**Per cent**	
SEIFA[(c)]					
1st quintile (most disadvantaged)	31,323	16.2	162,027	83.8	193,350
5th quintile (least disadvantaged)	1338†	8.5†	14,437	91.5	15,774
Ratio most/least disadvantaged	23.4	1.9*	11.2	0.9	12.3
Labour force status					
Employed	16,834	9.6	159,329	90.4	176,163
Unemployed	2,690	6.5*	38,613	93.5	41,304
Not in the labour force	31,405	21.2*	116,996	78.8	148,401
Ratio unemployed/employed	0.2	0.7*	0.2	1.0	0.2
Has non-school qualification[(d)]					
Yes	18,934	11.8	141,727	88.2	160,662
No	31,995	15.6	173,211	84.4	205,206
Ratio no/yes	1.7	1.3*	1.2	1.0	1.3
Highest year of school completed					
Year 12	6,620	6.7	92,368	93.3	98,988
Year 9 or below[(e)]	24,407	23.4	80,053	76.6	104,459
Ratio Year 9 or below/Year 12	3.7	3.5*	0.9	0.8	1.1
Smoker status					
Current smoker[(f)]	19,003	11.1	151,585	88.9	170,588
Non-smoker[(g)]	31,926	16.3	163,353	83.7	195,280
Ratio smoker/non-smoker	0.6	0.7*	0.9	1.1	0.9
Adequate daily vegetable intake[(h)]					
Yes	2,845	16.9	14,014	83.1	16,859
No	48,084	13.8	300,924	86.2	349,009
Ratio no/yes	16.9	0.8*	21.5	1.0	20.7
Adequate daily fruit intake[(i)]					
Yes	25,988	17.2	124,830	82.8	150,818
No	24,942	11.6	190,109	88.4	215,050
Ratio no/yes	1.0	0.7*	1.5	1.1	1.4
Obese[(j)]					
Yes	24,372	19.7	99,262	80.3	123,634
No	17,857	9.5	169,465	90.5	187,322
Ratio yes/no	1.4	2.1*	0.6	0.9	0.7
Total[(k)]	**42,229**	**13.6**	**268,727**	**86.4**	**310,956**

(continued)

Table 1.09.5 (continued): Indigenous persons (18 and over) reporting diabetes/high sugar levels, by selected socioeconomic and health characteristics, 2012–13

	Has diabetes/ high blood sugar levels[(a)]		Does not have diabetes/high blood sugar levels		Total number
	Number	**Per cent**	**Number**	**Per cent**	
Self-assessed health status					
Excellent/very good/good	25,931	9.6	244,913	90.4	270,845
Fair/poor	24,998	26.3	70,025	73.7	95,023
Ratio fair, poor/excellent, very good, good	1.0	2.7*	0.3	0.8	0.4
Heart/circulatory problems[(l)]					
Yes	22,471	31.6	48,591	68.4	71,062
No	28,458	9.7	266,348	90.3	294,806
Ratio yes/no	0.8	3.3*	0.2	0.8	0.2
Kidney disease[(m)]					
Yes	4,977	50.8	4,821	49.2	9,798
No	45,953	12.9	310,117	87.1	356,070
Ratio yes/no	0.1	3.9*	0.0	0.6	0.0
Measured high blood pressure[(n)]					
Yes	13,853	21.6	50,383	78.4	64,236
No	29,081	11.6	221,972	88.4	251,053
Ratio yes/no	0.5	1.9*	0.2	0.9	0.3
Total[(o)]	**42,933**	**13.6**	**272,355**	**86.4**	**315,288**
Total persons aged 18+	**50,930**	**13.9**	**314,938**	**86.1**	**365,868**

* Represents statistically significant differences at the p < 0.05 level. Rate ratios tested for 'Has diabetes/high blood sugar levels' column only. For labour force status, 'Not in the labour force' was also tested against 'Employed', using 'Employed' as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Self-reported data consisting of persons reporting diabetes which has lasted, or is expected to last, for six months or more. Includes Type 1 and Type 2 diabetes, type unknown, and persons who reported they had diabetes but that it was not current at the time of interview.

(b) Self-reported data consisting of persons reporting high sugar levels in blood/urine. Includes persons who reported they had high sugar levels that were current at time of interview but had not, or were not expected to last, for six months or more.

(c) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(d) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED) (includes eg. Bachelor degree or higher, diploma, advanced diploma, certificate).

(e) Year 9 or below includes never attended school.

(f) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(g) Includes ex-smoker and those who have never smoked.

(h) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 and over, with the exception of 18–49 year old males who eat 6 serves.

(i) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 and over.

(j) Body Mass Index greater than 30.0 for people aged 18 years and over. For information on the calculation of BMI scores for people aged 15–17, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001) or AATSIHS Updated Results 2012-13 (4727.0.55.006).

(k) Total excludes persons for whom physical measurements were not taken.

(l) Self-reported data consisting of persons reporting they have a current heart or circulatory condition which has lasted, or is likely to last, for 6 months or more.

(m) Self-reported data consisting of persons reporting kidney disease which has lasted or is expected to last, for six months or more.

(n) Measured blood pressure data collected for persons 18 years and over. High blood pressure is a measurement of 140/90 mmHg or higher.

(o) Total excludes 'measurement not taken' and valid reading not measured'.

Note: Percentages add within rows. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (2012–13 Core component).

Table 1.09.6: Diabetes problems[a] managed by general practitioners, by Indigenous status of patient, BEACH years April 2008–March 2009 to April 2012–March 2013[b][c]

	Number		Per cent of total problems		Crude rate (no. per 1,000 encounters)			Age-standardised rate (no. per 1,000 encounters)[d]							
Problem managed	**Indig.**	**Other[e]**	**Indig.**	**Other[e]**	**Indig.**	**95% LCL[f]**	**95% UCL[g]**	**Indig.**	**95% LCL[f]**	**95% UCL[g]**	**Other[e]**	**95% LCL[f]**	**95% UCL[g]**	**Rate ratio[h]**	**Rate difference[i]**
Diabetes: non-insulin-dependent (T90)	567	17,214	4.9	2.3	76.8	65.0	88.7	103.0*	88.4*	117.5*	35.3*	34.4*	36.2*	2.9*	67.6*
Diabetes: insulin-dependent (T89)	31	1,205	0.3	0.2	4.2	2.4	6.0	4.3	2.2	6.5	2.5	2.3	2.7	1.8	1.9
Total diabetes: non-gestational	*598*	*18,419*	*5.1*	*2.4*	*81.0*	*69.0*	*93.0*	*107.3**	*92.5**	*122.1**	*37.8**	*36.9**	*38.8**	*2.8**	*69.5**
Gestational diabetes (W85)[i]	8	134	0.1	0.0	1.1	0.3	1.9	0.8	0.2	1.3	0.3	0.2	0.3	2.7	0.5
All diabetes	*606*	*18,553*	*5.2*	*2.4*	*82.1*	*70.1*	*94.1*	*108.1**	*93.3**	*122.8**	*38.1**	*37.2**	*39.0**	*2.8**	*70.0**
Total problems	**11,689**	**764,696**	**100.0**	**100.0**	**1583.9**	**1534.0**	**1633.8**	**1685.3***	**1627.0***	**1743.5***	**1576.7***	**1567.6***	**1585.8***	**1.1***	**108.5***

*Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Classified according to ICPC-2 codes (Classification Committee of the World Organization of Family Doctors (WICC) 1998. ICPC-2 codes T90, T89, W85.

(b) Data from five combined BEACH years April 2008–March 2009 to April 2012–March 2013 inclusive.

(c) Data for Indigenous and other Australians have not been weighted.

(d) Directly age-standardised rate (no. per 1,000 encounters) using total BEACH encounters in the period as the standard. Figures do not add to 100 as more than one problem can be managed at each encounter.

(e) 'Other' includes encounters with non-Indigenous patients and those with patients for whom Indigenous status was not stated.

(f) LCL = lower confidence interval.

(g) UCL = upper confidence interval.

(h) Rate ratio Indigenous : Other.

(i) Rate difference Indigenous rate minus Other rate.

Source: Analyses conducted by the Family Medicine Research Centre, University of Sydney, of BEACH data collected by that Centre.

Table 1.09.7: Age-specific hospitalisation rates for a principal diagnosis of diabetes mellitus, by Indigenous status and sex, Australia, 2011–12 to 2012–13(a)

									All ages(b)	
	0–4	**5–14**	**15–24**	**25–34**	**35–44**	**45–54**	**55–64**	**65+**	**Crude**	**Age std.(c)**
Males										
Indigenous	0.2	0.7	1.4	2.9	5.7	11.0	15.6	16.1	3.9	6.6
Non-Indigenous	0.3	0.8	1.0	0.7	0.9	1.7	3.1	6.1	1.9	1.8
Rate ratio(d)	0.8	0.9	1.5	4.1	6.1	6.4	5.1	2.6	2.1	3.6
Rate difference(e)	–0.1	–0.1	0.4	2.2	4.8	9.3	12.6	10.0	2.0	4.8
Females										
Indigenous	0.1	1.0	2.0	2.9	5.3	8.8	15.6	15.4	4.1	6.3
Non-Indigenous	0.3	1.0	1.3	0.7	0.8	1.0	1.4	3.5	1.4	1.3
Rate ratio(d)	0.3	0.9	1.5	4.1	6.4	9.0	10.9	4.4	3.0	4.9
Rate difference(e)	–0.2	–0.1	0.6	2.2	4.4	7.9	14.2	11.9	2.7	5.0
Persons(f)										
Indigenous	0.2	0.8	1.7	2.9	5.5	9.9	15.6	15.7	4.0	6.4
Non-Indigenous	0.3	0.9	1.2	0.7	0.9	1.3	2.2	4.7	1.6	1.5
Rate ratio(d)	0.5	0.9	1.5	4.1	6.2	7.3	7.0	3.3	2.4	4.2
Rate difference(e)	–0.1	–0.1	0.5	2.2	4.6	8.5	13.4	11.0	2.4	4.9

(a) Data includes public and private hospitals in all jurisdictions.

(b) All age data includes age not stated.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes E10-E14.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.09.8: Hospitalisations for principal diagnosis of diabetes mellitus, by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b][c][d]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Ratio[f]	Difference[g]
NSW								
Males	617	2.9	4.5	11,743	1.7	1.6	2.8	2.9
Females	592	2.8	4.1	8,361	1.2	1.1	3.8	3.0
Persons[h]	1,209	2.8	4.3	20,104	1.4	1.3	3.3	3.0
Vic								
Males	135	2.8	4.7	11,056	2.0	1.9	2.4	2.7
Females	137	2.8	3.8	8,632	1.5	1.4	2.7	2.4
Persons[h]	272	2.8	4.2	19,688	1.8	1.7	2.5	2.5
Qld								
Males	842	4.4	8.2	8,958	2.1	2.0	4.1	6.2
Females	824	4.2	7.1	6,488	1.5	1.4	5.0	5.7
Persons[h]	1,666	4.3	7.6	15,446	1.8	1.7	4.5	5.9
WA								
Males	486	5.4	10.0	4,345	1.8	1.9	5.4	8.1
Females	528	5.8	9.2	3,022	1.3	1.3	7.3	7.9
Persons[h]	1,014	5.6	9.5	7,367	1.6	1.5	6.2	8.0
SA								
Males	178	4.7	8.4	3,629	2.3	2.0	4.1	6.3
Females	154	4.0	6.4	2,550	1.6	1.4	4.6	5.0
Persons[h]	332	4.3	7.3	6,179	1.9	1.7	4.3	5.6
Tas								
Males	n.p.	1.8	2.1	n.p.	2.0	1.8	1.2	0.3
Females	n.p.	0.9	1.5	n.p.	1.6	1.4	1.04	0.1
Persons[h]	n.p.	1.4	1.8	n.p.	1.8	1.6	1.1	0.2
NT								
Males	n.p.	5.1	7.8	n.p.	1.6	1.8	4.4	6.0
Females	n.p.	7.1	10.6	n.p.	0.8	0.9	11.4	9.6
Persons[i]	n.p.	6.1	9.3	n.p.	1.2	1.4	6.7	7.9
ACT								
Males	n.p.	2.1	4.9	n.p.	1.2	1.3	3.9	3.7
Females	n.p.	3.9	6.7	n.p.	0.9	0.9	7.6	5.8
Persons[i]	n.p.	3.0	5.8	n.p.	1.0	1.1	5.5	4.7

(continued)

Table 1.09.8 (continued): Hospitalisations for principal diagnosis of diabetes mellitus, by Indigenous status and sex, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
Australia								
Males	2,674	3.9	6.6	41,641	1.9	1.8	3.6	4.8
Females	2,780	4.1	6.3	30,397	1.4	1.3	4.9	5.0
Persons[(h)]	5,454	4.0	6.4	72,038	1.6	1.5	4.2	4.9

(a) Data include public and private hospital in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes E10–E14.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age–standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age–standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+. As different age-groupings were used, rates for Tasmania and the Australian Capital Territory cannot be compared with the rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.09.9: Hospitalisations for diabetes mellitus by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[(a)(b)]

	Indigenous		Non-Indigenous			
	Number	No. per 1,000(c)	Number	No. per 1,000(c)	Ratio(d)	Difference(e)
Major cities	1,145	3.9	46,915	1.4	2.7	2.5
Inner regional	794	4.1	15,304	1.7	2.4	2.3
Outer regional(f)	1,527	8.1	8,029	1.9	4.3	6.2
Remote(g)	752	10.9	979	1.9	5.9	9
Very remote	1,222	10.4	395	1.9	5.4	8.4
Total(h)	**5,454**	**6.4**	**72,038**	**1.5**	**4.2**	**4.9**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes E10–E14.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS' 2011 Australian Standard Geographical Classification (ASGC) and Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. These data should be interpreted with caution due to changes to coding practices for diabetes mellitus and impaired glucose regulation between 2011–12 and 2012–13 (see Australian Hospital Statistics 2012–13 for more information).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.09.10: Hospitalisations of Indigenous persons for principal diagnosis of diabetes mellitus, by type of diabetes and sex, Australia, 2011–12 to 2012–13[(a)(b)]

Principal diagnosis	Number	Per cent[(c)]	No per 1,000[(d)]	Ratio[(e)]	Difference[(f)]
			Males		
Type 2 (E11)	2,026	75.8	5.6	4.7	4.4
Type 1 (E10)	570	21.3	0.9	1.4	0.3
Other specified diabetes (E13)	59	2.2	0.1	7.8	0.1
Unspecified diabetes (E14)	19	0.7	__	n.p.	__
Total[(g)]	2,674	100.0	6.6	3.6	4.8
Diabetes in pregnancy (O24)[(h)]	. .	. .	. .	. .	. .
Total incl. O24	**2,674**	**100.0**	**6.6**	**3.6**	**4.8**
			Females		
Type 2 (E11)	2,162	77.8	5.4	8.7	4.8
Type 1 (E10)	581	20.9	0.8	1.2	0.1
Other specified diabetes (E13)	12	0.4	__	1.8	__
Unspecified diabetes (E14)	25	0.9	0.1	n.p.	__
Total[(g)]	2,780	100.0	6.3	4.9	5.0
Diabetes in pregnancy (O24)[(h)]	1,415	33.7	2.1	9.3	1.9
Total incl. O24	**4,195**	**100.0**	**8.4**	**5.5**	**6.9**
			Persons[(i)]		
Type 2 (E11)	4,188	76.8	5.5	6.2	4.6
Type 1 (E10)	1,151	21.1	0.8	1.3	0.2
Other specified diabetes (E13)	71	1.3	0.1	5.1	0.1
Unspecified diabetes (E14)	44	0.8	0.1	n.p.	__
Total[(g)]	5,454	100.0	6.4	4.2	4.9
Diabetes in pregnancy (O24)[(h)]	1,415	20.6	1.1	9.5	1.0
Total incl. O24	**6,869**	**100.0**	**7.5**	**4.5**	**5.8**

(continued)

Table 1.09.10 (continued): Hospitalisations of Indigenous persons for principal diagnosis of diabetes mellitus, by type of diabetes and sex, Australia, 2011–12 to 2012–13(a)(b)

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes E10 - E14.

(c) Proportion of male, female and total hospitalisations of Indigenous persons in the period 2011–12 to 2012–13.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(g) Total excludes diabetes mellitus in pregnancy (O24).

(h) Indigenous females with diabetes mellitus in pregnancy (including pre-existing diabetes mellitus, Type 1, in pregnancy (O24.0); pre-existing diabetes mellitus, Type 2, in pregnancy (O24.1); pre-existing diabetes mellitus, other specified type, in pregnancy (O24.2); pre-existing diabetes mellitus, unspecified, in pregnancy (O24.3); gestational diabetes (O24.4); pre-existing impaired glucose regulation in pregnancy (O24.5) and diabetes mellitus in pregnancy, unspecified onset (O24.9)). Proportion calculated out of those with Type 1, Type 2, other specified, unspecified or diabetes mellitus in pregnancy (E10–E14 and O24).

(i) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.09.11: Hospitalisations of Indigenous persons for principal diagnosis of diabetes mellitus, by additional diagnosis of hospitalisation, Australia, 2011–12 to 2012–13[(a)][(b)]

	Reported with a principal diagnosis of diabetes				
Additional diagnosis of hospitalisation	**Insulin-dependent diabetes (E10)**	**Non-insulin-dependent diabetes (E11)**	**Other specified diabetes (E13)**	**Unspecified diabetes (E14)**	**Total**
			Per cent[(c)]		
Factors influencing health status and contact with health services (includes dialysis) (Z00–Z99)	58.2	75.8	95.8	43.2	72.1
Diseases of the circulatory system (I00–I99)	6.9	37.7	32.4	6.8	30.9
Diseases of the genitourinary system (N00–N99)	14.8	34.6	32.4	9.1	30.2
Endocrine, nutritional & metabolic diseases (E00–E90) excluding (E10–E14)	29.8	20.8	40.9	11.4	22.9
Diseases of the eye & adnexa (H00–H59)	1.0	3.4	2.8	2.3	2.9
Certain infectious and parasitic diseases (A00–B99)	15.1	26.6	35.2	2.3	24.1
Diseases of the skin & subcutaneous tissue (L00–L99)	6.5	19.5	16.9	18.2	16.7
Diseases of the nervous system (G00–G99)	1.8	8.2	1.4	0.0	6.7
Symptoms, signs & abnormal clinical & laboratory findings (R00–R99)	16.9	16.5	29.6	0.0	16.6
Mental & behavioural disorders (F00–F99)	14.6	12.7	62.0	9.1	13.7
Diseases of the digestive system (K00–K93)	9.3	8.1	62.0	4.6	9.0
Injury & poisoning (S00–T98)	4.4	8.1	7.0	2.3	7.2
Diseases of the respiratory system (J00–J99)	5.9	5.3	12.7	2.3	5.5
Neoplasms (C00–D48)	0.4	1.0	2.8	0.0	0.9
Other[(d)]	35.9	67.9	71.8	20.5	60.8
Total number	**1,151**	**4,188**	**71**	**44**	**5,454**

(continued)

Table 1.09.11 (continued): Hospitalisations of Indigenous persons for principal diagnosis of diabetes mellitus, by additional diagnosis of hospitalisation, Australia, 2011–12 to 2012–13(a)(b)

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Percentage is the total number of each additional diagnosis divided by the total of principal diagnosis in each column.

(d) Includes: diseases of the musculoskeletal system and connective tissue; diseases of the ear and mastoid process; congenital malformations, deformations and chromosomal abnormalities; pregnancy, childbirth and the puerperium; certain conditions originating in the perinatal period; diseases of the blood and blood-forming organs; and certain disorders involving the immune system.

Notes

1. Sum of components may exceed 100% as more than one additional diagnosis can be reported for each hospitalisation.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. These data should be interpreted with caution due to changes to coding practices for diabetes mellitus and impaired glucose regulation between 2011–12 and 2012–13 (see Australian Hospital Statistics 2012–13 for more information).

Source: AIHW analysis of National Hospital Morbidity Database.

Data sources and quality

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013a). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Bettering the Evaluation and Care of Health survey

The Bettering the Evaluation and Care of Health (BEACH) survey collects information about encounters with general practitioners (GPs), including: GP and patient characteristics; patient reasons for the visit; problems managed; and treatments provided. The survey has been conducted annually since April 1998. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. Each participating GP provides details of 100 consecutive patient encounters. Although the questionnaire contains an Indigenous identifier, it is unknown whether all GPs ask their patients this question.

In a sub-study of approximately 9,000 patients, Supplementary Analysis of Nominated Data, it was found that if the question on Indigenous status was asked within the context of a series of questions about origin and cultural background, 1.3% identified as Aboriginal and Torres Strait Islander. This is twice the rate routinely recorded in BEACH, indicating that BEACH may under-estimate the number of encounters with Indigenous Australians.

Under the National Indigenous Reform Agreement, governments have agreed to the implementation of *National best practice guidelines for collecting Indigenous status in health data sets* (AIHW 2010a), which include recommended strategies for local service providers such as GPs and practice nurses to improve Indigenous identification data. General practices and Aboriginal and Torres Strait Islander health services that meet accreditation requirements are eligible for financial incentives when they do the following activities: sign on to the Practice Incentives Program—Indigenous Health Incentive (PIP IHI); obtain consent from their Indigenous clients to be registered for chronic disease management through the IHI; and provide a targeted level of care for each registered patient. Participation in the PIP IHI also provides eligibility for other initiatives under Medicare.

A Voluntary Indigenous Identifier was introduced into the Medicare database from November 2002. By July 2014, 415,730 people had identified as Aboriginal, Torres Strait Islander, or both.

National Hospital Morbidity Database (NHMD)

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010b). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the

Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013b). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013c).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the 2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see
<http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 10 of 68 **Detailed analyses**

1.10 Kidney disease

This measure reports on prevalence, deaths and hospitalisations for kidney disease among Aboriginal and Torres Strait Islander people, as well as incidence of treated end-stage kidney disease (ESKD) as registered by the Australia and New Zealand Dialysis and Transplant Registry.

Introduction

This is no. 10 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- Australian Aboriginal and Torres Strait Islander Health Survey
- Australian Health Survey
- National Mortality Database
- National Hospital Morbidity Database
- Australia and New Zealand Dialysis and Transplant Registry.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Age-standardised rates and ratios have been used as a measure of morbidity in the Indigenous Australian population relative to non-Indigenous Australians. Ratios of this type illustrate differences between the rates of morbidity among Indigenous Australians and non-Indigenous Australians, taking into account differences in age distributions.

Information on Indigenous persons with treated ESKD is available from the Australia and New Zealand Dialysis and Transplant Registry (ANZDATA).

Registrations data are only estimates of incidence and prevalence because not all cases of ESKD may be reported and not all persons with ESKD may be receiving treatment. Here, new registrations are used to estimate incidence, and total registrations are used to estimate prevalence.

For more information related to kidney disease, see measures 1.05, 1.07, 1.09 and 2.22. Also see 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Prevalence, see tables 1.10.1–3
- Deaths from kidney disease, see tables 1.10.4 and 1.23.23
- Hospitalisations for chronic kidney disease, see tables 1.10.5–9
- Incidence of treated end-stage kidney disease (ESKD), see tables 1.10.10–16.

Prevalence

Current period

In the period 2012–13:

- Based on the 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey, nearly 1 in 5 (18%) Indigenous Australian adults had blood or urine test results showing signs of kidney problems (infection, acute or chronic condition) (ABS 2014a).
- After adjusting for age, Indigenous Australians were 2.1 times as likely as non-Indigenous Australians to have chronic kidney disease.
- The rate of chronic kidney disease was highest among Indigenous Australians aged 55 and over (40 per 100). The rate for non-Indigenous Australians was also highest for this age group (21 per 100).

- Indigenous males were more likely than Indigenous females to have chronic kidney disease (25 and 20 per 100 respectively). There was little difference in the rates for non-Indigenous males and females (11 and 10 per 100, respectively) (Table 1.10.1).

Deaths

Current period

In the period 2008 to 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- 2.5% of deaths of Indigenous Australians were due to kidney disease.
- After adjusting for age, the death rate from kidney disease for Indigenous Australians was 30 per 100,000, compared with 11 per 100,000 for non-Indigenous Australians.
- The gap between the rate for Indigenous and non-Indigenous Australians was 18 per 100,000. Indigenous Australians were 2.6 times as likely as non-Indigenous Australians to die of kidney disease (Table 1.10.4).

Trend

In the period 1998 to 2012 in New South Wales, Queensland, Western Australia, South Australia and Northern Territory combined:

- There was no significant change in the death rate due to kidney disease for Indigenous or non-Indigenous Australians, and no significant change in the gap between Indigenous and non-Indigenous Australians.

In the period 2006 to 2012 in New South Wales, Queensland, Western Australia, South Australia and Northern Territory combined:

- There was a significant 40% decrease in the death rate due to kidney disease for Indigenous Australians, and a significant 53% decrease in the gap between Indigenous and non-Indigenous Australians.
- Over this time the Indigenous rate decreased from 44 to 25 per 100,000, while the non-Indigenous rate varied between 10 and 13 per 100,000 (Table 1.23.23).

Hospitalisations

Current period

In the period 2011–12 to 2012–13:

- Care involving dialysis was the most common reason for hospitalisation for both Indigenous and non-Indigenous Australians, accounting for 45% of hospitalisations of Indigenous Australians and 12% for non-Indigenous Australians (Table 1.02.7).
- There were more than 334,000 hospitalisations of Indigenous Australians for care involving dialysis, an age-standardised rate of 432 per 1,000. For non-Indigenous Australians there were almost 2.2 million hospitalisations for care involving dialysis, at an age-standardised rate of 44 per 1,000.
- Indigenous Australians were hospitalised for care involving dialysis at almost 10 times the rate of non-Indigenous Australians. The rate difference between Indigenous and non-Indigenous Australians was 388 per 1,000.

- For chronic kidney disease excluding dialysis, Indigenous Australians were hospitalised at a rate of 4 per 1,000 while non-Indigenous were hospitalised at a rate of 1 per 1,000 (4,120 and 61,817 hospitalisations, respectively). The rate difference was 3 per 1,000 (Table 1.10.5).

Treated end-stage kidney disease

End-stage kidney disease (ESKD) is a complete or near-complete failure of the kidneys to excrete wastes, concentrate urine, and regulate electrolytes. ESKD occurs when the kidneys are no longer able to function at a level that is necessary for day-to-day life. It usually occurs as chronic renal failure worsens to the point where kidney function is less than 10% of normal. Common associated complications include inflammation of the tissue layers surrounding the heart, bleeding in the gastrointestinal tract, altered brain function and structure, disturbances or structural or functional changes in the peripheral nervous system. Treatment for ESKD involves ongoing kidney replacement therapy (dialysis or kidney transplantation).

Information on persons with treated ESKD is available from the Australia and New Zealand Dialysis and Transplant Registry (ANZDATA).

Current period

In the period 2010 to 2012:

- There were 716 new Indigenous patients and 6,644 new non-Indigenous patients registered with ANZDATA. This represents an age-standardised rate for treated ESKD of 62 persons per 100,000 for Indigenous Australians and 9 per 100,000 for non-Indigenous Australians.
- The gap in the incidence rate between Indigenous and non-Indigenous Australians was 52 per 100,000. Indigenous Australians were almost 7 times as likely as non-Indigenous Australians to commence treatment for ESKD.
- Indigenous Australians starting ESKD treatment tended to be younger than non-Indigenous Australians. Over half (60%) of the new Indigenous patients registered with ANZDATA were aged less than 55, compared with around one third (31%) of non-Indigenous patients.
- The largest gap was in the 55–64 age group where the rates for Indigenous and non-Indigenous Australians were 180 per 100,000 and 19 per 100,000 respectively (a rate difference of 161 per 100,000) (Table 1.10.10).

Trend

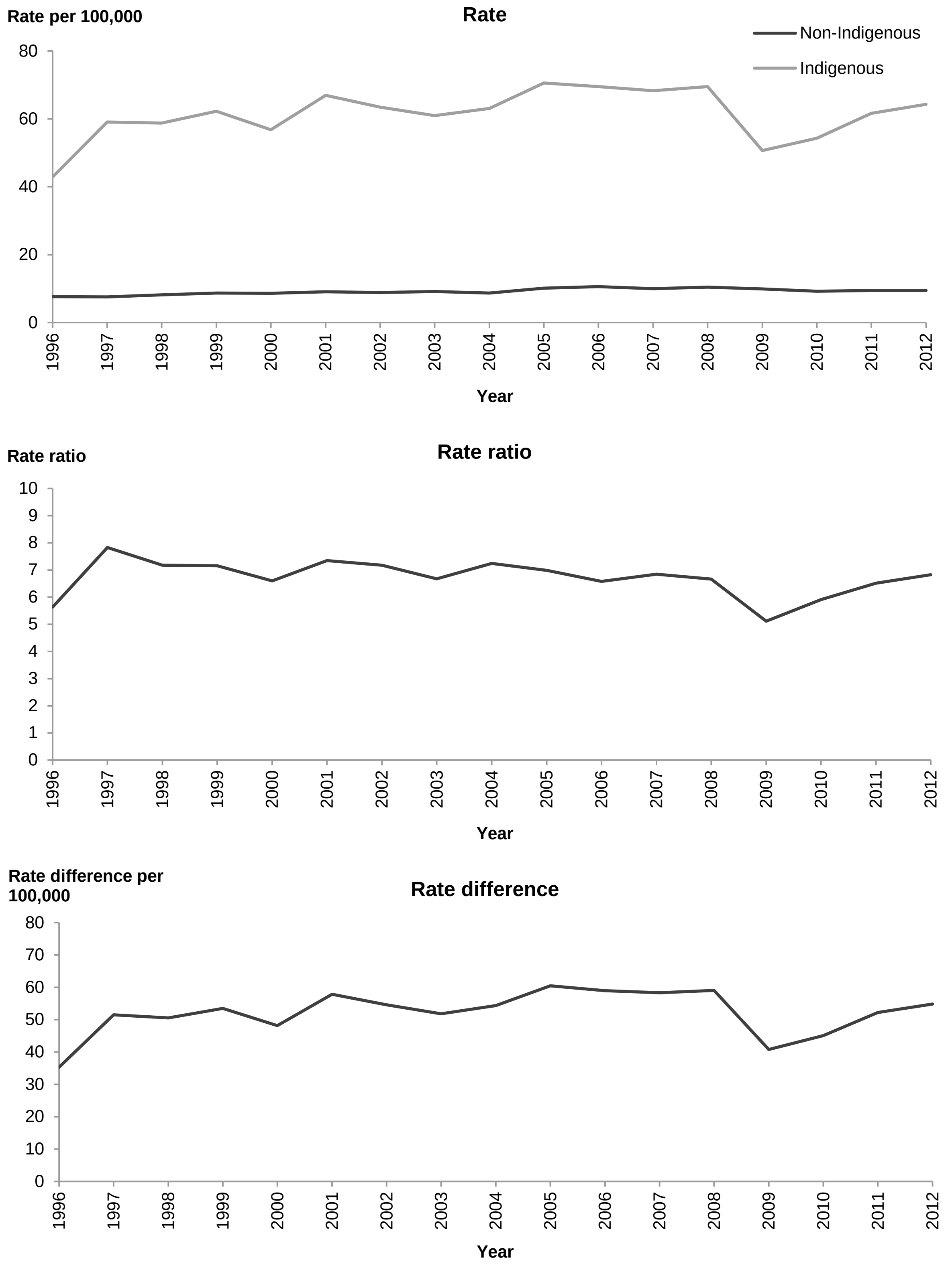
Caution should be exercised in assessing trends in Indigenous treated ESKD rates over time as fluctuations in the incidence rates may reflect changing levels of identification of Indigenous registrations in the ANZDATA Registry and Indigenous population estimates.

In the period from 1996 to 2012:

- Although there was a significant increase (26%) in the rate for non-Indigenous Australians, there was no significant change in the rate for Indigenous Australians and no significant change in the gap (Figure 1.10.1 and Table 1.10.14).
- The rate for Indigenous males increased significantly by 33%, but there was no significant change in the gap between Indigenous and non-Indigenous males. There was no significant change in either the rates or the gap for females.
  - Rates for Indigenous males gradually increased over the period 1996 to 2008, then declined substantially in 2009 before beginning to rise again. Rates for Indigenous females and persons showed a less consistent pattern (Table 1.10.14).

Management of end-stage kidney disease

- Of all Indigenous ESKD patients registered, 88% relied on dialysis and only 12% had received a kidney transplant. In contrast, 53% of non-Indigenous Australians living with ESKD relied on dialysis and 47% had received a kidney transplant.
- Indigenous Australians with treated-ESKD were 9 times as likely as non-Indigenous Australians to rely on dialysis (Table 1.10.15).



Rate

Rate ratio

Rate difference

Source: Table 1.10.14.

Figure 1.10.1: Age-standardised incidence rates, rate ratios and rate differences for end-stage kidney disease, 1996–2012

Table 1.10.1: Persons (18 and over) with chronic kidney disease, by remoteness, Indigenous status, age, sex and state/territory, 2011–13(a)(b)(c)

	Remoteness											Overall population distribution	
	Non-remote			Remote			Australia						
	Indigenous	Non-Indigenous	Rate ratio(d)	Indigenous	Non-Indigenous	Rate ratio(d)	Indigenous	Non-Indigenous	Rate ratio(d)	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	Rate(e)									Number		Per cent(f)	
Age(g)													
18–24	6.2†	. .	. .	11.7	. .	. .	7.4†	8.5	. .	5,326	155,961	21.5	11.8
25–34	5.8†	. .	. .	24.8	. .	. .	10.5	5.4	. .	8,246	156,149	23.5	18.7
35–44	7.0†	. .	. .	36.9	. .	. .	14.0	5.5	. .	10,177	154,295	21.8	18.2
45–54	17.7	. .	. .	48.8	. .	. .	24.9	6.0	. .	14,116	168,612	17.0	18.1
55+	36.0	. .	. .	55.2	. .	. .	40.3	20.7	. .	21,698	1,066,707	16.2	33.2
Sex													
Males	20.6	. .	. .	40.1	. .	. .	25.2	10.7	2.4	31,069	861,869	49.4	49.4
Females	14.3	. .	. .	37.6	. .	. .	19.6	10.2	1.9	28,495	839,855	50.6	50.6
State/territory													
NSW	17.0	. .	. .	32.8	. .	. .	17.7	10.6	1.7	15,398	584,730	31.7	33.1
Vic	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Qld	20.1	. .	. .	35.5	. .	. .	24.3	10.6	2.3	16,193	338,689	26.4	19.7
SA	18.9†	. .	. .	32.7	. .	. .	21.2	8.1	2.6	3,317	105,007	5.7	7.2
WA	18.9	. .	. .	35.5	. .	. .	26.1	11.0	2.4	10,250	176,354	13.5	10.1
Tas	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
NT	14.6†	. .	. .	46.5	. .	. .	39.8	8.7	4.6	11,978	9,130	11.1	0.7
ACT	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
All	**17.1**	**10.4**	**1.6**	**38.8**	**8.4†**	**4.6**	**22.2**	**10.4**	**2.1**	**17.9**	**11.0**	**100.0**	**100.0**
Total number	**33,576**	**1,689,591**	**. .**	**25,987**	**12,134†**	**. .**	**59,563**	**1,701,725**	**. .**	**59,563**	**1,701,725**	**333,082**	**15,503,514**

(continued)

Table 1.10.1 (continued): Persons (18 and over) with chronic kidney disease, by remoteness, Indigenous status, age, sex and state/territory, 2011–13(a)(b)(c)

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Chronic Kidney Disease is derived using a combination of participants' estimated glomerular filtration rate (eGFR) results with their albumin creatinine ratio (ACR) results.

(b) Data excludes not stated responses. Total excludes persons who did not supply a urine sample or for whom a valid test result was not obtained.

(c) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(d) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(e) Persons with chronic kidney disease aged 18 and over per 100 persons aged 18 and over.

(f) Distribution of total population.

(g) Data for specific age groups are not age-standardised, only the totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.10.2: Indigenous Australians (18 and over) reporting kidney disease, by selected socioeconomic and health characteristics, 2012–13

	Has kidney disease[(a)]	Does not have kidney disease	Total	Has kidney disease[(a)]	Does not have kidney disease	Total
	Number			Per cent		
SEIFA[(b)]						
1st quintile (most disadvantaged)	6,257	187,093	193,350	3.2	96.8	100.0
5th quintile (least disadvantaged)	221‡	15,553	15,774	1.4‡	98.6	100.0
Ratio most/least disadvantaged	28.3	12.0	12.3	2.3	1.0	1.0
Employment						
Employed	2,463	173,701	176,163	1.4	98.6	100.0
Unemployed	764†	40,539	41,304	1.8†	98.1	100.0
Not in the labour force	6,571	141,830	148,401	4.4	95.6	100.0
Ratio unemployed/employed	0.3	0.2	0.2	1.3	1.0	1.0
Has non-school qualification[(c)]						
Yes	3,970	156,692	160,662	2.5	97.5	100.0
No	5,828	199,378	205,206	2.8	97.2	100.0
Ratio no/yes	1.5	1.3	1.3	1.1	1.0	1.0
Highest year of school completed						
Year 12	1,633	97,355	98,988	1.6	98.4	100.0
Year 9 or below[(d)]	4,447	100,012	104,459	4.3	95.7	100.0
Ratio Year 9 or below/Year 12	2.7	1.0	1.1	2.6	1.0	1.0
Smoker status						
Current smoker[(e)]	3,552	167,036	170,588	2.1	97.9	100.0
Non-smoker[(f)]	6,245	189,034	195,280	3.2	96.8	100.0
Ratio smoker/non-smoker	0.6	0.9	0.9	0.7	1.0	1.0
Adequate daily vegetable intake[(g)]						
Yes	846†	16,013	16,859	5.0†	95.0	100.0
No	8,951	340,057	349,009	2.6	97.4	100.0
Ratio no/yes	10.6	21.2	20.7	0.5	1.0	1.0
Adequate daily fruit intake[(h)]						
Yes	4,290	146,527	150,818	2.8	97.2	100.0
No	5,507	209,543	215,050	2.6	97.4	100.0
Ratio no/yes	1.3	1.4	1.4	0.9	1.0	1.0
Obese[(i)]						
Yes	4,165	119,469	123,634	3.4	96.6	100.0
No	4,103	183,219	187,322	2.2	97.8	100.0
Ratio yes/no	1.0	0.7	0.7	1.5	1.0	1.0
Total number[(j)]	**8,268**	**302,688**	**310,956**	**2.7**	**97.3**	**. .**

(continued)

Table 1.10.2 (continued): Indigenous Australians (18 and over) reporting kidney disease, by selected socioeconomic and health characteristics, 2012–13

	Has kidney disease[(a)]	Does not have kidney disease	Total	Has kidney disease[(a)]	Does not have kidney disease	Total
	Number			Per cent		
Self-assessed health status						
Excellent/very good/good	3,291	267,553	270,845	1.2	98.8	100.0
Fair/poor	6,506	88,517	95,023	6.8	93.2	100.0
Ratio fair, poor/excellent, very good	2.0	0.3	0.4	5.6	0.9	1.0
Heart/circulatory problems[(k)]						
Yes	4,766	66,296	71,062	6.7	93.3	100.0
No	5,032	289,774	294,806	1.7	98.3	100.0
Ratio yes/no	0.9	0.2	0.2	3.9	0.9	1.0
Diabetes[(l)]						
Yes	4,867	42,887	47,754	10.2	89.8	100.0
No	4,931	313,184	318,114	1.6	98.5	100.0
Ratio yes/no	1.0	0.1	0.2	6.6	0.9	1.0
Total number of persons 18+	**9,798**	**356,070**	**365,868**	**2.7**	**97.3**	**. .**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting kidney disease which has lasted or is expected to last, for six months or more.

(b) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(c) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED) (includes eg. Bachelor degree or higher, diploma, advanced diploma, certificate).

(d) Year 9 or below includes never attended school.

(e) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(f) Includes ex-smoker and those who have never smoked.

(g) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 years and over, with the exception of 18–49 year old males who eat 6 serves.

(h) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 years and over.

(i) Body Mass Index greater than 30.0 for people aged 18 years and over.

(j) Totals exclude measurement not taken.

(k) Self reported data consisting of persons reporting they have a current heart or circulatory condition which has lasted, or is likely to last, for 6 months or more.

(l) Self-reported data consisting of persons reporting diabetes which has lasted, or is expected to last, for six months or more. Includes Type 1 and Type 2 diabetes, type unknown, and persons who reported they had diabetes but that it was not current at the time of interview.

Note: Percentages add within rows. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.10.3: Indigenous Australians (18 and over) reporting kidney disease, by selected household and health risk factors, 2012–13

	Has kidney disease[(a)]		Does not have kidney disease		Total number
	Number	**Per cent**	**Number**	**Per cent**	
Equivalised household income[(b)]					
1st quintile (lowest)	5,068	4.1	119,451	95.9	124,518
4th/5th quintile (highest)	321†	0.6†	51,355	99.4	51,676
Ratio lowest/highest	15.8	6.6*	2.3	1.0	2.4
Total number	**7,759**	**2.7**	**284,988**	**97.3**	**292,747**
Financial stress—whether household could raise $2,000 in an emergency[(b)]					
Yes	2,817	1.8	155,458	98.2	158,276
No	6,132	3.3	178,509	96.7	184,641
Ratio yes/no	0.5	0.5*	0.9	1.0	0.9
Total number	**8,949**	**2.6**	**333,968**	**97.4**	**342,917**
Household had day/s without money for basic living expenses in last 12 months					
Yes	3,955	2.7	143,244	97.3	147,199
No	5,773	2.7	211,136	97.3	216,909
Ratio yes/no	0.7	1.0	0.7	1.0	0.7
Total number	**9,728**	**2.7**	**354,380**	**97.3**	**364,108**
Housing tenure type					
Owner	2,086	1.9	108,130	98.1	110,215
Renter	7,610	3.0	244,937	97.0	252,547
Ratio renter/owner	3.6	1.6	2.3	1.0	2.3
Total number[(c)]	**9,728**	**2.7**	**354,449**	**97.3**	**364,177**
Lives in overcrowded household[(d)]					
Yes	1,345†	1.9†	70,036	98.1	71,380
No	8,384	2.9	284,344	97.1	292,728
Ratio yes/no	0.2	0.7	0.2	1.0	0.2
Total number	**9,728**	**2.7**	**354,380**	**97.3**	**364,108**
Alcohol consumption					
Abstained from alcohol in last 12 months[(e)]	3,968	4.8*	79,216	95.2	83,184
Short-term/single occasion risk[(f)]					
Yes	3,654	1.7	205,325	98.3	208,979
No	1,902†	2.8†	65,235	97.2	67,136
Ratio yes/no	1.9	0.6	3.1	1.0	3.1

(continued)

Table 1.10.3 (continued): Indigenous Australians (18 and over) reporting kidney disease, by selected household and health risk factors, 2012–13

	Has kidney disease[(a)]		Does not have kidney disease		Total number
	Number	Per cent	Number	Per cent	
Physical activity[(g)]					
Met guidelines[(h)]	2,326†	2.0†	114,798	98.0	117,125
Did not meet guidelines[(i)]	4,741	2.9	161,169	97.1	165,910
Ratio did not meet/met guidelines	2.0	1.4	1.4	1.0	1.4
Total number	**7,067**	**2.5**	**275,967**	**97.5**	**283,035**
Disability status[(j)]					
Has moderate,severe or profound core activity limitation[(k)]	4,106	8.4*	44,780	91.6	48,886
Has a schooling/employment restriction only[(l)]	1515†	3.8†	38,535	96.2	40,050
Has unspecified limitation or restriction	2,271	2.8*	80,054	97.2	82,325
Total with disability/long-term health condition	**7,892**	**4.6**	**163,369**	**95.4**	**171,261**
No disability/long-term health condition	1,836	0.9*	192,770	99.1	194,607
Ratio disability/no disability	4.3	4.9*	0.8	1.0	0.9
Psychological distress (Kessler 5)[(m)(n)]					
Low/moderate	5,505	2.2	246,724	97.8	252,230
High/very high	4,211	3.9	104,924	96.1	109,134
Ratio high, very high/low, moderate	0.8	1.8*	0.4	1.0	0.4
Total number	**9,716**	**2.7**	**351,648**	**97.3**	**361,364**
Stressors experienced in last 12 months[(o)]					
No stressors	1,731†	1.9†	89,613	98.1	91,344
Experienced one or more stressor	7,996	2.9	265,393	97.1	273,389
Ratio one or more/no stressors	4.6	1.5	3.0	1.0	3.0
Total number[(i)]	**9,728**	**2.7**	**355,701**	**97.3**	**365,429**
Long term health conditions[(p)]					
No current long term health condition	0	0.0	63,950	100.0	63,950
One	61‡	0.1*‡	64,185	99.9	64,247
Two	355†	0.6*†	56,739	99.4	57,094
Three or more	9,312	5.2	171,265	94.8	180,577
Ratio three or more/no conditions	. .	. .	2.7	0.9	2.8
Respiratory disease[(q)]					
Yes	4,464	3.2	132,942	96.8	137,406
No	5,264	2.3	223,198	97.7	228,462
Ratio yes/no	0.8	1.4	0.6	1.0	0.6
Total number of persons 18+	**9,728**	**2.7**	**356,140**	**97.3**	**365,868**

(continued)

Table 1.10.3 (continued): Indigenous Australians (18 and over) reporting kidney disease, by selected household and health risk factors, 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested for ‘Has kidney disease’ column only. For Alcohol consumption, ‘Abstained’ was also tested against those who did not have ‘Short term/single occasion risk’. For those with disability or a long-term health condition, level of disability/long-term health condition was also tested with ‘Total with disability/long-term health condition’ used as the reference category. Number of long term health conditions were also tested with ‘Three or more’ as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting kidney disease which has lasted or is expected to last, for six months or more.

(b) Excludes ‘not stated’ and ‘not known’.

(c) Total includes ‘other’ and ‘life tenure scheme’.

(d) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(e) Abstainer includes those who have never consumed alcohol.

(f) Includes those who drank alcohol. Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(g) Physical activity data collected from persons 18 years and over; and non-remote areas only.

(h) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(i) Includes ‘don’t know’.

(j) Self-reported data consisting of persons who reported having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities.

(k) Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities.

(l) Only current difficulties with education and/or employment were collected. Respondents aged 65 years and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(m) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25.

(n) Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(o) Stressors experiences by self, family or friends.

(p) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(q) Self reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitus, and other diseases of the respiratory system.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.10.4: Deaths of Indigenous Australians from kidney disease, by Indigenous status, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)

	Number			Per cent			Rate per 100,000(f)				
	Indigenous	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Rate ratio(g)**	**Rate difference(h)**	**Rate difference %(i)**
Kidney diseases (N00–N29)	290	9,372	77	2.5	1.9	1.4	29.6	11.2	2.6*	18.4*	4.7
All causes	**11,612**	**495,782**	**5,517**	**100.0**	**100.0**	**100.0**	**985.6**	**596.7**	**1.7***	**388.9***	**100.0**

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(d) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(e) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(f) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(g) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(h) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(i) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all causes.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.10.5: Hospitalisations for chronic kidney disease and its sequelae, by Indigenous status and type of kidney disease, Australia, 2011–12 to 2012–13[a][b]

	Number		Per cent		No. per 1,000[c]			
Principal diagnosis	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Ratio**[d]	**Difference**[e]
Care involving dialysis (ESKD) (Z49)	334,265	2,155,803	98.8	97.2	431.9	43.8	9.9	388.1
Diabetic nephropathy (E102, E112, E132, E142)	241	1,683	0.1	0.1	0.3	__	9.5	0.3
Renal-tubulo interstitial diseases (N11, N12, N14, N15, N16)	1,287	17,125	0.4	0.8	1.1	0.4	2.9	0.7
Chronic renal failure (N18, N19)	1,585	23,985	0.5	1.1	1.9	0.5	3.9	1.4
Glomerular diseases (N00–08)	437	7,013	0.1	0.3	0.3	0.2	1.8	0.1
Hypertensive renal disease (I12, I13,I150, I151)	104	1,435	0.0	0.1	0.1	__	3.6	0.1
Other chronic diseases (N25, N26, N27, N28, Q60, Q61, Q62, Q63, N391, N392, T824, T861, Z940)	466	10,576	0.1	0.5	0.4	0.2	1.9	0.2
Total	**338,385**	**2,217,620**	**100.0**	**100.0**	**436.1**	**45.2**	**9.7**	**390.9**
Total excl. dialysis	**4,120**	**61,817**	**1.2**	**2.8**	**4.2**	**1.3**	**3.1**	**2.8**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.10.6: Hospitalisations of Indigenous Australians for chronic kidney disease and its sequelae, by sex and type of kidney disease, Australia, 2011–12 to 2012–13(a)(b)

	Males					Females				
Principal diagnosis	**Number**	**Per cent**(c)	**No per 1,000**(d)	**Ratio**(e)	**Difference**(f)	**Number**	**Per cent**(c)	**No per 1,000**(d)	**Ratio**(e)	**Difference**(f)
Care involving dialysis (ESKD) (Z49)	142,417	99.0	384.3	6.6	326.4	191,848	98.6	475.9	15.0	444.1
Diabetic nephropathy (E102, E112, E132, E142)	120	0.1	0.3	7.6	0.3	121	0.1	0.3	12.5	0.3
Renal-tubulo interstitial diseases (N11, N12, N14, N15, N16)	145	0.1	0.3	2.3	0.2	1,142	0.6	1.9	2.9	1.2
Chronic renal failure (N18, N19)	733	0.5	1.9	2.7	1.2	852	0.4	2.0	6.0	1.6
Glomerular diseases (N00–08)	219	0.2	0.3	1.5	0.1	218	0.1	0.3	2.2	0.1
Hypertensive renal disease (I12, I13,I150, I151)	49	0.0	0.1	2.4	0.1	55	0.0	0.1	5.4	0.1
Other chronic kidney diseases (N25, N26, N27, N28, Q60, Q61, Q62, Q63, N391,N392,T824,T861,Z940)	212	0.1	0.4	1.5	0.1	254	0.1	0.5	2.4	0.3
Total	**143,895**	**100.0**	**387.6**	**6.5**	**328.3**	**194,490**	**100.0**	**480.9**	**14.5**	**447.8**
Total excl. dialysis	**1,478**	**1.0**	**3.3**	**2.4**	**1.9**	**2,642**	**1.4**	**5.0**	**3.7**	**3.7**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Proportion of hospitalisations of Indigenous males and females in the period 2011–12 to 2012–13.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(f) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.10.7: Age-specific hospitalisation rates for a principal diagnosis of chronic kidney disease (excluding dialysis), by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b]

	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65+	All ages[c]	
									Crude	Age-std.[d]
Males										
Indigenous	1.2	0.8	0.6	1.1	3.1	6.0	7.6	6.7	2.2	3.3
Non-Indigenous	1.2	0.4	0.3	0.6	0.8	1.5	1.8	4.5	1.4	1.3
Rate ratio[e]	1.0	2.2	1.9	1.7	3.9	4.0	4.2	1.5	1.6	2.4
Rate difference[f]	__	0.4	0.3	0.5	2.3	4.5	5.7	2.2	0.8	1.9
Females										
Indigenous	1.0	1.3	2.9	3.4	5.3	8.7	9.7	8.2	3.9	5.0
Non-Indigenous	1.0	0.4	1.7	1.3	1.1	1.2	1.4	2.6	1.4	1.3
Rate ratio[e]	1.1	3.3	1.6	2.6	4.8	7.2	6.7	3.2	2.7	3.7
Rate difference[f]	0.1	0.9	1.1	2.1	4.2	7.5	8.2	5.6	2.4	3.7
Persons[g]										
Indigenous	1.1	1.0	1.7	2.3	4.2	7.4	8.6	7.6	3.0	4.2
Non-Indigenous	1.1	0.4	1.0	1.0	1.0	1.4	1.6	3.5	1.4	1.3
Rate ratio[e]	1.0	2.7	1.7	2.3	4.4	5.5	5.3	2.2	2.1	3.1
Rate difference[f]	__	0.7	0.7	1.3	3.3	6.1	7.0	4.1	1.6	2.8

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes N00–08, N00, N11, N12, N14, N15, N16, N18, N19, I12, I13, N25, N26, N27, N28, Q60, Q61, Q62, Q63, E102, E112, E132, E142, I150, I151, N391, N392, T824, T861, Z940).

(c) All age data includes age not stated.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(g) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.10.8: Hospitalisations for chronic kidney disease (excluding dialysis) by Indigenous status and jurisdiction, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)(e)]

	Indigenous			Non-Indigenous				
	Number	Crude Rate per 1,000	ASR Rate per 1,000[(e)]	Number	Crude Rate per 1,000	ASR Rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
NSW								
Males	241	1.1	1.7	13,598	1.9	1.8	0.9	–0.1
Females	483	2.3	3.0	9,854	1.4	1.3	2.4	1.7
Persons[(h)]	724	1.7	2.4	23,452	1.7	1.5	1.6	0.9
Vic								
Males	100	2.1	3.4	6,939	1.3	1.2	2.8	2.2
Females	104	2.1	2.8	8,411	1.5	1.4	1.9	1.4
Persons[(h)]	204	2.1	3.1	15,350	1.4	1.3	2.3	1.8
Qld								
Males	408	2.1	3.6	4,962	1.1	1.1	3.2	2.5
Females	724	3.7	5.0	6,377	1.5	1.4	3.5	3.6
Persons[(h)]	1,132	2.9	4.3	11,339	1.3	1.3	3.4	3.0
WA								
Males	329	3.7	5.8	2,289	1.0	1.0	5.9	4.9
Females	592	6.5	8.5	3,313	1.4	1.4	6.1	7.1
Persons[(h)]	921	5.1	7.2	5,602	1.2	1.2	6.1	6.0
SA								
Males	94	2.5	3.9	1,714	1.1	1.0	3.9	2.9
Females	163	4.2	5.3	1,894	1.2	1.1	4.9	4.2
Persons[(h)]	257	3.4	4.6	3,608	1.1	1.0	4.5	3.6
Tas								
Males	n.p.	0.4	0.4	n.p.	1.0	1.0	0.4	–0.5
Females	n.p.	1.2	1.2	n.p.	1.1	1.0	1.2	0.2
Persons[(h)]	n.p.	0.8	0.8	n.p.	1.1	1.0	0.8	–0.2
NT								
Males	n.p.	4.2	5.4	n.p.	0.9	1.1	5.1	4.4
Females	n.p.	7.7	10.1	n.p.	1.1	1.2	8.5	8.9
Persons[(h)]	n.p.	5.9	7.9	n.p.	1.0	1.1	7.1	6.8
ACT								
Males	n.p.	0.3	0.6	n.p.	0.6	0.6	1.0	0.0
Females	n.p.	1.0	0.8	n.p.	0.8	0.8	0.9	–0.1
Persons[(h)]	n.p.	0.6	0.7	n.p.	0.7	0.7	0.9	–0.1
Australia								
Males	**1,478**	**2.2**	**3.3**	**30,575**	**1.4**	**1.3**	**2.4**	**1.9**
Females	**2,642**	**3.9**	**5.0**	**31,242**	**1.4**	**1.3**	**3.7**	**3.7**
Persons[(h)]	**4,120**	**3.0**	**4.2**	**61,817**	**1.4**	**1.3**	**3.1**	**2.8**

(continued)

Table 1.10.8 (continued): Hospitalisations for chronic kidney disease (excluding dialysis) by Indigenous status and jurisdiction, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)(e)]

(a) Data include public and private hospital in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes N00–08, N11, N12, N14, N15, N16, N18, N19, I12, I13, N25, N26, N27, N28, Q60, Q61, Q62, Q63, E102, E112, E132, E142, I150, I151, N391, N392, T824, T861, Z940.Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Data are reported by state/territory of usual residence of the patient hospitalised. Directly age-standardised using the Australian 2001 standard population.

(d) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.10.9: Age-specific hospitalisations for chronic kidney disease (excluding dialysis) by Indigenous status and remoteness, Australia, 2011–2012 to 2012–2013[(a)(b)]

	Indigenous		Non-Indigenous			
	Number	**No. per 1,000**[(c)]	**Number**	**No. per 1,000**[(c)]	**Ratio**[(d)]	**Difference**[(e)]
Major cities	776	2.3	43,448	1.3	1.7	1.0
Inner regional	563	2.5	12,214	1.4	1.8	1.2
Outer regional[(f)]	1,070	5.0	4,630	1.1	4.4	3.9
Remote[(g)]	695	8.8	714	1.4	6.5	7.5
Very remote	1,002	7.1	241	1.2	6.0	5.9
Total[(h)]	**4,120**	**4.2**	**61,817**	**1.3**	**3.1**	**2.8**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes N00–08, N00, N11, N12, N14, N15, N16, N18, N19, I12, I13, N25, N26, N27, N28, Q60, Q61, Q62, Q63, E102, E112, E132, E142, I150, I151, N391, N392, T824, T861, Z940.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS' 2011 Australian Standard Geographical Classification (ASGC) and Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder); and those with a principal diagnosis of dialysis ICD-10-AM Z49.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.10.10: Incidence of end-stage kidney disease, by Indigenous status and age group, 2010–2012[(a)]

	Number		Per cent(b)		No. per 100,000(c)			
	Indig.	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Rate ratio(d)**	**Rate difference**
0–24	19	251	2.7	3.8	1.7	1.2	1.4	0.5
25–44	178	865	24.9	13.0	34.3	4.7	7.4*	29.7*
45–54	232	930	32.4	14.0	122.6	10.4	11.8*	112.2*
55–64	199	1,456	27.8	21.9	180.2	19.3	9.3*	160.9*
65+	88	3,142	12.3	47.3	128.9	34.1	3.8*	94.8*
Total(e)	**716**	**6,644**	**100.0**	**100.0**	**61.7**	**9.3**	**6.6***	**52.3***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous Australian comparisons.

(a) Calendar year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Proportion of Indigenous and non-Indigenous patients in each age group.

(c) Age-specific rates per 100,000 population.

(d) Rate ratio Indigenous: non-Indigenous.

(e) Total rates are directly age-standardised using the Australian 2001 standard population. Age-standardised rates have been calculated using the direct method, age-standardised by 5 year age group to 65+.

Source: AIHW analysis of ANZDATA data.

Table 1.10.11: Incidence of end-stage kidney disease for Indigenous Australians, by age group and sex, 2010–2012(a)

	Indigenous males						
Age group	**No.**	**Per cent(b)**	**No. per 100,000(c)**	**LCL 95%(d)**	**UCL 95%(d)**	**Rate ratio(e)**	**Rate difference(f)**
0–14 years	2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
15–24 years	6	1.9	2.9	0.6	5.2	1.4	0.9
25–34 years	20	6.3	14.7	8.3	21.2	4.2*	11.3*
35–44 years	62	19.4	52.7	39.5	65.8	7.0*	45.1*
45–54 years	110	34.5	120.5	98.0	143.0	9.2*	107.4*
55–64 years	83	26.0	156.1	122.5	189.7	6.3*	131.4*
65 +years	36	11.3	119.8	80.7	158.9	2.5*	72.0*
Total(g)	**319**	**100.0**	**57.2**	**50.2**	**64.2**	**4.7***	**44.9***

	Indigenous females						
Age group	**No.**	**Per cent(b)**	**No. per 100,000(c)**	**LCL 95%(d)**	**UCL 95%(d)**	**Rate ratio(e)**	**Rate difference(f)**
0–14 years	3	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
15–24 years	8	2.0	4.1	1.3	6.9	2.9*	2.7
25–34 years	17	4.3	12.3	6.5	18.1	4.2*	9.3*
35–44 years	79	19.9	62.1	48.4	75.9	13.3*	57.5*
45–54 years	122	30.7	124.6	102.5	146.7	16.0*	116.8*
55–64 years	116	29.2	202.7	165.8	239.6	14.5*	188.7*
65 +years	52	13.1	136.1	99.1	173.1	6.1*	113.7*
Total(g)	**397**	**100.0**	**65.6**	**58.7**	**72.6**	**9.8***	**59.0***

	Indigenous Total						
Age group	**No.**	**Per cent(b)**	**No. per 100,000(c)**	**LCL 95%(d)**	**UCL 95%(d)**	**Rate ratio(e)**	**Rate difference(f)**
0–14 years	5	1.0	0.7	0.1	1.3	0.8	–0.1
15–24 years	14	2.8	3.5	1.7	5.3	2.0*	1.7
25–34 years	37	7.3	13.5	9.2	17.9	4.2*	10.3*
35–44 years	141	27.8	57.6	48.1	67.1	9.4*	51.5*
45–54 years	232	45.8	122.6	106.8	138.4	11.8*	112.2*
55–64 years	199	39.3	180.2	155.2	205.3	9.3*	160.9*
65 +years	88	17.4	128.9	102.0	155.8	3.8*	94.8*
Total(g)	**716**	**100.0**	**61.7**	**56.7**	**66.6**	**6.6***	**52.3***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous Australian comparisons.

(a) Calender year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Proportion of male, female and total registration rates for Indigenous persons in the period 2010–2012.

(c) Age-specific rates per 100,000 population.

(d) LCL = lower confidence limit, UCL = upper confidence limit.

(e) Rate ratio Indigenous: non-Indigenous.

(f) Rate difference is Indigenous minus non-Indigenous.

(g) Total rates are directly age-standardised using the Australian 2001 standard population. Age-standardised rates have been calculated using the direct method, age-standardised by 5 year age group to 65+.

Source: AIHW analysis of ANZDATA data.

Table 1.10.12: Incidence of end-stage kidney disease, by Indigenous status, sex and state/territory, 2010–2012[(a)]

	Males				Females				Persons			
	No.	No. per 100,000[(b)]	Ratio[(c)]	Rate difference[(d)]	No.	No. per 100,000[(b)]	Ratio[(c)]	Rate difference[(d)]	No.	No. per 100,000[(b)]	Ratio[(c)]	Rate difference[(d)]
NSW/ACT												
Indigenous	52	29.3	2.4*	17.0*	62	37.1	5.3*	30.1*	114	33.5	3.5*	24.0*
Non-Indigenous	1,453	12.3	. .	. .	891	7.0	. .	. .	2,344	9.5	. .	. .
Vic												
Indigenous	20	50.5	3.8*	37.2*	15	n.p.	n.p.	n.p.	35	43.7	4.4*	33.8*
Non-Indigenous	1,136	13.3	. .	. .	634	6.8	. .	. .	1,770	9.9	. .	. .
Qld												
Indigenous	86	59.6	5.4*	48.5*	93	54.3	8.5*	47.9*	179	56.5	6.5*	47.8*
Non-Indigenous	739	11.1	. .	. .	451	6.4	. .	. .	1,190	8.7	. .	. .
WA												
Indigenous	61	82.4	6.8*	70.3*	74	97.6	16.0*	91.5*	135	91.1	10.1*	82.1*
Non-Indigenous	415	12.1	. .	. .	221	6.1	. .	. .	636	9.0	. .	. .
SA												
Indigenous	16	n.p.	n.p.	n.p.	29	86.1	13.5*	79.7*	45	73.1	7.9*	63.8*
Non-Indigenous	338	12.6	. .	. .	182	6.4	. .	. .	520	9.3	. .	. .
Tas												
Indigenous	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Non-Indigenous	89	10.4	. .	. .	52	5.6	. .	. .	141	7.9	. .	. .
NT												
Indigenous	82	132.6	13.3*	122.6*	121	171.3	n.p.	n.p.	203	151.9	16.0*	142.4*
Non-Indigenous	24	10.0	. .	. .	19	n.p.	. .	. .	43	9.5	. .	. .

(continued)

Table 1.10.12 (continued): Incidence of end-stage kidney disease, by Indigenous status, sex and state/territory, 2010–2012(a)

	Males				Females				Persons			
	No.	**No. per 100,000(b)**	**Ratio(c)**	**Rate difference(d)**	**No.**	**No. per 100,000(b)**	**Ratio(c)**	**Rate difference(d)**	**No.**	**No. per 100,000(b)**	**Ratio(c)**	**Rate difference(d)**
Australia												
Indigenous	319	57.2	4.7*	45.0*	397	65.6	9.8*	58.9*	716	61.7	6.6*	52.4*
Non-Indigenous	4,194	12.2	. .	. .	2,450	6.7	. .	. .	6,644	9.3	. .	. .

* Represents results with statistically significant differences at the $p < 0.05$ level in the Indigenous/non-Indigenous Australian comparisons.

(a) Calendar year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Directly age-standardised using the Australian 2001 standard population. Age-standardised rates have been calculated using the direct method, age-standardised by 5 year age group to 65+.

(c) Rate ratio Indigenous: non-Indigenous.

(d) Rate difference is Indigenous minus non-Indigenous.

Source: AIHW analysis of ANZDATA data.

Table 1.10.13: Incidence of end-stage kidney disease, by Indigenous status and remoteness, 2010–2012[(a)]

	Number		Per cent[(b)]		No. per 100,000[(c)]			
	Indig.	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Rate ratio[(d)]**	**Rate difference[(e)]**
Major cities	120	4,695	17.0	71.1	32.8	9.6	3.4*	23.2*
Inner regional	80	1,230	11.3	18.6	36.5	8.6	4.2*	27.9*
Outer regional	183	575	26.0	8.7	68.7	8.7	7.9*	60.0*
Remote	158	74	22.4	1.1	148.6	9.0	16.5*	139.5*
Very remote	164	26	23.3	0.4	96.6	7.9	12.2*	88.7*
Australia[(f)]	**716**	**6,644**	**100.0**	**100.0**	**61.7**	**9.3**	**6.6***	**52.4***

* Represents results with statistically significant differences at the $p < 0.05$ level in the Indigenous/non-Indigenous Australian comparisons.

(a) Calendar year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Proportion of Indigenous and non-Indigenous patients in each remoteness category.

(c) Directly age-standardised using the Australian 2001 standard population. Age-standardised rates have been calculated using the direct method, age-standardised by 5 year age group to 65+.

(d) Rate ratio Indigenous: non-Indigenous.

(e) Rate difference is Indigenous minus non-Indigenous.

(f) Australia total includes cases where remoteness category was not known.

Source: AIHW analysis of ANZDATA data.

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Table 1.10.14: Age-standardised incidence rates, rate ratios and rate differences for end-stage kidney disease, 1996–2012

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Annual change[(a)]	% change over period[(b)]
Indigenous																			
Males	46	57	67	58	66	70	81	81	90	91	104	108	117	85	97	105	117	3.9*	116.8*
Females	57	95	70	99	84	104	92	93	105	127	117	131	134	111	109	151	137	4.1*	90.0*
Persons	103	152	137	157	150	174	173	174	195	218	221	239	251	196	206	256	254	8.0*	101.3*
Non-Indigenous																			
Males	760	782	883	949	930	1,042	1,058	1,082	1,085	1,271	1,370	1,371	1,428	1,393	1,360	1,379	1,455	45.6*	92.6*
Females	563	552	586	643	672	692	659	722	669	805	843	772	872	842	764	861	825	19.1*	53.5*
Persons	1,323	1,334	1,469	1,592	1,602	1,734	1,717	1,804	1,754	2,076	2,213	2,143	2,300	2,235	2,124	2,240	2,280	64.8*	76.2*
Indigenous rate (no. per 100,000)[(c)]																			
Males	36.2	40.4	58.2	43.4	53.9	49.7	60.4	62.0	58.4	58.9	67.5	65.6	68.2	46.7	52.4	52.7	62.5	1.0*	32.6*
Females	52.8	79.7	61.8	74.6	62.5	82.2	74.3	68.8	73.1	91.2	71.7	79.2	74.1	57.5	62.9	71.2	68.8	0.1	2.5
Persons	42.9	59.1	58.8	62.2	56.8	67.0	63.5	61.0	63.1	70.6	69.5	68.3	69.5	50.7	54.3	61.7	64.3	0.4	12.3
Non-Indigenous[(c)] rate (no. per 100,000)																			
Males	9.2	9.3	10.3	10.9	10.6	11.6	11.6	11.6	11.4	13.1	13.8	13.5	13.6	12.9	12.4	12.2	12.6	0.2*	37.0*
Females	6.3	6.0	6.3	6.8	6.9	7.0	6.5	7.0	6.4	7.5	7.7	6.9	7.6	7.2	6.4	7.1	6.6	0.0	10.6
Persons	7.6	7.5	8.2	8.7	8.6	9.1	8.9	9.1	8.7	10.1	10.6	10.0	10.4	9.9	9.2	9.5	9.4	0.1*	26.3*
Rate ratio[(d)]																			
Males	3.9	4.3	5.6	4.0	5.1	4.3	5.2	5.3	5.1	4.5	4.9	4.9	5.0	3.6	4.2	4.3	4.9	n.a.	n.a.
Females	8.4	13.2	9.7	11.0	9.0	11.7	11.4	9.8	11.4	12.1	9.3	11.4	9.7	8.0	9.8	10.1	10.4	n.a.	n.a.
Persons	5.6	7.8	7.2	7.2	6.6	7.3	7.2	6.7	7.2	7.0	6.6	6.8	6.7	5.1	5.9	6.5	6.8	n.a.	n.a.

(continued)

Table 1.10.14 (continued): Age-standardised incidence rates, rate ratios and rate differences for end-stage kidney disease, 1996–2012

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Annual change[(a)]	% change over period[(b)]
Rate difference[(e)]																			
Males	27.0	31.1	47.9	32.4	43.3	38.1	48.9	50.4	47.0	45.8	53.7	52.1	54.6	33.8	40.0	40.5	49.8	0.7	31.4
Females	46.5	73.7	55.4	67.8	55.6	75.2	67.8	61.8	66.7	83.7	64.0	72.3	66.5	50.3	56.5	64.1	62.2	0.1	1.6
Persons	35.3	51.5	50.6	53.5	48.2	57.8	54.6	51.8	54.4	60.5	59.0	58.3	59.1	40.8	45.1	52.2	54.9	0.3	10.0

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1996–2012.

(a) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(b) Per cent change between 1996 and 2012 based on the average annual change over the period.

(c) Rates have been directly age-standardised using the Australian 2001 standard population. Age-standardised rates have been calculated using the direct method, age-standardised by 5 year age group to 75+.

(d) Incidence rate for Indigenous people divided by the rate for non-Indigenous Australians.

(e) Incidence rate for Indigenous people minus the rate for non-Indigenous Australians.

Source: AIHW analysis of ANZDATA data.

Table 1.10.15: Total patients with end-stage kidney disease, by Indigenous status and treatment, as at 31 December 2012[a]

	Number		Per cent[b]		No. per 100,000[c]			
Treatment	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Ratio[d]**	**Ratio difference[e]**
Dialysis	1,425	10,021	88.1	52.7	370.4	40.1	9.2*	330.3*
Transplant	192	8,977	11.9	47.3	43.5	38.1	1.1	5.4
Total	**1,617**	**18,998**	**100.0**	**100.0**	**413.9**	**78.2**	**5.3***	**335.6***

* Represents results with statistically significant differences at the $p < 0.05$ level in the Indigenous/non-Indigenous comparisons.

(a) Calendar year reporting.

(b) Proportion of Indigenous and non-Indigenous patients receiving dialysis and transplants.

(c) Directly age-standardised using the Australian 2001 standard population. Age-standardised rates have been calculated using the direct method, age-standardised by 5 year age group to 75+.

(d) Rate ratio Indigenous: non-Indigenous.

(e) Rate difference is Indigenous minus non-Indigenous.

Source: AIHW analysis of ANZDATA data.

Table 1.10.16: Incidence of end-stage kidney disease in Aboriginal and Torres Strait Islander people, by state and territory, 1996–2012

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Per cent change[(a)]
									Number									
New South Wales	10	19	20	17	14	23	17	20	13	25	21	33	29	19	29	35	47	192.3
Victoria	3	5	2	5	6	5	3	3	8	6	11	8	4	9	11	10	14	355.7
Queensland	27	34	36	44	42	49	59	48	47	48	66	66	56	49	62	63	54	78.8
South Australia	3	6	9	12	7	15	6	11	10	16	15	9	19	16	17	16	12	157.5
Western Australia	19	42	35	32	37	29	37	41	44	46	35	55	63	41	32	61	42	68.2
Northern Territory	40	46	35	45	43	53	49	48	72	76	71	67	76	59	52	67	84	90.3
Australia[(b)]	**103**	**152**	**137**	**157**	**150**	**174**	**173**	**174**	**195**	**218**	**221**	**239**	**251**	**196**	**206**	**256**	**254**	**101.3**
									Crude rate (per 100,000 population)									
New South Wales	6.5	12.1	12.4	10.3	8.4	13.5	9.8	11.3	7.2	13.5	11.1	17.1	14.7	9.5	14.2	16.8	22.1	96.2
Victoria	n.p.	15.3	n.p.	14.5	17.1	14.0	n.p.	n.p.	20.7	15.1	27.0	19.1	n.p.	20.2	23.9	21.1	28.9	153.4
Queensland	22.4	27.2	27.8	32.8	30.3	34.1	39.8	31.5	29.9	29.7	39.7	38.7	32.0	27.2	33.6	33.3	27.9	14.9
South Australia	n.p.	23.6	34.2	44.1	24.8	51.6	20.1	35.9	31.8	49.6	45.2	26.5	54.5	44.8	46.5	42.8	31.4	68.3
Western Australia	29.9	64.5	52.4	46.7	52.7	40.3	50.2	54.5	57.3	58.7	43.6	67.1	75.4	48.1	36.9	69.1	46.6	19.9
Northern Territory	72.8	82.4	61.7	78.0	73.3	88.8	80.5	77.4	113.9	118.0	108.3	101.0	113.4	87.1	76.1	97.3	120.0	48.5
Australia[(b)]	**22.0**	**31.6**	**27.7**	**30.9**	**28.8**	**32.5**	**31.6**	**31.0**	**34.0**	**37.1**	**36.7**	**38.8**	**39.9**	**30.5**	**31.4**	**38.2**	**37.1**	**37.9**

(a) Per cent change between 1996 and 2012, calculated using linear regression.

(b) Data for Tasmania and the Australian Capital Territory are not published due to small numbers, but are included in the Australian totals.

Source: AIHW analysis of ANZDATA data.

Data sources and quality

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013a). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013b).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the

2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014b).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

National Hospital Morbidity Database

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

Australia and New Zealand Dialysis and Transplant registry

The data reported here on Indigenous persons with end-stage kidney disease (ESKD) have been supplied by the Australia and New Zealand Dialysis and Transplant Registry (ANZDATA). Data sets provided for analysis are de-identified. The interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official policy or interpretation of the registry. Data are collected from all dialysis and transplant units in Australia and New Zealand at 31 December each year. This encompasses virtually all patient events that have occurred in the previous 12 months as well as a 'snapshot' of all dialysis and transplants patients on those dates.

Indigenous status question

A survey form is completed for all patients at the commencement of haemodialysis; this survey includes a prompt regarding Indigenous status. Separate results are not always published for Torres Strait Islanders because of the small number of patients.

Under-identification

Indigenous identification is based on self-identification in hospital records and discussion with the treating nurse or physician. The completeness of identification of Indigenous Australians in the registry is not known. However it is believed that Indigenous identification in the registry is more complete than in general hospital data (Cass et al. 2001). ESKD patients have regular contact with renal services from the time of diagnosis, through intensive maintenance therapy until death. There is heightened awareness of kidney disease in Indigenous Australians and multiple opportunities exist to reconfirm data accuracy (Cass et al. 2001).

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is ‘as reported’ by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013c). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Australian Health Survey

The Australian Health Survey (AHS) combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) together with 2 new elements: a National Nutrition and Physical Activity Survey (NNPAS) and a National Health Measures Survey (NHMS).

For more information see:

- National Health Survey <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4363.0.55.001Main+Features12011-13?OpenDocument>.
- National Aboriginal and Torres Strait Islander Health Survey <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4715.0/>.

- National Nutrition and Physical Activity Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.007~2011-12~Main%20Features~About%20the%20National%20Nutrition%20and%20Physical%20Activity%20Survey~731>.
- National Health Measures Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.005Chapter1102011-12>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 11 of 68

Detailed analyses

1.11 Oral health

This measure reports on experience of decayed, missing and filled teeth and dental treatment among Aboriginal and Torres Strait Islander people.

Introduction

This is no. 11 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- Australian Aboriginal and Torres Strait Islander Health Survey
- National Aboriginal and Torres Strait Islander Social Survey
- Child Dental Health Survey
- National Hospital Morbidity Database
- Stronger Futures in the Northern Territory dental data collection (previously Northern Territory Emergency Response Child Health Check Initiative—dental data collection)
- Medicare data.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Data on decayed, missing and filled teeth for Indigenous children and young people come from the Child Dental Health Survey. Oral health outcomes are usually measured in terms of the number of decayed, missing or filled deciduous infant teeth ('dmft') and the number of decayed, missing or filled permanent adult teeth ('DMFT'). Another measure of good oral health is the proportion of children with no tooth decay.

Data analyses on tooth loss pertain to adult teeth, excluding wisdom teeth—therefore, complete tooth loss refers to people who have lost all of their adult teeth.

For more information about access to dental care and barriers to seeking dental care when needed, see measure 3.14 and 3.08. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Self-reported dental problems, see tables 1.11.1–10
- Decayed, missing and filled teeth, see tables 1.11.13–20
- Dental care, see tables 1.11.11–1.11–12 and 1.11.21
- Dental services for children, see tables 1.11.22–27.

Self-reported dental problems

Current period

In 2008:

- Among Indigenous children aged under 15, an estimated 32% reported having teeth or gum problems. The most common problems were having tooth or teeth filled because of dental decay (16%) and untreated cavities or dental decay (15%) (Table 1.11.3).

In 2012–13, among Indigenous Australians aged 15 and over:

- An estimated 5% reported complete tooth loss (excluding wisdom teeth) and a further 47% reported having lost at least 1 adult tooth (Table 1.11.7). The proportion who reported complete tooth loss was significantly higher among those with diabetes (17%) compared with those without diabetes (3%), and among those with heart/circulatory disease (12%) compared with those without heart/circulatory disease (3%) (Table 1.11.8).
- The proportion who reported complete tooth loss was significantly higher among those whose highest level of schooling was Year 9 or below (11%) compared with those who completed Year 12 or equivalent (2%) (Table 1.11.8), and those in the lowest equivalised gross household income group (first quintile) (7%) compared with those in the highest group (fourth and fifth quintiles) (1%) (Table 1.11.9).

Decayed, missing and filled teeth

Current period

In 2010, in Queensland, Western Australia, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory combined:

- Indigenous children aged 5–10 had a significantly higher mean number of decayed, missing or filled deciduous teeth than non-Indigenous children of this age (3.81 and 2.22, respectively) (Table 1.11.13). The proportion of Indigenous children aged 5–10 with no decayed, missing or filled deciduous teeth was significantly lower than non-Indigenous children of this age (24% and 45%, respectively) (Table 1.11.14, Figure 1.11.1).
- Among those aged 6–15, Indigenous Australians had a higher mean number of decayed, missing or filled permanent teeth than non-Indigenous Australians (1.94 and 1.08, respectively) (Table 1.11.15). The proportion of Indigenous Australians aged 6–15 with no decayed, missing or filled permanent teeth was significantly lower than non-Indigenous Australians of this age (48% and 63%, respectively) (Table 1.11.16, Figure 1.11.2).

Dental care

In the 2 years 2011–12 to 2012–13:

- The rate of hospitalisations for dental problems for Indigenous Australians was 3 per 1,000. After adjusting for age, the rate for Indigenous Australians was 1.3 times the rate for non-Indigenous Australians (Table 1.11.21).
- Indigenous children aged 0–4 were hospitalised for dental conditions at twice the rate of non-Indigenous children (8 per 1,000 compared with 4 per 1,000) (Table 1.11.21).

In 2012–13:

- An estimated 21% of Indigenous Australians reported that they didn’t go to a dentist when they needed to in the previous 12 months. Reasons included cost (43%), being too busy (21%), waiting time too long/service not available at time required (20%) and disliking service/professional/feeling embarrassed or afraid (19%) (Table 3.08.4).

Dental services for children

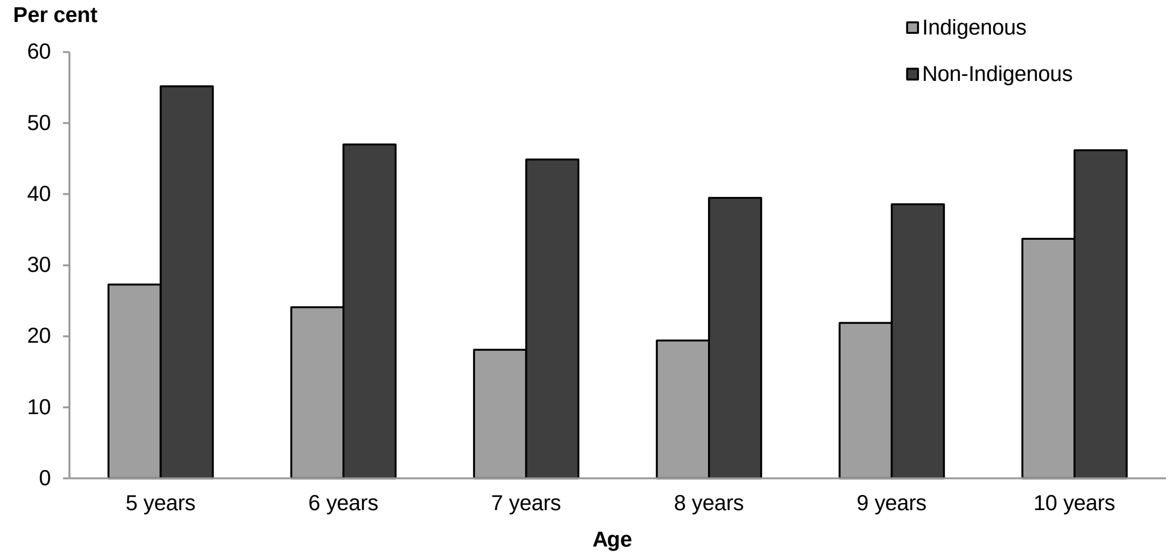
Current period

From August 2007 to December 2013, dental services targeted at Indigenous children in the Northern Territory were provided to 8,865 children through the Northern Territory Emergency Response Child Health Check Initiative/Stronger Futures in the Northern Territory Program. Of these children:

- Almost all (97%) received diagnostic dental services, 83% received preventative services and about half received follow-up dental services (53%) and restorative services (47%) (Table 1.11.24).
- 43% received treatment for at least 1 dental problem during a dental service. Of those, 86% received treatment for untreated caries (Table 1.11.25).

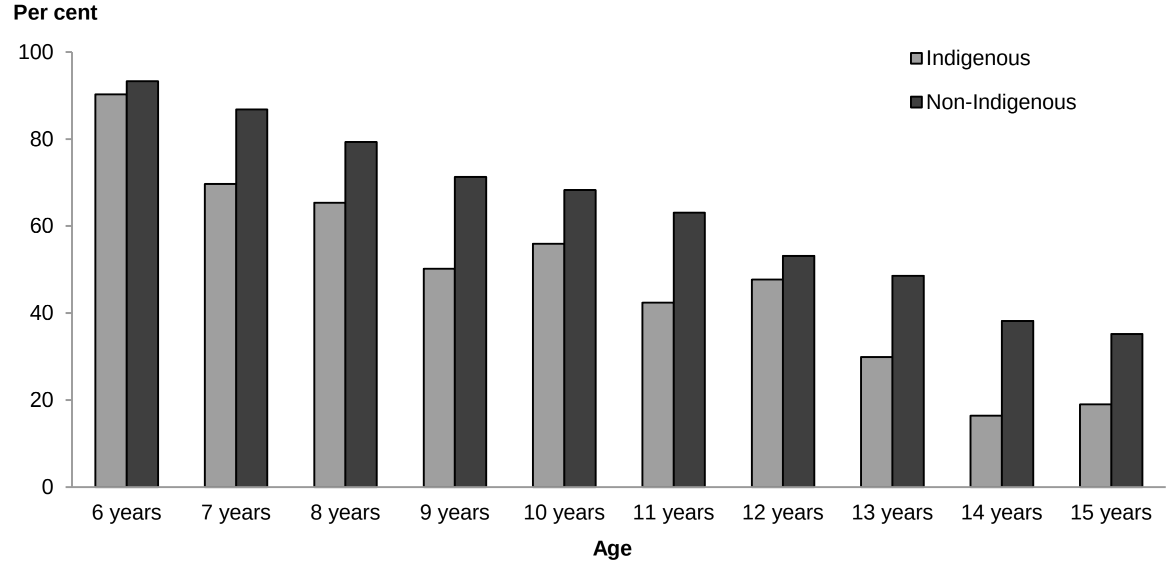
In 2014:

- A higher proportion of Indigenous than non-Indigenous children were eligible to receive services under the Child Dental Benefit Schedule (82% and 59%, respectively). However, the proportion of eligible children who received services claimed under the Child Dental Benefit Schedule was lower among Indigenous than non-Indigenous children (9% and 16%, respectively) (Table 1.11.26).
- Among Indigenous children, the most common types of services claimed under the Child Dental Benefit Schedule were diagnostic services (39% of Indigenous children) and preventive services (38%). These were also the most common types of services claimed for non-Indigenous children (38% and 43% respectively) (Table 1.11.27).



Source: Table 1.11.14.

Figure 1.11.1: Proportion of children aged 5–10 with no decayed, missing or filled deciduous teeth (dmft = 0), by age and Indigenous status, NT, Qld, SA, Tas, WA and ACT, 2010



Source: Table 1.11.16.

Figure 1.11.2: Proportion of children aged 6–15 with no decayed, missing or filled permanent teeth (DMFT = 0), by age and Indigenous status, NT, Qld, SA, Tas, WA and ACT, 2010

Table 1.11.1: Number and percentage of Indigenous children aged 0–14[(a)] with reported teeth or gum problems, by state/territory, 2008

	Number	Per cent[(b)]
NSW	17,826	32.8
Vic	4,519	38.3
Qld	17,811	33.8
WA	6,653	28.1
SA	3,190	33.1
Tas/ACT	2,885	36.8
NT	4,171	20.3
Aust.	57,055	31.6

(a) Excludes Indigenous children who do not have teeth and not known responses.

(b) Based on 2008 Indigenous population.

Source: AIHW analysis of 2008 NATSISS.

Table 1.11.2: Number and percentage of Indigenous children aged 0–14[(a)] with reported teeth or gum problems, by remoteness, 2008

	Number	Per cent[(b)]
Non-remote	47,307	34.1
Remote	9,748	24.0
Total	**57,055**	**31.8**

(a) Excludes Indigenous children who do not have teeth and not known responses.

(b) Based on 2006 Indigenous population.

Source: AIHW analysis of 2008 NATSISS.

Table 1.11.3: Number and proportion of Indigenous children aged 0–14[(a)] with reported teeth or gum problems, by type of dental or gum problem, 2008

	Number	Proportion
Type of teeth/gum problem		
Cavities or dental decay	27,089	15.2
Tooth or teeth filled because of dental decay	27,647	15.5
Teeth pulled out because of dental decay	12,203	6.8
An accident caused breakage or loss of teeth	7,474	4.2
Bleeding or sore gums	4,927	2.8
Other problems with teeth or gums	6,713	3.8
Total has teeth or gum problems[(b)]	*57,056*	*32.0*
Does not have teeth or gum problems	121,177	68.0
Total[(c)]	**178,233**	**100.0**
Not known	3,581	. .

(a) Indigenous children who have teeth. Excludes children who do not have teeth.

(b) Total will be less than the sum of the components as a child can have more than one tooth or gum problem.

(c) Excludes not known responses.

Source: AIHW analysis of 2008 NATSISS.

Table 1.11.4: Number and proportion of Indigenous children[(a)] with reported teeth or gum problems, by age, 2008

Age (years)	Number	Proportion
0–4	5,553	9.7
5–9	25,123	44.0
10–14	26,380	46.2
Total	**57,056**	**100.0**

(a) Indigenous children who have teeth. Excludes children who do not have teeth.

Note: Excludes not known responses.

Source: AIHW analysis of 2008 NATSISS.

Table 1.11.5: Number and proportion of Indigenous children aged 0–14 with reported teeth or gum problems by number of months with teeth or gum problem and remoteness, 2008

	Non-remote		Remote		Total	
Number of months	Number	Proportion	Number	Proportion	Number	Proportion
1 month	7,927	16.8	1,779	18.2	9,706	17.0
2 to <6	5,690	12.0	1,737	17.8	7,426	13.0
6 to <12	5,208	11.0	1,417	14.5	6,625	11.6
12+	28,483	60.2	4,816	49.4	33,299	58.4
Total	**47,307**	**100.0**	**9,748**	**100.0**	**57,056**	**100.0**

Source: AIHW analysis of 2008 NATSISS.

Table 1.11.6: Number and proportion of Indigenous children aged 0–14[(a)] with reported teeth or gum problems by time since last dental check, 2008

Time since last dental check	Number	Proportion
Less than 3 months ago	15,656	27.9
3 months to less than 6 months ago	8,622	15.3
6 months to less than a year ago	12,344	22.0
1 year ago to less than 2 years ago	12,096	21.5
2 years ago or more	3,237	5.8
Never	4,227	7.5
Total[(b)]	**56,180**	**100.0**
Not known	875	. .

(a) Includes children who have teeth only.

(b) Excludes not known responses.

Source: AIHW analysis of 2008 NATSISS.

Table 1.11.7: Status of tooth loss, Indigenous persons 15 years and over, by age, 2012–13

	Age group (years)				
	15–34	**35–44**	**45–54**	**55+**	**Total**
			Per cent[(a)]		
Natural tooth loss[(b)]					
Complete tooth loss[(c)]	23.2†	2.4†	6.9	23.6	4.7
Loss of one or more teeth[(d)]	28.8	61.5	72.5	69.3	46.6
No tooth loss	70.9	36.1	20.6	7.1	48.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Total number	**212,776**	**76,134**	**56,683**	**52,293**	**397,886**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Percentages add within columns.

(b) Self-reported data consisting of persons reporting whether they have lost any of their adult teeth (excluding wisdom teeth) and if so, how many.

(c) Complete tooth loss is comprised of persons who responded they have lost all of their adult teeth.

(d) Doesn't include 'complete tooth loss'.

Notes

1. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.
2. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.11.8: Indigenous persons (15 years and over) selected socioeconomic and health characteristics, by tooth loss 2012–13

	Complete tooth loss[a]	Lost some teeth	No missing teeth	Total[b]		Overall population distribution
		Per cent[c]		Per cent[c]	Number	Per cent[d]
SEIFA[e]						
1st quintile (most disadvantaged)	5.4	49.2	45.5	100.0	204,721	51.8
5th quintile (most advantaged)	3.0‡	43.8	53.1	100.0	14,814	3.7
Ratio most disadvantaged/most advantaged	1.8*	1.1*	0.9*	1.0	13.8	14.0
Employment						
Employed	2.0	45.7	52.4	100.0	183,814	45.8
Unemployed	1.6*†	45.5*	52.9*	100.0	50,436	12.5
Not in the labour force	8.7*	48.0*	43.3*	100.0	163,636	41.8
Ratio unemployed/employed	0.8*	1.0	1.0	1.0	0.3	0.3
Has non-school qualification[f]						
Yes	3.5	50.2	46.2	100.0	159,244	39.9
No	5.4	44.2	50.3	100.0	238,642	60.1
Ratio no/yes	1.5*	0.9*	1.1*	1.0	1.5	1.5
Highest year of school completed						
Year 12 or equivalent	1.5†	36.0	62.5	100.0	98,882	24.5
Year 9 or below[g]	10.6	55.6	33.8	100.0	113,424	29.2
Ratio Year 9 or below/Year 12	7.1*	1.5*	0.5*	1.0	1.1	1.2
Smoker status						
Current smoker [h]	4.2	53.6	42.1	100.0	169,964	43.0
Non-smoker [i]	5.0	41.4	53.6	100.0	227,922	57.0
Ratio smoker/non-smoker	0.8*	1.3*	0.8*	1.0	0.7	0.8
Adequate daily vegetable intake[j]						
Yes	7.9	51.2	40.9	100.0	19,542	4.9
No	4.5	46.4	49.1	100.0	378,344	95.1
Ratio no/yes	0.6*	0.9*	1.2*	1.0	19.4	19.4
Adequate daily fruit intake[k]						
Yes	5.0	45.5	49.5	100.0	170,848	42.8
No	4.4	47.5	48.1	100.0	227,038	57.2
Ratio no/yes	0.9*	1.04*	0.97*	1.0	1.3	1.3
Obese[l]						
Yes	5.7	55.0	39.4	100.0	121,192	37.0
No	4.1	44.7	51.3	100.0	207,761	63.0
Ratio yes/no	1.4*	1.2*	0.8*	1.0	0.6	0.6
Total number[m]	**15,337**	**159,380**	**154,236**	**. .**	**328,953**	**337,506**

(continued)

Table 1.11.8 (continued): Indigenous persons (15 years and over) selected socioeconomic and health characteristics, by tooth loss 2012–13

	Complete tooth loss(a)	Lost some teeth	No missing teeth	Total(b)		Overall population distribution
		Per cent(c)		Per cent(c)	Number	Per cent(d)
Self-assessed health status						
Excellent/very good/good	3.1	42.7	54.2	100.0	302,459	75.2
Fair/poor	9.7	59.0	31.3	100.0	95,428	24.8
Ratio fair, poor/excellent, very good, good	3.1*	1.4*	0.6*	1.0	0.3	0.3
Heart/circulatory disease(n)						
Yes	12.0	58.8	29.2	100.0	69,724	17.8
No	3.1	44.0	52.8	100.0	328,163	82.2
Ratio yes/no	3.9*	1.3*	0.6*	1.0	0.2	0.2
Diabetes(o)(p)						
Yes	17.3	65.2	17.5	100.0	44,166	11.7
No	3.1	44.3	52.6	100.0	353,721	88.3
Ratio yes/no	5.6*	1.5*	0.3*	1.0	0.1	0.1
Total number of persons 15+	**18,642**	**185,489**	**193,756**	**. .**	**397,886**	**408,941**

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested. For employment, ‘Not in the labour force’ was also tested against ‘Employed’. Overall population distribution and Total columns not tested.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting they have lost all of their adult teeth. This excludes wisdom teeth.

(b) Total excludes ‘don’t know’.

(c) Percentages add within rows.

(d) Distribution of total Indigenous population. Percentages add within columns.

(e) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(f) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED) (includes Bachelor degree or higher, diploma, advanced diploma, certificate).

(g) Year 9 or below includes never attended school.

(h) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoke less than weekly.

(i) Includes ex-smokers and those who have never smoked.

(j) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 and over, with the exception of 18–49 year old males who eat 6 serves.

(k) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 15 and over.

(l) Body Mass Index greater than 30.0 for people aged 18 and over. For information on the calculation of BMI scores for people aged 15–17, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001) or AATSIHS Updated Results 2012–13 (4727.0.55.006).

(m) Totals and population distributions exclude measurement not taken.

(n) Self-reported data consisting of persons reporting they have a current heart or circulatory condition which has lasted, or is likely to last, for 6 months or more.

(o) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for 6 months or more.

(p) Includes Type 1 and Type 2 diabetes, and type unknown. Includes persons who reported they had diabetes but that it was not current at the time of interview.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.11.9: Selected household and health risk factors by tooth loss, Indigenous persons (15 years and over), 2012–13

	Complete tooth loss(a)	Lost some teeth	No missing teeth	Total(b)		Overall population distribution
		Per cent(c)		Per cent(c)	Number	Per cent(d)
Equivalised gross household income(e)						
1st quintile (lowest)	7.4	48.6	43.9	100.0	136,468	42.7
4th/5th quintile (highest)	1.0†	44.4	54.6	100.0	54,460	17.0
Ratio lowest/highest	7.4*	1.1*	0.8*	1.0	2.5	2.5
Total number	**15,926**	**149,740**	**154,348**	**. .**	**320,014**	**328,690**
Financial stress—whether household could raise $2,000 in an emergency(f)						
Yes	3.4	43.5	53.1	100.0	173,373	46.2
No	6.0	49.3	44.7	100.0	200,055	53.8
Ratio yes/no	0.6*	0.9*	1.2*	1.0	0.9	0.9
Total number	**17,933**	**174,006**	**181,487**	**. .**	**373,427**	**383,711**
Household had day/s without money for basic living expenses in last 12 months						
Yes	4.6	50.4	45.0	100.0	158,295	40.5
No	n.p.	44.3	50.9	100.0	237,430	59.5
Ratio yes/no	. .	1.1*	0.9*	1.0	0.7	0.7
Total number	**18,606**	**184,923**	**192,196**	**. .**	**395,725**	**406,696**
Housing tenure type						
Owner	4.0	45.6	50.4	100.0	120,420	30.6
Renter	5.0	47.1	47.9	100.0	274,100	69.0
Ratio renter/owner	1.3*	1.0*	1.0*	1.0	2.3	2.3
Total number(f)	**18,606**	**184,992**	**192,442**	**. .**	**396,040**	**407,011**
Lives in overcrowded household(g)						
Yes	2.7	44.4	53.0	100.0	78,946	20.1
No	5.2	47.3	47.5	100.0	316,779	79.9
Ratio yes/no	0.5*	0.9*	1.1*	1.0	0.2	0.3
Total number	**18,606**	**184,923**	**192,196**	**. .**	**395,725**	**406,696**
Alcohol consumption						
Abstained from alcohol in last 12 months(h)	6.6*	45.0*	48.4.0*	100.0	104,169	26.4
Short-term/single occasion risk(i)						
Yes	2.6	46.9	50.5	100.0	215,045	53.6
No	7.8	48.7	43.5	100.0	71,733	18.2
Ratio yes/no	0.3*	1.0*	1.2*	1.0	3.0	2.9
Physical activity(j)(k)						
Met guidelines	3.3	49.6	47.1	100.0	114,550	41.4
Did not meet guidelines	7.4	50.8	41.8	100.0	160,216	58.6

(continued)

Table 1.11.9 (continued): Selected household and health risk factors by tooth loss, Indigenous persons (15 years and over), 2012–13

	Complete tooth loss[(a)]	Lost some teeth	No missing teeth	Total[(b)]		Overall population distribution
		Per cent[(c)]		Per cent[(c)]	Number	Per cent[(d)]
Ratio did not meet/met guidelines	2.2*	1.0*	0.9*	1.0	1.4	1.4
Total number	**15,730**	**138,221**	**120,815**	**. .**	**274,767**	**283,035**
Disability status[(l)]						
Has profound, severe or moderate core activity limitation	11.9*	53.7*	34.4*	100.0	47,524	12.5
Has a schooling/employment restriction only	4.3*	56.0	39.6*	100.0	43,134	10.9
Has unspecified limitation or restriction	7.2*	56.2*	36.6	100.0	85,907	21.6
Total with disability/long-term health condition	**7.8**	**55.5**	**36.7**	**100.0**	**176,565**	**45.0**
No disability/long-term health condition	2.2	39.5	58.2	100.0	221,322	55.0
Ratio disability/no disability	3.5*	1.4*	0.6*	1.0	0.8	0.8
Psychological distress (Kessler 5)[(m)]						
Low/moderate	4.7	50.4	44.9	100.0	245,302	69.8
High/very high	6.6	53.6	39.8	100.0	105,570	30.2
Ratio high, very high/low, moderate	1.4*	1.1*	0.9*	1.0	0.4	0.4
Total number[(n)(o)]	**18,490**	**180,221**	**152,162**	**. .**	**350,873**	**361,364**
Family stressors experienced in last 12 months[(p)]						
No stressors	5.2	40.4	54.4	100.0	104,346	26.3
Experienced one or more stressor	4.5	49.0	46.5	100.0	292,099	73.5
Ratio one or more/no stressors	0.9*	1.2*	0.9*	1.0	2.8	2.8
Total number	**18,606**	**185,434**	**193,284**	**. .**	**397,324**	**408,220**
Long term health conditions[(q)]						
No current long term health condition	0.9*†	29.6*	69.5*	100.0	78,989	19.5
One	1.5*†	40.4*	58.1*	100.0	75,370	18.6
Two	4.2*	45.9*	49.9*	100.0	62,043	15.5
Three or more	7.8	56.8	35.3	100.0	181,484	46.3
Ratio three or more/no conditions	8.7*	1.9*	0.5*	1.0	2.3	2.4
Total number of persons 15+	**18,642**	**185,489**	**193,756**	**. .**	**397,886**	**408,941**

(continued)

Table 1.11.9 (continued): Selected household and health risk factors by tooth loss, Indigenous persons (15 years and over), 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested. For Alcohol consumption, 'Abstained' was also tested against those who did not have 'Short term/single occasion risk'. For those with disability or long-term health condition, level of disability/long term health condition was also tested with 'Total with disability/long-term health condition' used as the reference category. Number of long term health conditions were also tested with 'Three or more' as the reference category. Overall population distribution and Total columns not tested.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Self-reported data consisting of persons reporting they have lost all of their adult teeth. This excludes wisdom teeth.

(b) Total excludes 'don't know'.

(c) Percentages add within rows.

(d) Distribution of total Indigenous population. Percentages add within columns.

(e) Excludes 'not stated' and 'not known'.

(f) Total includes 'other' and 'life tenure scheme'.

(g) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(h) Abstainer includes those who have never consumed alcohol.

(i) Includes those who drank alcohol. Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(j) Physical activity data collected from persons 18 years and over; and non-remote areas only.

(k) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(l) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person's overall level of core activity limitation is determined by their highest level of limitation in any of these activities. Only current difficulties with education and/or employment were collected. Respondents aged 65 and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned 'schooling/employment restriction only' had they been asked the question.

(m) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25.

(n) Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(o) Total population is 18 years and over.

(p) Stressors experienced by self, family or friends.

(q) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.11.10: Selected population characteristics for Indigenous persons (15 years and over) reporting complete tooth loss 2012–13(a)

	Remoteness						Overall population distribution
	Non-remote		Remote		Australia		
	Number	Rate(b)	Number	Rate(b)	Number	Rate(b)	Per cent(c)
Age							
15–34	310‡	0.2‡	257‡	0.6*‡	567†	0.3*†	52.4
35–44	1590†	2.7†	250†	1.4*†	1840†	2.4*†	19.0
45–54	3,434	7.8	451†	3.5*†	3,885	6.9*	14.7
55+	10,395	25.5	1,954	16.8*	12,350	23.6	13.9
Sex							
Males	7,287	4.8*	1,216	2.8*	8,503	4.3*	49.2
Females	8,443	5.4	1,695	3.8	10,138	5.0	50.8
State/territory							
NSW	5,940	5.0*	464	7.8*†	6,404	5.2*	31.3
Vic.	2,279	7.9	. .	. .	2,279	7.9*	7.2
Qld	3,849	4.4*	605	2.8*†	4,453	4.0*	27.6
SA	1,089	5.8*	205	5.4*†	1,294	5.7*	5.6
WA	1,021	3.3*	491	2.3*†	1,511	2.9*	13.0
Tas.	1,171	8.2	163	25.6‡	1,333	9.0	3.7
NT	332†	4.7*†	984	2.8*†	1,316	3.1*	10.6
ACT	50‡	1.3*‡	. .	. .	50‡	1.3*‡	1.0
Total per cent reporting complete tooth loss	**. .**	**5.1**	**. .**	**3.3***	**. .**	**4.7***	**100.0**
Total number 15+ reporting complete tooth loss	**15,730**	**. .**	**2,912**	**. .**	**18,642**	**. .**	**408,941**

* Represents statistically significant differences at the $p < 0.05$ level. Differences between rates were tested within each remoteness category for Sex and State Territory, using females as the reference category for Sex, and Tas as the reference category for State/territory. For Age, differences were tested between age-groups for Australia, using 15–34 as the reference category, and between remoteness columns, using non-remote as the references category. Differences between the overall rates for remoteness categories were also tested, using non-remote as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting they have lost all of their adult teeth.

(b) Rate per 100.

(c) Distribution of total Indigenous population. Percentages add within columns.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.11.11: Dental care and oral health, by age, sex and remoteness, Indigenous persons, 2012–13

	Age						Sex		Remoteness		Overall population distribution	
	2–14	15–24	25–34	35–44	45–54	55+	Males	Females	Non-remote	Remote	Number	Per cent(a)
						Per cent(b)						
Type of professional see for dental care												
Dentist	28.0	22.2	15.5	13.5	10.7	10.1	49.0	51.0	80.4	19.6	496,969	81.9
Doctor/GP	23.8	18.2	13.7	17.7	14.5†	12.2†	48.8	51.2	83.1	16.9	13,192	2.2
Nurse	65.5	7.6†	12.8†	6.8‡	4.2‡	3.2‡	45.0	55.0	50.1	49.9	5,051	0.8
Other	29.0	27.5	10.5†	7.4‡	10.0†	15.6†	33.2	66.8	92.2	7.8†	7,607	1.3
Never seen health prof about teeth	59.8	14.6	7.7	9.0	4.5	4.4	56.4	43.6	67.5	32.5	84,096	13.9
Total	*197,974*	*127,722*	*86,720*	*77,855*	*60,002*	*56,642*	*301,992*	*304,923*	*476,880*	*130,035*	*606,915*	*100.0*
Time since last visited dentist												
< 3 months ago	34.5	18.9	13.1	13.3	10.8	9.4	42.7	57.3	75.2	24.8	83,656	16.0
3 to less than 6 months ago	46.2	17.3	12.0	9.7	6.8	8.0	45.8	54.2	80.8	19.2	65,901	12.6
6 to less than 12 months ago	41.8	18.4	13.5	8.6	9.7	7.8	45.8	54.2	82.5	17.5	96,589	18.5
1 to less than 2 years ago	26.1	22.6	18.4	13.4	11.7	7.7	52.9	47.1	84.3	15.7	103,006	19.7
2+ years ago	10.1	27.7	17.2	18.1	12.8	14.1	51.8	48.2	80.1	19.9	161,664	30.9
Don't know	39.9	18.7	12.9†	11.9†	4.9†	11.6†	52.8	47.2	65.6	34.4	12,003	2.3
Total	*147,687*	*115,413*	*80,251*	*70,326*	*56,235*	*52,907*	*254,585*	*268,233*	*420,097*	*102,722*	*522,819*	*100.0*
Where last visited dentist												
Private dental clinic (including specialist)	13.9	20.7	17.7	18.1	15.4	14.3	51.4	48.6	92.2	7.8	174,402	33.4
Government dental clinic (including dental hospital)	25.1	22.0	17.2	13.3	11.8	10.6	44.6	55.4	79.2	20.8	157,489	30.1
School dental clinic	67.5	26.4	3.7	1.9†	0.5‡	0.1‡	54.0	46.0	77.5	22.5	85,850	16.4

(continued)

Table 1.11.11 (continued): Dental care and oral health, by age, sex and remoteness, Indigenous persons, 2012–13

	Age						Sex		Remoteness		Overall population distribution	
	2–14	15–24	25–34	35–44	45–54	55+	Males	Females	Non-remote	Remote	Number	Per cent[a]
						Per cent[b]						
Dentist at Aboriginal Medical Service[c]	20.6	21.8	18.9	17.3	10.7	10.7	44.8	55.2	61.5	38.5	83,913	16.1
Other	46.9	9.7†	17.8†	8.3†	12.1†	5.2†	44.3	55.7	77.1	22.9†	8,491	1.6
Don't know	37.9	23.8	14.8	8.1†	2.2†	13.2	55.0	45.0	78.7	21.3	12,674	2.4
Total	*147,687*	*115,413*	*80,251*	*70,326*	*56,235*	*52,907*	*254,585*	*268,233*	*420,097*	*102,722*	*522,819*	*100.0*
Usual reason for dental visit												
Treatment	8.9	18.0	22.2	21.2	16.2	13.4	51.2	48.8	83.2	16.8	132,293	21.8
Check-up	49.6	25.4	9.4	6.4	4.9	4.4	50.1	49.9	79.7	20.3	122,296	20.2
Both	29.5	22.7	15.0	12.5	10.8	9.5	46.2	53.8	79.8	20.2	234,432	38.6
Don't know	17.6	21.8	12.3	15.4	10.9	21.9	50.9	49.1	75.7	24.3	33,797	5.6
Total[d]	*197,974*	*127,722*	*86,720*	*77,855*	*60,002*	*56,642*	*301,992*	*304,923*	*476,880*	*130,035*	*606,915*	*100.0*
How long on waiting list[e]												
<7days (including did not wait)	53.0	24.5	10.0	5.5	4.1	2.9	48.8	51.2	100.0	. .	93,725	50.7
1 to <4 weeks	37.2	22.3	14.4	9.9	7.4	8.7	46.7	53.3	100.0	. .	30,968	16.7
1 to <3 months	39.2	24.5	11.4†	8.9†	10.0†	6.1†	43.9	56.1	100.0	. .	17,527	9.5
3 months or more	35.5	22.9	10.7†	13.2	7.4†	10.3	45.7	54.3	100.0	. .	22,450	12.1
Don't know	29.8	37.8	12.7	4.5†	6.5†	8.6	54.3	45.7	100.0	. .	20,283	11.0
Total	*82,083*	*46,944*	*20,787*	*13,727*	*10,837*	*10,575*	*89,207*	*95,746*	*184,953*	. .	*184,953*	*100.0*
Frequency of tooth brushing												
2 or more times a day	32.5	20.2	14.9	13.0	10.2	9.2	42.7	57.3	86.3	13.7	277,278	46.3
1 time a day	34.3	21.5	14.0	13.0	9.1	8.2	53.1	46.9	79.3	20.7	207,456	34.6
1+ times a week	36.5	26.8	11.5	11.9	8.6	4.7	61.6	38.4	75.5	24.5	50,273	8.4

(continued)

Table 1.11.11 (continued): Dental care and oral health, by age, sex and remoteness, Indigenous persons, 2012–13

	Age						**Sex**		**Remoteness**		**Overall population distribution**	
	2–14	**15–24**	**25–34**	**35–44**	**45–54**	**55+**	**Males**	**Females**	**Non-remote**	**Remote**		
						Per cent(b)					**Number**	**Per cent(a)**
<1 times a week	27.5	22.4	17.6	14.9†	10.1†	7.4†	61.0	39.0	53.6	46.4	10,801	1.8
Sometimes	30.5	22.4	17.4	13.5	8.8	7.4	60.6	39.4	41.3	58.7	34,582	5.8
Never	24.3	18.3	14.1	11.8	16.1	15.5	60.9	39.1	48.0	52.0	18,580	3.1
Total(f)	*197,520*	*127,722*	*86,673*	*77,320*	*58,490*	*51,246*	*298,337*	*300,633*	*470,710*	*128,260*	*598,970*	*100.0*
Lost/removed teeth (excl. wisdom teeth)(g)												
All	. .	n.p	n.p	9.9	20.8	66.2	45.6	54.4	84.4	15.6	18,642	4.7
One or more	. .	11.5	21.6	25.2	22.2	19.5	49.6	50.4	76.3	23.7	185,489	46.6
None	. .	54.6	23.2	14.2	6.0	1.9	49.7	50.3	78.7	21.3	193,756	48.7
Total	*. .*	*127,400*	*85,376*	*76,134*	*56,683*	*52,293*	*196,763*	*201,123*	*309,789*	*88,098*	*397,886*	*100.0*
Whether need to get false teeth to eat properly(g)												
Needs dentures or false teeth to eat properly	. .	4.0†	14.0	31.7	29.7	20.6	44.7	55.3	77.1	22.9	25,064	6.1
Does not need dentures or false teeth to eat properly	. .	14.0	24.7	25.3	20.1	15.8	51.9	48.1	72.9	27.1	145,229	35.5
Wears dentures or no teeth lost(h)	. .	44.6	19.8	13.9	9.8	11.9	48.0	52.0	80.8	19.2	238,648	58.4
Total	*. .*	*127,722*	*86,720*	*77,855*	*60,002*	*56,642*	*201,027*	*207,914*	*318,128*	*90,813*	*408,941*	*100.0*

(continued)

Table 1.11.11 (continued): Dental care and oral health, by age, sex and remoteness, Indigenous persons, 2012–13

	Age						**Sex**		**Remoteness**		**Overall population distribution**	
	2–14	**15–24**	**25–34**	**35–44**	**45–54**	**55+**	**Males**	**Females**	**Non-remote**	**Remote**		
						Per cent$^{(b)}$					**Number**	**Per cent**$^{(a)}$
Whether child (2–6) years had any teeth filled by dentist												
Yes	. .	. .	. .	. .	. .	. .	61.9	38.1	82.7	17.3†	7,874	10.0
No	. .	. .	. .	. .	. .	. .	43.6	56.4	83.4	16.6	29,770	37.7
Has not seen dentist or health professional	. .	. .	. .	. .	. .	. .	53.5	46.5	79.6	20.4	41,212	52.2
Total$^{(i)}$	. .	. .	. .	. .	. .	. .	*39,894*	*38,962*	*64,156*	*14,700*	*78,856*	*100.0*
Total number of persons aged 2+	**197,974**	**127,722**	**86,720**	**77,855**	**60,002**	**56,642**	**301,992**	**304,923**	**476,880**	**130,035**	**606,915**	**100.0**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Distribution of total Indigenous population.

(b) Percentages add within rows.

(c) Includes Aboriginal Medical Service, Aboriginal or Torres Strait Islander Medical Service, Community clinic.

(d) Total includes ‘never seen health professional about teeth’.

(e) Non-remote only item.

(f) Excludes people who have lost all teeth.

(g) Aged 15 and over.

(h) Excludes wisdom teeth.

(i) Excludes ‘Don’t Know’.

Notes

1. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.
2. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.11.12: Reasons parent did not take child to see a dentist when needed to in last 12 months, 2008

Reasons why parent did not take child to see a dentist when needed to	Number	Proportion
Cost	3,048	20.7
Transport/distance	1,712	11.6
Waiting time too long or not available at time required	4,715	32.0
Not available in area	2,311	15.7
Could not find time to take child (including personal/family responsibilities)	2,382	16.1
Dislikes service/professional/afraid/embarrassed	1,330	9.0
Decided not to seek care for child	860	5.8
Other	1,769	12.0
Total needed to go to a dentist but didn't(a)	**14,751**	**100.0**
Total did not need to see dentist in last 12 months	**163,804**	**. .**

(a) Total will be less than the sum of the components as more than one reason may be reported.

Note: Children aged 0–14 who had teeth and needed to go to a dentist but did not go.

Source: AIHW analysis of 2008 NATSISS.

Table 1.11.13: Mean number of decayed, missing or filled deciduous teeth, children aged 5–10, by Indigenous status and jurisdiction, 2010

	NT		Qld		SA		Tas		WA		Total	
Age	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**
						Decayed						
5–7 years	2.62*	0.81*	3.54*	2.28*	2.40*	1.05*	1.22	0.97	2.35*	0.80*	3.05*	1.49*
8–10 years	1.47*†	0.48*	2.02*	1.30*	1.22*	0.73*	0.90*	0.69*	0.60†	0.37	1.60*	0.87*
Total	**2.02***	**0.65***	**2.81***	**1.79***	**1.83***	**0.88***	**1.06***	**0.82***	**1.43***	**0.58***	**2.33***	**1.18***
						Missing						
5–7 years	0.68*†	0.14*	0.32	0.19	0.61*	0.22*	0.90	0.52	0.12‡	0.02†	0.41*	0.16*
8–10 years	0.43*†	0.12*	0.15†	0.14	0.39*	0.19*	0.56*†	0.47*	0.00	0.01	0.22	0.13
Total	**0.55*†**	**0.13***	**0.24†**	**0.17**	**0.50***	**0.20***	**0.73**	**0.49**	**0.06‡**	**0.01‡**	**0.32***	**0.15***
						Filled						
5–7 years	1.77*	0.87*	0.63*	0.58*	1.22	0.85	1.01	0.84	0.96*	0.40*	0.96*	0.60*
8–10 years	1.45*	1.22*	1.30*	1.25*	1.56	1.35	1.31	1.27	1.35*	0.95*	1.37	1.18
Total	**1.60***	**1.04***	**0.95**	**0.91**	**1.38**	**1.11**	**1.16**	**1.06**	**1.17***	**0.68***	**1.16***	**0.89***
						Decayed, missing or filled (dmft)						
5–7 years	5.08*	1.81*	4.49*	3.05*	4.23*	2.12*	3.12*	2.32*	3.43*	1.22*	4.41*	2.26*
8–10 years	3.34*	1.82*	3.47*	2.69*	3.17*	2.27*	2.78	2.43	1.95	1.33	3.19*	2.18*
Total	**4.17***	**1.81***	**4.00***	**2.87***	**3.72***	**2.20***	**2.96***	**2.37***	**2.65***	**1.28***	**3.81***	**2.22***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Note: Data for ACT were not able to be published separately but are included in totals. Data for NSW and Vic not available.

Source: AIHW analysis of Child Dental Health Survey.

Table 1.11.14: Proportion of children aged 5–10 with no decayed, missing or filled deciduous teeth (dmft = 0), by age and Indigenous status, 2010

	NT		Qld		SA		Tas		WA		Total			
Age	Indig.%	Non-Indig.%	Indig.%	Non-Indig.%	Indig.%	Non-Indig.%	Indig.%	Non-Indig.%	Indig.%	Non-Indig.%	Indig. %	Non-Indig. %	Rate ratio[(a)]	Rate difference[(b)]
							Decayed							
5 years	31.7*	74.6*	30.9*	47.2*	37.3*	65.8*	65.7	71.3	31.2*†	73.0*	32.7*	60.5*	0.5	–27.8
6 years	33.6*	71.7*	27.4	44.5	41.3*	62.5*	54.9	63.7	42.0*	66.1*	32.0*	56.6*	0.6	–24.6
7 years	40.7*	71.4*	24.2*	46.5*	44.7*	62.9*	59.2	64.3	46.3*	74.4*	33.3*	59.5*	0.6	–26.2
8 years	42.5*	71.8*	37.0	44.3	40.5*	62.6*	60.9	64.3	60.4†	81.0	41.1*	60.3*	0.7	–19.2
9 years	46.6*	73.3*	29.1*	48.4*	46.1*	63.7*	59.5	65.1	70.8	77.9	40.9*	61.2*	0.7	–20.3
10 years	60.8*	81.1*	55.9	59.5	59.1	69.4	52.1†	71.6	71.7	86.0	60.1	70.0	0.9	–9.9
Total	**42.9***	**74.0***	**34.1***	**48.4***	**45.1***	**64.5***	**59.2***	**66.8***	**54.7***	**76.4***	**40.2***	**61.4***	**0.7**	**–21.2**
							Missing							
5 years	84.4*	95.0*	99.4*	94.8*	85.7*	94.5*	84.6	89.7	97.7	99.8	94.5	95.8	1.0	–1.3
6 years	79.3*	93.4*	89.2	93.0	82.2*	90.8*	75.0	74.4	98.2	98.7	87.6	93.1	0.9	–5.5
7 years	81.4*	92.0*	77.6*	91.6*	80.5	88.7	45.2	63.2	100.0*	99.1*	80.7*	91.5*	0.9	–10.8
8 years	77.2*	91.5*	93.4	90.0	76.2*	86.9*	69.1	69.4	100.0*	99.3*	88.3	90.9	1.0	–2.6
9 years	85.7	91.3	90.8	93.3	80.2	88.3	74.6	74.4	100.0*	99.9*	89.2	93.0	1.0	–3.8
10 years	90.1	93.8	92.5	96.1	90.2	91.2	86.4	78.1	100.0*	99.8*	93.2	94.9	1.0	–1.7
Total	**82.9***	**92.9***	**90.6**	**93.2**	**82.9***	**90.1***	**74.0**	**74.9**	**99.3**	**99.4**	**89.1**	**93.2**	**1.0**	**–4.1**
							Filled							
5 years	63.0*	81.4*	89.2	88.6	76.1	82.2	65.3	78.1	97.7	94.3	83.7	88.0	1.0	–4.3
6 years	50.2*	70.2*	78.5	78.5	59.9	72.1	58.3	69.0	76.2	87.0	71.2	79.0	0.9	–7.8
7 years	46.7*	62.1*	60.5	70.3	52.6	63.0	48.7	61.1	46.6*	76.5*	54.8*	70.1*	0.8	–15.3

(continued)

Table 1.11.14 (continued): Proportion of children aged 5–10 with no decayed, missing or filled deciduous teeth (dmft = 0), by age and Indigenous status, 2010

	NT		Qld		SA		Tas		WA		Total			
Age	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig. %**	**Non-Indig. %**	**Rate ratio(a)**	**Rate difference(b)**
8 years	42.3	52.3	56.7	55.0	43.4	55.2	42.9	54.4	20.3‡	67.0	48.8	58.6	0.8	–9.8
9 years	46.6*	55.4*	44.2*	52.0*	45.0*	52.2*	47.3†	52.4	68.4	63.2	47.9	55.6	0.9	–7.7
10 years	60.1	62.6	49.5	58.7	51.6	55.8	46.3	57.9	41.3†	63.7	50.0	59.5	0.8	–9.5
Total	**51.0***	**64.3***	**64.1**	**67.2**	**55.5**	**63.2**	**52.5**	**62.1**	**59.9**	**75.1**	**59.7***	**68.4***	**0.9**	**–8.7**
							Decayed, missing or filled (dmft)							
5 years	17.7*	65.0*	28.7*	43.7*	29.9*	57.5*	41.4*	57.3*	28.9*	69.4*	27.3*	55.2*	0.5	–27.9
6 years	14.4*†	54.9*	25.0	37.7	24.3*	49.2*	26.2	39.4	33.2*	58.4*	24.1*	47.0*	0.5	–22.9
7 years	16.3*†	48.0*	16.7*	37.3*	26.6*	43.7*	17.4†	30.7	19.3‡	59.1	18.1*	44.9*	0.4	–26.8
8 years	16.1*†	40.7*	23.5†	28.9	11.5*†	38.1*	26.3	31.6	6.5*‡	57.6*	19.4*	39.5*	0.5	–20.1
9 years	19.6*	42.0*	17.8*	29.7*	20.4*	36.3*	26.0†	31.9	43.2	54.9	21.9*	38.6*	0.6	–16.7
10 years	36.3*	52.5*	33.6	40.9	35.4	42.5	22.7‡	39.2	31.6†	58.4	33.7*	46.2*	0.7	–12.5
Total	**20.0***	**50.8***	**24.5***	**36.3***	**25.4***	**44.4***	**27.9***	**38.4***	**28.7***	**59.5***	**24.3***	**45.2***	**0.5**	**–20.9**

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Rate ratio is Indigenous divided by non-Indigenous.

(b) Rate difference is Indigenous minus non-Indigenous.

Note: Data for ACT were not able to be published separately but are included in totals. Data for NSW and Vic not available.

Source: AIHW analysis of Child Dental Health Survey.

Table 1.11.15: Mean number of decayed, missing or filled permanent teeth (DMFT) for children aged 6–15, by age and Indigenous status, 2010

	NT		Qld		SA		Tas		WA		Total	
Age	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**
						Decayed						
6–7 years	0.15*	0.05*	0.41*	0.27*	0.11	0.07	0.17†	0.08	0.07‡	0.06	0.28*	0.15*
8–9 years	0.36*	0.13*	0.75	0.53	0.41*	0.16*	0.50*	0.19*	0.21†	0.13	0.56*	0.31*
10–11 years	0.61*†	0.22*	0.99	0.73	0.59*	0.22*	0.44†	0.28	0.76†	0.14†	0.82*	0.42*
12–13 years	1.16	0.42	2.08	1.33	1.09*	0.39*	0.63†	0.50	0.14‡	0.32	1.38	0.78
14–15 years	2.07*	0.79*	3.20†	2.11	1.58*	0.58*	0.92†	0.62	1.00‡	0.52	2.44	1.25
Total	**0.87***	**0.31***	**1.53***	**1.02***	**0.77***	**0.29***	**0.55†**	**0.34**	**0.52†**	**0.24**	**1.15***	**0.6***
						Missing						
6–7 years	0.01	0.00	0.01‡	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
8–9 years	0.10‡	0.02†	0.06†	0.01‡	0.02†	0.01	0.03‡	0.02†	0.00	0.02‡	0.05†	0.02†
10–11 years	0.14†	0.08‡	0.03†	0.01	0.10†	0.02	0.00	0.04†	0.06†	0.02†	0.06†	0.02
12–13 years	0.27	0.12†	0.08†	0.06	0.09†	0.04†	0.20‡	0.10	0.00	0.02†	0.11†	0.05
14–15 years	0.30	0.19	0.17‡	0.04†	0.16†	0.07	0.16‡	0.18	0.00	0.02†	0.17†	0.06
Total	**0.16**	**0.08†**	**0.07‡**	**0.03**	**0.07†**	**0.03**	**0.08†**	**0.07**	**0.02†**	**0.02†**	**0.08*†**	**0.03***
						Filled						
6–7 years	0.19	0.10†	0.03†	0.04	0.04†	0.01	0.02	0.02	0.00	0.01	0.06	0.03
8–9 years	0.60	0.45†	0.23	0.26	0.16	0.14	0.24	0.18	0.34*	0.09*	0.32*	0.18*
10–11 years	1.06	0.85†	0.65	0.43	0.29	0.31	0.58†	0.37	0.34†	0.20	0.63*	0.35*
12–13 years	1.95	1.32	0.87	0.75	0.55	0.58	0.68	0.70	0.21‡	0.38	0.94	0.62
14–15 years	2.17	1.82	1.19	1.18	1.10	1.05	1.41	1.13	1.79	0.82	1.45*	1.06*
Total	**1.19**	**0.88**	**0.60**	**0.55**	**0.44**	**0.44**	**0.61***	**0.50***	**0.62**	**0.31**	**0.71***	**0.46***

(continued)

Table 1.11.15 (continued): Mean number of decayed, missing or filled permanent teeth (DMFT) for children aged 6–15, by age and Indigenous status, 2010

	NT		Qld		SA		Tas		WA		Total	
Age	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**
	Decayed, missing or filled (DMFT)											
6–7 years	0.35*	0.15*	0.44*	0.31*	0.15*	0.08*	0.19†	0.10	0.07‡	0.06	0.35*	0.18*
8–9 years	1.05	0.59	1.04	0.80	0.59*	0.32*	0.78*	0.39*	0.55*	0.24*	0.94*	0.51*
10–11 years	1.81	1.16	1.67*	1.17*	0.98*	0.56*	1.02*	0.70*	1.16†	0.36	1.51*	0.78*
12–13 years	3.37*	1.86*	3.03*	2.14*	1.73*	1.02*	1.51	1.30	0.35‡	0.72	2.42*	1.45*
14–15 years	4.54*	2.81*	4.56	3.33	2.84*	1.7*	2.50	1.93	2.79†	1.35	4.06*	2.36*
Total	**2.22***	**1.27***	**2.2***	**1.6***	**1.28***	**0.76***	**1.24**	**0.92**	**1.15†**	**0.56**	**1.94***	**1.08***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Note: Data for ACT were not able to be published separately but are included in totals. Data for NSW and Vic not available.

Source: AIHW analysis of Child Dental Health Survey.

Table 1.11.16: Proportion of children aged 6–15 with no decayed, missing or filled permanent teeth (DMFT = 0), by age and Indigenous status, 2010

	NT		Qld		SA		Tas		WA		Total	
Age	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig. %**	**Non-Indig. %**
6 years	91.6*	96.2*	87.3	89.5	96.8	96.8	95.7	96.6	98.2	95.6	90.3	93.3
7 years	75.8*	88.2*	59.9*	78.7*	85.1*	91.4*	78.2	90.1	86.7	95.2	69.7*	86.8*
8 years	68.0*	80.3*	63.4	69.7	78.1	85.3	72.6	82.2	55.2*	88.4*	65.4*	79.3*
9 years	49.9	69.2	44.5*	60.9*	62.5*	75.9*	52.9*	73.6*	63.0*	82.8*	50.2*	71.3*
10 years	46.4	64.5	49.5	56.9	61.3*	74.8*	58.4	69.0	76.6	80.5	56.0	68.3
11 years	41.3	53.6	40.1	52.8	54.8	65.3	55.1	62.1	41.5*	76.7*	42.4*	63.1*
12 years	26.5*	45.1*	30.0	42.7	42.8*	60.6*	66.7	55.1	88.2	62.6	47.7	53.2
13 years	23.2†	36.5	29.4†	37.3	43.0	50.1	19.3*	43.9*	37.0‡	66.3	29.9	48.6
14 years	24.0	30.1	15.7†	30.8	25.8*	43.0*	35.5†	38.0	5.7*‡	47.3*	16.4*	38.2*
15 years	14.6*	37.2*	20.1	25.8	23.8*	38.7*	27.8	34.9	16.2‡	47.0	19.0*	35.2*
Total	**46.2***	**61.1***	**44.5***	**53.8***	**56.8***	**67.4***	**55.0***	**63.5***	**56.7**	**73.8**	**48.1***	**63.1***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Note: Data for ACT were not able to be published separately but are included in totals. Data for NSW and Vic not available.

Source: AIHW analysis of Child Dental Health Survey.

Table 1.11.17: Mean DMFT of Indigenous and non-Indigenous children aged 6–15 by residential location, 2010

	NT				Qld				SA			
	Indig.	**Non-Indig.**	**Rate ratio**[(a)]	**Rate difference**[(b)]	**Indig.**	**Non-Indig.**	**Rate ratio**[(a)]	**Rate difference**[(b)]	**Indig.**	**Non-Indig.**	**Rate ratio**[(a)]	**Rate difference**[(b)]
Major cities												
6–7 years	n.a.	n.a.	n.a.	n.a.	0.35	0.33	1.06	0.02	0.13	0.08	1.63	0.05
8–9 years	n.a.	n.a.	n.a.	n.a.	0.98	0.81	1.21	0.17	0.58*	0.29*	2.00	0.29
10–11 years	n.a.	n.a.	n.a.	n.a.	1.60*	1.12*	1.43	0.48	0.85*	0.53*	1.60	0.32
12–13 years	n.a.	n.a.	n.a.	n.a.	3.32*	2.31*	1.44	1.01	1.52	0.94	1.62	0.58
14–15 years	n.a.	n.a.	n.a.	n.a.	5.81*	3.67*	1.58	2.14	2.72	1.59	1.71	1.13
Total	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**2.49***	**1.72***	**1.45**	**0.77**	**1.16***	**0.71***	**1.63**	**0.45**
Inner regional												
6–7 years	n.a.	n.a.	n.a.	n.a.	0.29†	0.33	0.88	–0.04	0.15*	0.07*	2.14	0.08
8–9 years	n.a.	n.a.	n.a.	n.a.	1.37*	0.89*	1.54	0.48	0.44*	0.32*	1.42	0.13
10–11 years	n.a.	n.a.	n.a.	n.a.	1.87	1.35	1.39	0.52	0.63	0.53	1.19	0.10
12–13 years	n.a.	n.a.	n.a.	n.a.	2.7†	2.06	1.31	0.64	1.31	1.04	1.26	0.27
14–15 years	n.a.	n.a.	n.a.	n.a.	6.47*	3.57*	1.81	2.90	2.21	1.76	1.26	0.45
Total	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**2.52***	**1.60***	**1.58**	**0.92**	**1.14**	**0.77**	**1.48**	**0.37**

(continued)

Table 1.11.17 (continued): Mean DMFT of Indigenous and non-Indigenous children aged 6–15 by residential location, 2010

	NT				Qld				SA			
	Indig.	**Non-Indig.**	**Rate ratio(a)**	**Rate difference(b)**	**Indig.**	**Non-Indig.**	**Rate ratio(a)**	**Rate difference(b)**	**Indig.**	**Non-Indig.**	**Rate ratio(a)**	**Rate difference(b)**
Outer regional												
6–7 years	0.22	0.13	1.69	0.09	0.55	0.28†	1.96	0.27	0.22*	0.10*	2.20	0.12
8–9 years	0.80*	0.48*	1.67	0.32	0.77	0.65	1.18	0.12	0.38	0.41	0.93	–0.03
10–11 years	1.43	0.93	1.54	0.50	1.37†	1.07	1.28	0.30	1.14*	0.69*	1.65	0.45
12–13 years	3.28*	1.62*	2.02	1.66	3.75*	1.97*	1.90	1.78	1.47	1.26	1.17	0.21
14–15 years	4.67*	2.57*	1.82	2.10	2.45	2.81	0.87	–0.36	2.34†	2.11	1.11	0.23
Total	**2.25***	**1.09***	**2.06**	**1.16**	**1.63**	**1.45**	**1.12**	**0.18**	**1.06**	**0.94**	**1.13**	**0.12**
Remote/very remote												
6–7 years	0.46*	0.21*	2.19	0.25	0.51*	0.13*	3.92	0.38	0.09	0.10	0.90	–0.01
8–9 years	1.31*	0.9*	1.46	0.41	1.22	0.75†	1.63	0.47	0.93*	0.39*	2.38	0.54
10–11 years	2.15	1.73	1.24	0.42	1.82*	0.92*	1.98	0.90	1.37†	0.66	2.08	0.71
12–13 years	3.48	2.54	1.37	0.94	2.24	2.09†	1.07	0.15	3.20*	1.33*	2.41	1.87
14–15 years	4.34†	3.27	1.33	1.07	4.59*	1.92*	2.39	2.67	3.95	2.07	1.91	1.88
Total	**2.20**	**1.69**	**1.30**	**0.51**	**2.37**	**1.27**	**1.87**	**1.10**	**2.05***	**0.93***	**2.20**	**1.12**

(continued)

Table 1.11.17 (continued): Mean DMFT of Indigenous and non-Indigenous children aged 6–15 by residential location, 2010

	Tas				WA				Total			
	Indig.	**Non-Indig.**	**Rate ratio(a)**	**Rate difference(b)**	**Indig.**	**Non-Indig.**	**Rate ratio(a)**	**Rate difference(b)**	**Indig.**	**Non-Indig.**	**Rate ratio(a)**	**Rate difference(b)**
Major cities												
6–7 years	n.a.	n.a.	n.a.	n.a.	0.11‡	0.05	2.20	0.06	0.26†	0.16†	1.63	0.10
8–9 years	n.a.	n.a.	n.a.	n.a.	0.71*	0.12*	5.92	0.59	0.82	0.41†	2.00	0.41
10–11 years	n.a.	n.a.	n.a.	n.a.	1.25*	0.31*†	4.03	0.94	1.35*	0.64*†	2.11	0.71
12–13 years	n.a.	n.a.	n.a.	n.a.	0.15*‡	0.70*	0.21	–0.55	2.39	1.30	1.84	1.09
14–15 years	n.a.	n.a.	n.a.	n.a.	1.57†	1.14	1.38	0.43	3.98†	2.18	1.83	1.80
Total	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**1.03†**	**0.48**	**2.15**	**0.55**	**1.91**	**0.97**	**1.97**	**0.94**
Inner regional												
6–7 years	0.12†	0.09	1.33	0.03	0.23‡	0.11†	2.09	0.12	0.27†	0.25	1.08	0.02
8–9 years	0.47†	0.39	1.21	0.08	0.00*	0.29*	0.00	–0.29	1.16*	0.68*	1.71	0.48
10–11 years	0.65†	0.68	0.96	–0.03	0.5‡	0.34	1.47	0.16	1.52	1.04	1.46	0.48
12–13 years	1.68†	1.30	1.29	0.38	1.66*	0.56*	2.96	1.10	2.43†	1.64	1.48	0.79
14–15 years	2.67	1.88	1.42	0.79	0.00*	1.09*	0.00	–1.09	5.72*	2.77*	2.06	2.95
Total	**1.27†**	**0.90**	**1.41**	**0.37**	**0.5‡**	**0.47**	**1.06**	**0.03**	**2.19***	**1.26***	**1.74**	**0.93**

(continued)

Table 1.11.17 (continued): Mean DMFT of Indigenous and non-Indigenous children aged 6–15 by residential location, 2010

	Tas				WA				Total			
	Indig.	Non-Indig.	Rate ratio(a)	Rate difference(b)	Indig.	Non-Indig.	Rate ratio(a)	Rate difference(b)	Indig.	Non-Indig.	Rate ratio(a)	Rate difference(b)
Outer regional												
6–7 years	0.27†	0.11	2.45	0.16	0.00*	0.06*	0.00	–0.06	0.38	0.18	2.11	0.20
8–9 years	1.02*	0.37*	2.76	0.65	0.44†	0.32	1.38	0.12	0.75*	0.50*	1.50	0.25
10–11 years	1.34†	0.65	2.06	0.69	2.70‡	0.42	6.43	2.28	1.57	0.84	1.87	0.73
12–13 years	1.44	1.29	1.12	0.15	0.25‡	0.85	0.29	–0.6	3.09*	1.57*	1.97	1.52
14–15 years	1.86	1.95	0.95	–0.08	3.30*	1.81*	1.82	1.49	3.21	2.42	1.33	0.79
Total	**1.17**	**0.91**	**1.29**	**0.26**	**1.84***	**0.74***	**2.49**	**1.10**	**1.79***	**1.16***	**1.54**	**0.63**
Remote/very remote												
6–7 years	0.00*	0.12*†	0.00	–0.12	0.06‡	0.07‡	0.86	–0.01	0.43*	0.11*†	3.91	0.32
8–9 years	0.78‡	0.50	1.56	0.28	0.66	0.51	1.29	0.15	1.16*	0.60*	1.93	0.56
10–11 years	0.00*	1.02*	0.00	–1.02	1.04	0.71†	1.46	0.33	1.77*	0.87*	2.03	0.90
12–13 years	0.92‡	1.36	0.68	–0.44	1.54†	0.98	1.57	0.56	2.71	1.58	1.72	1.13
14–15 years	4.94†	2.16	2.29	2.78	4.77†	2.05†	2.33	2.72	4.51*	2.11*	2.14	2.40
Total	**1.47**	**1.03**	**1.43**	**0.44**	**1.74†**	**0.80**	**2.18**	**0.94**	**2.21***	**1.07***	**2.07**	**1.14**

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Rate ratio is Indigenous divided by non-Indigenous.

(b) Rate difference is Indigenous minus non-Indigenous.

Note: Data for ACT were not able to be published separately but are included in totals. Data for NSW and Vic not available.

Source: AIHW analysis of Child Dental Health Survey.

Table 1.11.18: Mean dmft for Indigenous and non-Indigenous children aged 5–10 by remoteness and jurisdiction, 2010

	NT				Qld				SA			
	Indig.	**Non-Indig.**	**Rate ratio**[(a)]	**Rate difference**[(b)]	**Indig.**	**Non-Indig.**	**Rate ratio**[(a)]	**Rate difference**[(b)]	**Indig.**	**Non-Indig.**	**Rate ratio**[(a)]	**Rate difference**[(b)]
Major cities												
5–7 years	. .	. .	. .	. .	4.87*	3.25*	1.50	1.62	3.94*	2.05*	1.92	1.89
8–10 years	. .	. .	. .	. .	2.55	2.65	0.96	–0.10	3.04*	2.09*	1.45	0.95
Total	**. .**	**. .**	**. .**	**. .**	**3.77***	**2.94***	**1.28**	**0.83**	**3.50***	**2.07***	**1.69**	**1.43**
Inner regional												
5–7 years	. .	. .	. .	. .	3.69	3.23	1.14	0.46	3.76*	2.02*	1.86	1.74
8–10 years	. .	. .	. .	. .	3.46	2.84	1.22	0.62	3.31*	2.36*	1.40	0.95
Total	**. .**	**. .**	**. .**	**. .**	**3.58**	**3.03**	**1.18**	**0.55**	**3.54***	**2.20***	**1.61**	**1.34**
Outer regional												
5–7 years	5.24*	1.88*	2.79	3.36	4.45*	2.55*	1.75	1.90	4.44*	2.47*	1.80	1.97
8–10 years	3.49*	1.79*	1.95	1.70	3.97*	2.47*	1.61	1.50	3.00	2.84	1.06	0.16
Total	**4.30***	**1.84***	**2.34**	**2.46**	**4.23***	**2.51***	**1.69**	**1.72**	**3.79***	**2.66***	**1.42**	**1.13**
Remote/very remote												
5–7 years	4.94*	1.67*	2.96	3.27	5.02*	2.38*	2.11	2.64	5.24*	2.38*	2.20	2.86
8–10 years	3.20*	1.92*	1.67	1.28	3.80	2.83	1.34	0.97	3.87	2.92	1.33	0.95
Total	**4.06***	**1.79***	**2.27**	**2.27**	**4.39**	**2.62**	**1.68**	**1.77**	**4.56***	**2.66***	**1.71**	**1.90**

(continued)

Table 1.11.18 (continued): Mean dmft for Indigenous and non-Indigenous children aged 5–10 by remoteness and jurisdiction, 2010

	Tas				WA				Total			
	Indig.	Non-Indig.	Rate ratio(a)	Rate difference(b)	Indig.	Non-Indig.	Rate ratio(a)	Rate difference(b)	Indig.	Non-Indig.	Rate ratio(a)	Rate difference(b)
Major cities												
5–7 years	. .	. .	. .	. .	4.59*	1.18*	3.89	3.41	4.59*	2.09*	2.20	2.50
8–10 years	. .	. .	. .	. .	2.34*	1.04*	2.25	1.30	2.64	1.90	1.39	0.74
Total	**. .**	**. .**	**. .**	**. .**	**3.64***	**1.11***	**3.28**	**2.53**	**3.67***	**1.99***	**1.84**	**1.68**
Inner regional												
5–7 years	2.96*	2.02*	1.47	0.94	3.75*	1.24*	3.02	2.51	3.66*	2.69*	1.36	0.97
8–10 years	2.23	2.29	0.97	–0.06	1.79	1.73	1.03	0.06	3.25	2.56	1.27	0.69
Total	**2.60***	**2.15***	**1.21**	**0.45**	**2.85***	**1.49***	**1.91**	**1.36**	**3.46***	**2.63***	**1.32**	**0.83**
Outer regional												
5–7 years	3.40*	2.46*	1.38	0.94	2.85*	1.31*	2.18	1.54	4.39*	2.28*	1.93	2.11
8–10 years	2.99*	2.51*	1.19	0.48	1.67	1.80	0.93	–0.13	3.53*	2.36*	1.50	1.17
Total	**3.21***	**2.49***	**1.29**	**0.72**	**2.44***	**1.56***	**1.56**	**0.88**	**3.99***	**2.32***	**1.72**	**1.67**
Remote/very remote												
5–7 years	2.07‡*	3.27*	0.63	–1.2	1.67‡	1.17	1.43	0.50	4.80*	1.94*	2.47	2.86
8–10 years	3.80†*	2.67*	1.42	1.13	1.84	1.81	1.02	0.03	3.31	2.41	1.37	0.90
Total	**2.92†***	**2.96***	**0.99**	**–0.04**	**1.80**	**1.49**	**1.21**	**0.31**	**4.00***	**2.18***	**1.83**	**1.82**

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Rate ratio is Indigenous divided by non-Indigenous.

(b) Rate difference is Indigenous minus non-Indigenous.

Note: Data for ACT were not able to be published separately but are included in totals. Data for NSW and Vic not available.

Source: 2010 Child Dental Health Survey.

Table 1.11.19: Proportion of Indigenous and non-Indigenous children aged 5–10 with dmft = 0 by remoteness and jurisdiction, 2010

	NT		Qld		SA		Tas		WA		Total	
	Indig.%	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig. %**	**Non-Indig. %**
Major cities												
5–7 years	. .	. .	24.7*	37.2*	29.9*	51.5*	. .	. .	21.4*‡	61.9*	25.4*	51.6*
8–10 years	. .	. .	37.2	33.0	23.6*	41.8*	. .	. .	29.1*	67.3*	32.3	47.8
Total	**. .**	**. .**	**30.6**	**35.0**	**26.8***	**46.6***	**. .**	**. .**	**24.7***	**64.6***	**28.7***	**49.6***
Inner regional												
5–7 years	. .	. .	34.5	37.1	34.8	49.3	32.3	46.0	24.6*†	61.2*	33.4	42.7
8–10 years	. .	. .	27.1	31.0	26.1*	36.9*	30.9*	35.7*	45.8†	42.2	28.9	33.9
Total	**. .**	**. .**	**30.8**	**34.1**	**30.6**	**42.9**	**31.6***	**40.9***	**34.3†**	**51.5**	**31.2**	**38.3**
Outer regional												
5–7 years	13.9*†	55.6*	18.7*	46.4*	23.9*	45.8*	26.1	40.5	23.3*	61.0*	18.8*	48.5*
8–10 years	21.7*†	45.9*	15.5*	37.2*	24.9	31.1	22.1	33.5	53.3*	38.3*	21.4*	36.7*
Total	**18.1*†**	**50.8***	**17.3***	**42.0***	**24.4***	**38.3***	**24.2***	**36.9***	**33.7***	**49.2***	**20.0***	**42.6***
Remote/Very remote												
5–7 years	18.1*	57.4*	19.5*	45.0*	17.1*	44.8*	49.6†	34.5	62.4	65.7	21.3*	52.8*
8–10 years	25.5*	42.9*	23.7	32.3	21.2†	28.0	19.4‡	30.8	30.0	42.5	25.1*	35.8*
Total	**21.8***	**50.4***	**21.7***	**38.2***	**19.2***	**36.1***	**34.8†**	**32.6**	**38.3**	**54.1**	**23.3***	**44.1***

* Represents results with statistically significant differences in the Indigenous/Non-Indigenous comparisons at the $p < 0.05$ level.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Note: Data for ACT were not able to be published separately but are included in totals. Data for NSW and Vic not available.

Source: 2010 Child Dental Health Survey.

Table 1.11.20: Proportion of Indigenous and non-Indigenous children aged 6–15 with DMFT = 0 by remoteness and jurisdiction, 2010

	NT		Qld		SA		Tas		WA		Total	
	Indig.%	Non-Indig.%	Indig.%	Non-Indig.%	Indig.%	Non-Indig.%	Indig.%	Non-Indig.%	Indig.%	Non-Indig.%	Indig. %	Non-Indig. %
Major cities												
6–7 years	. .	. .	79.1	83.7	91.3	94.3	. .	. .	88.9	95.5	83.7*	91.2*
8–9 years	. .	. .	53.7*	62.8*	69.8*	81.3*	. .	. .	59.6*	91.4*	59.4	78.6
10–11 years	. .	. .	50.3	56.7	58.9*	71.2*	. .	. .	34.1*	81.6*	50.7*	70.5*
12–13 years	. .	. .	20.9*	37.1*	46.6*	57.3*	. .	. .	85.0	65.7	34.9	53.8
14–15 years	. .	. .	16.5*	25.8*	27.9	43.0	. .	. .	15.6‡	51.5	18.6†	39.7
Total	**. .**	**. .**	**44.5***	**52.2***	**58.8***	**68.7***	**. .**	**. .**	**43.2†**	**76.5**	**47.7***	**66.0***
Inner regional												
6–7 years	. .	. .	85.4	83.2	92.1	94.5	87.6	93.7	77.2†	94.0	85.1	87.1
8–9 years	. .	. .	45.2*	63.5*	75.2	81.1	72.2	77.7	100.0	81.3*	52.6*	69.5*
10–11 years	. .	. .	45.2	49.3	63.9	69.8	65.5	65.2	71.0	79.4	51.4	57.7
12–13 years	. .	. .	26.5†	38.3	36.6*	55.9*	42.6	49.8	49.2*	70.2*	30.1	46.0
14–15 years	. .	. .	12.2‡	27.1	27.4*	39.2*	29.9*	37.6*	100.0*	56.4*	16.1†	34.1
Total	**. .**	**. .**	**43.9***	**53.0***	**52.5***	**67.3***	**56.2**	**63.9**	**75.4**	**76.6**	**47.8***	**59.2***
Outer regional												
6–7 years	87.0*	92.5*	67.3*	84.8*	87.7*	93.4*	87.6	93.1	100.0*	94.5*	77.7	89.2
8–9 years	65.3*	76.7*	65.3	71.7	75.1	77.4	53.0*	78.8*	71.4	80.1	65.8*	75.4*
10–11 years	49.7	63.1	43.0†	58.3	56.1	65.3	47.9*	67.2*	44.2*	72.1*	46.7*	63.1*
12–13 years	22.3*	42.6*	32.0	44.4	47.8	48.8	37.7	49.8	93.8	60.2	33.7	48.2
14–15 years	18.3*	34.2*	29.7	32.5	30.1	33.1	38.5†	36.2	0.0*	35.4*	21.7	33.7
Total	**46.2***	**62.9***	**49.5**	**56.6**	**60.8**	**62.8**	**53.6***	**63.8***	**48.2***	**67.1***	**49.2***	**60.6***

(continued)

Table 1.11.20 (continued): Proportion of Indigenous and non-Indigenous children aged 6–15 with DMFT = 0 by remoteness and jurisdiction, 2010

	NT		Qld		SA		Tas		WA		Total	
	Indig.%	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig.%**	**Non-Indig.%**	**Indig. %**	**Non-Indig. %**
Remote/Very remote												
6–7 years	80.0*	91.3*	74.8*	90.9*	92.9	93.3	100.0*	92.5*	93.6	96.9	79.7*	93.6*
8–9 years	52.5	68.6	45.9*	71.5*	62.0	77.4	64.4†	73.7	40.1*	74.9*	49.1*	73.5*
10–11 years	38.7	48.4	40.8	60.7	58.3	66.5	100.0*	57.3*	57.0	63.5	44.0*	61.6*
12–13 years	27.5†	37.8	38.1†	49.3	26.1*	45.7*	49.6†	44.1	7.5‡*	51.3*	30.2	48.3
14–15 years	21.7*	33.1*	10.0*	34.6*	11.3*	34.6*	0.0*	30.5*	0.0*	34.4‡*	11.9*	34.1*
Total	**46.0**	**56.8**	**38.1***	**58.8***	**47.7***	**62.8***	**57.5**	**59.6**	**37.3***	**65.5***	**41.6***	**61.6***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Note: Data for ACT were not able to be published separately but are included in totals. Data for NSW and Vic not available.

Source: 2010 Child Dental Health Survey.

Table 1.11.21: Age-specific hospitalisation rates for dental problems (rates per 1,000), by Indigenous status, Australia, 2011–12 to 2012–13(a)(b)

	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65+	All ages	
									Crude(c)	Age std.(d)
Males										
Indigenous	8.4	6.4	0.5	0.7	0.9	0.8	0.4	0.3	3.0	1.9
Non-Indigenous	3.9	4.6	0.5	0.6	0.7	0.8	1.0	1.1	1.5	1.5
Rate ratio(e)	2.2	1.4	0.9	1.1	1.3	0.9	0.4	0.3	2.0	1.3
Rate difference(f)	4.6	1.8	–0.1	0.1	0.2	–0.1	–0.7	–0.8	1.5	0.4
Females										
Indigenous	7.2	6.5	0.6	1.0	0.8	0.7	0.6	0.4	2.8	1.9
Non-Indigenous	3.7	4.6	0.7	0.6	0.8	1.0	1.2	1.0	1.5	1.6
Rate ratio(e)	2.0	1.4	1.0	1.6	1.1	0.7	0.5	0.4	1.9	1.2
Rate difference(f)	3.5	1.9	0.0	0.4	0.0	–0.3	–0.6	–0.6	1.3	0.4
Persons(g)										
Indigenous	7.8	6.4	0.6	0.8	0.8	0.8	0.5	0.4	2.9	1.9
Non-Indigenous	3.8	4.6	0.6	0.6	0.7	0.9	1.1	1.0	1.5	1.5
Rate ratio(e)	2.1	1.4	0.9	1.4	1.1	0.8	0.5	0.4	2.0	1.3
Rate difference(f)	4.0	1.8	–0.1	0.2	0.1	–0.2	–0.6	–0.7	1.4	0.4

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes K02, K081, Z012.

(c) All age data includes age not stated.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(g) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.11.22: Number of dental services per child, Indigenous children who had a dental service, 1 August 2007 to 31 December 2013

	Checks		Children	
	Number	**Per cent**	**Number**	**Per cent**
1 dental check[(a)]	4,065	21.2	4,065	45.9
2 dental checks or more	15,066	78.8	4,800	54.1
Total	**19,131**	**100.0**	**8,865**	**100.0**

(a) Where the Hospital Record Number was invalid or missing, data were reported as one dental service received.

Notes

1. Data are only provided for occasions of service where children's families have provided consent to share information with the AIHW. These accounted for 81% of all occasions of service.
2. Data include services provided through the Child Health Check Initiative (CtG) Program in prescribed areas of the Northern Territory from 1 August 2007 to 30 June 2012, and through the Stronger Futures in the Northern Territory Program in the whole Northern Territory from 1 July 2012 on.
3. Data relate to occasions of service to children aged 0–15.

Source: AIHW analysis of Child Health Check Initiative/Stronger Futures dataset.

Table 1.11.23: Number of Indigenous children who received dental services, by age and sex, 1 August 2007 to 31 December 2013

	Children	
	Number	**Per cent**
Age group (years)		
0–5	2,071	23.4
6–11	4,810	54.3
12–15	1,984	22.4
16+	n.a.	n.a.
Missing	n.a.	n.a.
Sex		
Male	4,367	49.3
Female	4,496	50.7
Missing	2	0
Total	**8,865**	**100.0**

Notes

1. Data are only provided for occasions of service where children's families have provided consent to share information with the AIHW. These accounted for 81% of all occasions of service.
2. Data include services provided through the Child Health Check Initiative (CtG) Program in prescribed areas of the Northern Territory from 1 August 2007 to 30 June 2012, and through the Stronger Futures in the Northern Territory Program in the whole Northern Territory from 1 July 2012 on.
3. Data relate to occasions of service to children aged 0–15. Age as at most recent dental service.

Source: AIHW analysis of Child Health Check Initiative/Stronger Futures dataset.

Table 1.11.24: Type of clinical dental management received by Indigenous children, 1 August 2007 to 31 December 2013

Dental services provided	Number	Per cent
Diagnostic	8,557	96.5
Health Preventative	7,313	82.5
Restorative	4,175	47.1
Surgery	1449	16.3
Surgery under general anaesthetic	359	4
Endodontic	162	1.8
Periodontic	94	1.1
Require follow-up dental services	4680	52.8
Other	13	0.1
Total children	**8,865**	**100.0**

Notes

1. This is a multiple response item. Children may have received more than one treatment.
2. Data include cases where the Hospital Record Number was unknown.
3. Data are only provided for occasions of service where children's families have provided consent to share information with the AIHW. These accounted for 81% of all occasions of service.
4. Data include services provided through the CHCI (CtG) Program in prescribed areas of the Northern Territory from 1 August 2007 to 30 June 2012, and through the Stronger Futures in the Northern Territory Program in the whole Northern Territory from 1 July 2012 on.
5. Data relate to occasions of service to children aged 0–15.

Source: AIHW analysis of Child Health Check Initiative/Stronger Futures dataset.

Table 1.11.25: Types of dental problems of Indigenous children that were treated at their last dental check, 1 August 2007 to 31 December 2013

	Total number of children	
Problem treated	**Number**	**Per cent**
Untreated caries	3,288	37.1
Dental abscess	182	2.1
Mouth infection or mouth sore	127	1.4
Gum disease	119	1.3
Broken or chipped teeth due to trauma	41	0.5
Abnormal teeth growth	40	0.5
Missing teeth[(a)]	8	0.1
Other	698	7.9
Children treated for at least one dental problem during dental service	*3,814*	*43.0*
Children who did not receive treatment or had no dental problem diagnosed during dental service	*5,051*	*57.0*
Total number of children who received dental service	**8,865**	**100.0**

(a) Missing teeth are reported as a type of dental problem rather than a problem treated as missing teeth are not replaced.

Notes

1. This is a multiple response item. Children may have received more than one treatment.
2. Data include cases where the Hospital Record Number was unknown.
3. Data are only provided for occasions of service where children's families have provided consent to share information with the AIHW. These accounted for 81% of all occasions of service.
4. Data include services provided through the CHCI (CtG) Program in prescribed areas of the Northern Territory from 1 August 2007 to 30 June 2012, and through the Stronger Futures in the Northern Territory Program in the whole Northern Territory from 1 July 2012 on.
5. Data relate to occasions of service to children aged 0–15.

Source: AIHW analysis of Child Health Check Initiative/Stronger Futures dataset.

Table 1.11.26: Child Dental Benefit Schedule: children with services claimed or eligible, by Indigenous status, Australia, 2014[(a)]

	Children with services claimed			Children eligible for services		
	Number of children	**% of children with claims[(b)]**	**% of eligible children[(c)]**	**Number of children**	**% of total population[(d)]**	**Total population[(d)]**
Indigenous	19,029	4.4	9.0	211,103	82.1	257,103
Non-Indigenous	414,365	95.6	15.8	2,618,854	59.1	4,431,066
Total	**433,394**	**100.0**	**15.3**	**2,829,957**	**60.4**	**4,688,169**

(a) Reporting is by calendar year. Because the Child Dental Benefit Scheme commenced on 1 Jan 2014, only a partial year of data was available (Jan to Jun 2014).

(b) Per cent of children with services claimed who are Indigenous/non-Indigenous.

(c) Children with services claimed as a percentage of children eligible for services in the reporting period.

(d) Population 2–17 years as at 30 June 2014 based on the 2011 Census.

Note: A child's eligibility is assessed at the beginning of each year and a child may be eligible if they are aged 2–17 years for at least 1 day of the calendar year (so services may be provided to 1–18 year olds).

Source: Analysis of Medicare Data by AIHW and Medicare Benefit Division, Department of Health.

Table 1.11.27: Child Dental Benefits Schedule: services claimed, by type of service and Indigenous status, Australia, 2014[(a)]

	Indigenous		Non-Indigenous		Total			
Type of service	Number of services	% of total services claimed	Number of services	% of total services claimed	Number of services	% of total services claimed	Rate ratio[(b)]	Rate difference[(c)]
Diagnostic services	33,217	39.4	675,155	37.5	708,372	37.6	1.0	1.9
Preventive services	32,057	38.0	777,987	43.2	810,044	43.0	0.9	–5.2
Periodontics	115	0.1	1,466	0.1	1,581	0.1	1.7	0.1
Oral surgery	2,832	3.4	56,833	3.2	59,665	3.2	1.1	0.2
Endodontics	693	0.8	14,077	0.8	14,770	0.8	1.1	0.0
Restorative services	15,151	18.0	267,614	14.9	282,765	15.0	1.2	3.1
Prosthodontics	44	0.1	926	0.1	970	0.1	1.0	0.0
General services	296	0.4	6,495	0.4	6,791	0.4	1.0	0.0
Total	**84,404**	**100.0**	**1,800,554**	**100.0**	**1,884,958**	**100.0**	. .	. .

(a) Reporting is by calendar year. As the Child Dental Benefit Scheme commenced on 1 Jan 2014, only a partial year of data was available (Jan–Jun 2014).

(b) Rate ratio is the Indigenous percentage divided by the non-Indigenous percentage.

(c) Rate difference is the Indigenous percentage minus the non-Indigenous percentage.

Note: A child's eligibility is assessed at the beginning of each year and a child may be eligible if they are aged 2–17 for at least 1 day of the calendar year (so services may be provided to 1–18 year olds).

Source: Analysis of Medicare Data by AIHW and Medicare Benefit Division, Department of Health.

Data quality issues

National Aboriginal and Torres Strait Islander Social Survey

The NATSISS is conducted in all states and territories and includes *Remote* and *Non-remote* areas. The 2008 survey was undertaken between August 2008 and April 2009, with a sample size of 13,300 persons (5,500 aged 0–14 and 7,800 aged 15 and over) in 6,900 households, and a response rate of 82% of households. Up to 3 randomly selected Indigenous Australians were chosen from selected households to participate in the survey. Trained ABS interviewers conducted the survey using face-to-face interviews. In *Non-remote* areas interviewers used a notebook computer to record responses, while in *Remote* areas a paper questionnaire was used. Interviewers obtained the consent of a parent or guardian before interviewing those aged 15–17. Indigenous persons usually resident in non-private dwellings, such as hotels, motels, hostels, hospitals, short-stay caravan parks, prisons and other correctional facilities were excluded.

The NATSISS uses the standard Indigenous status question. The NATSISS sample was specifically designed to select a representative sample of Indigenous Australians.

As with other surveys, the NATSISS is subject to sampling and non-sampling errors.

Care has been taken to ensure that the results of this survey are as accurate as possible. Trained ABS officers conducted all interviews. However, some factors may affect the reliability of the data.

Information recorded in this survey is 'as reported' by respondents, and therefore may differ from information available from other sources or collected using different methodologies.

Data on health-related indicators have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the states and territories and the Indigenous and non-Indigenous population.

Time series comparisons for the 2008 survey are available through the 1994 National Aboriginal and Torres Strait Islander Survey and the 2002 NATSISS. However not all data elements align across the 3 (1994, 2001 and 2008) NATSISS surveys, hence care is required when reviewing results across the 3 surveys.

There are no strictly comparable non-Indigenous results available for the 2008 NATSISS. Where possible, the ABS has provided recommendations for non-Indigenous data comparisons (such as the 2007–08 National Health Survey) and these have been adopted in this report.

The 2008 NATSISS had a relatively large level of under-coverage when compared with other ABS surveys. There was also an increase in under-coverage compared to previous ABS Indigenous surveys. For example, the estimated under-coverage in the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) was 42%. The overall under-coverage rate for the 2008 NATSISS was approximately 53% of the in-scope population at the national level. This rate varied across the states and territories (ABS 2010).

Further information on NATSISS data quality issues can be found in the *National Aboriginal and Torres Strait Islander Social Survey: User's guide, 2008* (ABS 2010).

Child Dental Health Survey

All states and territories provide subsidised dental care for school-aged children (usually a school dental service). Each participating jurisdiction provides oral health data annually to AIHW Dental Statistics Research Unit. Data provided are for a sample of children who visit a service. These data are compiled into a national dataset.

Data relate to the calendar year 2010. No data are collected for New South Wales as children attending the service have been triaged and are not representative of children who approached the service for care. Data are not currently provided for Victoria.

In Queensland and Western Australia, children were sampled at random from school dental service (SDS) clinics by selecting those examined during the 2010 calendar year who were born on specific days of the month. In other jurisdictions, a full count was extracted from electronic patient records. Although there are national standards for collecting data, there are some variations in SDS coverage, level of enrolment, services policy focus, or access to services in *Rural* or *Remote* areas. Therefore, any comparison among states and territories should be made with caution.

Indigenous status was reported for all jurisdictions. Children were reported as 'non Aboriginal', 'unknown', 'Aboriginal', 'Aboriginal and Torres Strait Islander' according to child/parent's report to examining clinician. Nearly 4% of children/parents reported 'unknown' or did not report their Indigenous status. In this data set, 6.8% of children are recorded as Aboriginal, Torres Strait Islander and/or Aboriginal and Torres Strait Islander (AIHW 2014a).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/515381>.

National Hospital Morbidity Database

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital*

Statistics 2012–13, available at
<http://www.aihw.gov.au/publication-detail/?id=60129546922>.

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Stronger Futures in the Northern Territory dental data collection

This collection was previously known as the Northern Territory Emergency Response Child Health Check Initiative—dental data collection.

In response to the high level of need identified in the Northern Territory Emergency Response Child Health Check Initiative (started in August 2007), the Australian Government initiated a program of follow-up services, including ear and oral health services, initially as part of the Northern Territory Emergency Response (NTER) Child Health Check Initiative (CHCI) and later through the Closing the Gap in the Northern Territory National Partnership Agreement (CtG). Clinical dental services have been funded continuously over this time. The follow-up services targeted children who received a referral from their initial Child Health Check, however, other Indigenous children in need in the prescribed areas were also able to access these services (AIHW 2014b).

The National Partnership Agreement on Stronger Futures in the Northern Territory (SFNT) was implemented mid-2012 outlining a 10 year commitment to 2021–22. The oral health component of this agreement replaced, and expanded upon, services implemented under the NTER CHCI (CtG). It is funded by the Australian Government and delivered by the Northern Territory Government. The AIHW collects data on the SFNT Oral Health Program (OHP) which includes the delivery of clinical services, tooth extractions under general anaesthetic (in the first 3 years of the agreement), and a preventive program including the delivery of fissure sealants and full-mouth fluoride varnish (FV) applications.

Summary of key issues

- Children who receive SFNT oral health services are not a random sample of Indigenous children in the Northern Territory. As such, SFNT oral health data may not be representative of the Northern Territory Indigenous child population.
- The data that have been collected as part of the SFNT Oral Health Program are a by-product of a clinical process. That is, dental professionals providing clinical services document the results on standard data collection forms or via a computer-based data collection system.
- The extent of missing data should be taken into account when using and interpreting SFNT data. Where possible, published tables show the percentage of missing data (AIHW 2014c).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/591588>.

Medicare data

Standard Indigenous status question

Medicare seeks Indigenous status information in its enrolment forms, including the general enrolment application form and the Aboriginal and Torres Strait Islander Medicare enrolment form. These forms include the national standard Indigenous identification question. Indigenous Australians can also complete a specific Voluntary Indigenous Identification form. Indigenous status information is held in Medicare records as the Voluntary Indigenous Identifier (VII).

Under-identification

The coverage of Indigenous Australians in the VII database is not complete. There were around 415,730 people who had identified as Aboriginal and/or Torres Strait Islander in this database at June 2014; around 58% of the estimated Indigenous population. There has been a rapid expansion in the number of enrolees who identified as Indigenous, from 47,200 people in August 2004.

Readers should note the following caveats to the Medicare Voluntary Indigenous Identifier (VII) adjustment methodology:

- Estimates generated by the adjustment methodology for a given period will vary according to the point in time at which they are calculated, as the adjustment factors will be updated regularly to account for the ongoing change in the population coverage of the VII sample.
- There are inherent uncertainties in the current ABS Indigenous population estimates, and they are therefore described by the ABS as ‘experimental estimates and projections’. The ABS Indigenous population estimates after 2011 are experimental projections, based on a number of assumptions about future levels of fertility, mortality and migration. The projections are not predictions or forecasts, but are illustrations of the growth and change in population that would occur if these assumptions were to prevail over the projection period. There can be no certainty that any particular outcome will be realised, or that future outcomes will necessarily fall within the projected ranges.

- The propensity to identify as Indigenous is influenced by numerous factors including the context, how the question is asked and by whom, motivations of the individual and perceived uses of the data in question. For example, it is possible that there are some Indigenous Australians who are registered with the VII but who do not identify as Indigenous for the purposes of the Census, or vice versa.
- PBS and MBS data do not give a comprehensive picture of actual service delivery for Indigenous Australians, as some service delivery (especially in *Remote* areas) is not part of these systems. For example, s.100 medication delivery in *Remote* locations takes place outside of, and is not recorded by, the PBS. Likewise state and territory primary health care providers are generally not eligible to bill Medicare.
- In some areas, particularly *Remote* and *Very remote* areas, there is a portion of the Indigenous population that does not ever use the Medicare system. It is therefore possible that the adjustment methodology could overestimate Medicare use by the Indigenous population.
- As participation in the VII sample is voluntary, 100% coverage is unlikely. There could be biases in the data that are not addressed by the adjustment methodology.

List of symbols used in tables

n.a.	not available
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 12 of 68

Detailed analyses

1.12 HIV/AIDS, hepatitis and sexually transmissible infections

This measure reports on the rate of notified sexually transmissible and blood-borne virus infections (STIs and BBVs), including chlamydia, gonorrhoea, non-congenital syphilis, newly acquired hepatitis C, newly acquired hepatitis B and HIV/AIDS for Aboriginal and Torres Strait Islander Australians.

Introduction

This is no. 12 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- National Notifiable Diseases Surveillance System
- National HIV Registry.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Only states and territories with adequate levels of Indigenous identification in disease registers are presented within each section. A cut-off of 50% completeness of Indigenous status reporting for the reported periods was used to determine inclusion in the analyses in this report. Those with less than the total 8 states and territories do not represent a quasi-Australian figure.

No data are included for AIDS notification rates due to the small number of notifications.

Notification data includes cases that have been tested, diagnosed and notified to health authorities, representing only a proportion of the total incidence of disease. Changes in notification rates over time are influenced by a range of factors including access to health care, improved screening programs for Indigenous Australians and improved accuracy of tests. For Indigenous Australians, the accuracy of Indigenous identification in the data varies by jurisdiction and over time. Improved primary health care can lead to increased testing and a corresponding increase in notification rates.

Data for 3 years have been combined for reporting due to the small number of Indigenous and other Australian notifications for some diseases each year.

Notifications where Indigenous status was not reported have been included with notifications data for non-Indigenous people under the 'other Australian' category.

Disease register notification statistics should not be interpreted as directly measuring the incidence or prevalence of the disease in the community, as under-reporting may occur.

The following data are presented for this measure:

- Chlamydia notifications, see tables 1.12.1–3.
- Non-congenital syphilis notifications, see tables 1.12.1–2 and 1.12.4.
- Gonorrhoea notifications, see tables 1.12.1–2 and 1.12.5.
- Hepatitis C, see tables 1.12.1–2 and 1.12.6.
- Hepatitis B, see tables 1.12.1–2, and 1.12.7–8.
- HIV notifications, see tables 1.12.9–12.

Chlamydia

Current period

Data are presented for 5 jurisdictions that have been determined to have adequate levels of Indigenous identification (Queensland, Western Australia, South Australia, Tasmania and the Northern Territory).

In 2011–2013:

- There were 19,990 notifications of chlamydia for Indigenous Australians. This represents 17% of total number of notifications for all Australians (Table 1.12.1).
- After adjusting for age, notification rates for Indigenous Australians were 3 times the rate of notifications for other Australians.
  - The gap in rates of chlamydia notifications between Indigenous and other Australians was significant (875 per 100,000).
- Rates for Indigenous Australians were higher than rates for other Australians across all age groups. The highest notification rates occurred for those aged 15–24, for both Indigenous and other Australians.
- Indigenous and other Australian females had higher rates of chlamydia notifications (1,610 and 460 per 100,000 respectively) than Indigenous and other Australian males (910 and 302 per 100,000 respectively) (Table 1.12.2).

Trend

The trends in notification rates are based on data from 3 jurisdictions that have been determined to have adequate levels of Indigenous identification for historical data (Western Australia, South Australia and the Northern Territory).

- Age-standardised notification rates of chlamydia for Indigenous Australians have increased significantly from 710 per 100,000 for the period 1996–1998, to 1,548 for the period 2011–2013 (a 122% increase).
  - Rates for other Australians have also increased significantly, from 80 per 100,000 to 374 per 100,000 (a 668% increase). The gap in rates of chlamydia notifications between Indigenous and other Australians widened significantly (by 83%) (Table 1.12.3).

Non-congenital syphilis

Current period

Data are presented for all jurisdictions.

In 2011–2013:

- There were 1,111 notifications of non-congenital syphilis for Indigenous Australians, representing 12% of total number of notifications for all Australians (Table 1.12.1).
- Notification rates of non-congenital syphilis for Indigenous Australians were 66 per 100,000, more than 5 times the rate of notifications for other Australians.
- The gap between rates of non-congenital syphilis notifications for Indigenous and other Australians was significant (54 per 100,000).
- Rates for Indigenous Australians were higher than for other Australians in all age groups (Table 1.12.2).
- Notification rates were higher among Indigenous and other Australian males than among their female counterparts.

Trend

The trends in notification rates are based on data from the 3 jurisdictions that have been determined to have adequate levels of Indigenous identification for historical data (Western Australia, South Australia and the Northern Territory).

- Age-standardised notification rates for non-congenital syphilis for Indigenous Australians decreased significantly from 270 per 100,000 in 1996–1998, to 72 per 100,000 in 2011–2013 (a 64% reduction).
    - Rates for other Australians increased significantly from 3 per 100,000 to 8 per 100,000. The gap in rates of non-congenital syphilis notifications between Indigenous and other Australians narrowed significantly (by 64%) (Table 1.12.4).

Gonorrhoea

Current period

Data are presented for the 7 jurisdictions that have been determined to have adequate levels of Indigenous identification (Victoria, Queensland, Western Australia, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory).

In 2011–2013:

- There were 12,643 notifications of gonorrhoea for Indigenous Australians, representing 43% of total number of notifications for all Australians (Table 1.12.1).
- Notification rates of gonorrhoea for Indigenous Australians were 736 per 100,000. This was almost 20 times the rate of notifications for other Australians (38 per 100,000).
- The gap between rates of gonorrhoea notifications for Indigenous and other Australian Australians was significant (698 per 100,000).
- Across all age groups, rates were higher for Indigenous Australians than for other Australians. The highest notification rates occurred for those aged 15–24 for both Indigenous and other Australians.
- Indigenous females had higher rates of gonorrhoea notifications than Indigenous males (786 and 692 per 100,000 respectively). However for other Australians the opposite pattern was observed, with males having higher notification rates than females (59 and 16 per 100,000 respectively) (Table 1.12.2).

Trend

The trends in notification rates are based on data from the 3 jurisdictions that have been determined to have adequate levels of Indigenous identification for historical data (Western Australia, South Australia and the Northern Territory).

- Age-standardised notification rates of gonorrhoea for Indigenous Australians have not changed significantly between 1996–1998 and 2011–2013.
    - Rates for other Australians increased for males, from 28 per 100,000 to 49 per 100,000 (a 75% increase), but no clear trend was observed for females. The gap in rates of gonorrhoea notifications between Indigenous and other Australians did not change significantly (Table 1.12.5).

Hepatitis C

Current period

Data are presented for the 4 jurisdictions that are determined to have adequate levels of Indigenous identification (Western Australia, South Australia, Tasmania and the Northern Territory).

In 2011–2013:

- There were 847 notifications of hepatitis C for Indigenous Australians, representing 13% of the total number of notifications for all Australians (Table 1.12.1).
- Notification rates of hepatitis C for Indigenous Australians were 3 times the rate of notifications for other Australians after adjusting for age.
- The gap between rates of hepatitis C notifications for Indigenous and other Australians was significant (92 per 100,000).
- Rates for Indigenous Australians were higher than rates for other Australians across all age groups. The highest notification rates occurred for those aged 25–34 and 35–44 respectively, for both Indigenous and other Australians.
- Indigenous and other Australian males had higher rates of hepatitis C notifications (165 and 53 per 100,000 respectively) than Indigenous and other Australian females (99 and 26 per 100,000 respectively) (Table 1.12.2).

Trend

The trends in notification rates are based on data from the 3 jurisdictions that have been determined to have adequate levels of Indigenous identification for historical data (Western Australia, South Australia and the Northern Territory).

- Age-standardised notification rates of hepatitis C for Indigenous Australians have remained relatively stable between 1996–1998 and 2011–13.
  - Rates for other Australians decreased significantly from 95 per 100,000 to 40 per 100,000 (a 59% decrease). The gap in rates of hepatitis C notifications between Indigenous and other Australians widened significantly (by 83%) (Table 1.12.6).

Hepatitis B

Current period

Data are presented for the 5 jurisdictions that are determined to have adequate levels of Indigenous identification (Western Australia, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory).

In 2011–2013:

- There were 402 notifications of hepatitis B for Indigenous Australians, representing 8% of total number of notifications for all Australians (Table 1.12.1).
- Notification rates of hepatitis B for Indigenous Australians were almost 3 times the rate of notifications for other Australians, after adjusting for age.
- The gap in rates of hepatitis B notifications for Indigenous and other Australians was significant (48 per 100,000).

- Rates for Indigenous Australians were higher than rates for other Australians across all age groups, with the highest reported notification rates occurring among those aged 35–44 and 65 and over.
  - For other Australians, the highest notification rate was in the 25–34 year age group.
- Indigenous and other Australian males had higher rates of hepatitis B notifications (98 and 37 per 100,000 respectively) than Indigenous and other Australian females (59 and 22 per 100,000 respectively) (Table 1.12.2).

Trend

The trends in notification rates are based on data from the 3 jurisdictions that have been determined to have adequate levels of Indigenous identification for historical data (Western Australia, South Australia and the Northern Territory).

- Age-standardised notification rates of hepatitis B for Indigenous Australians have decreased significantly from 204 per 100,000 in 2006–2007, to 79 in 2012–2013 (a 63% decrease).
  - The gap in rates of hepatitis B notification between Indigenous and other Australians decreased significantly (by 77%) (Table 1.12.8).

HIV and AIDS

Data on HIV notifications are presented in tables 1.12.9–12.

No data are included for AIDS notification rates due to the small number of notifications.

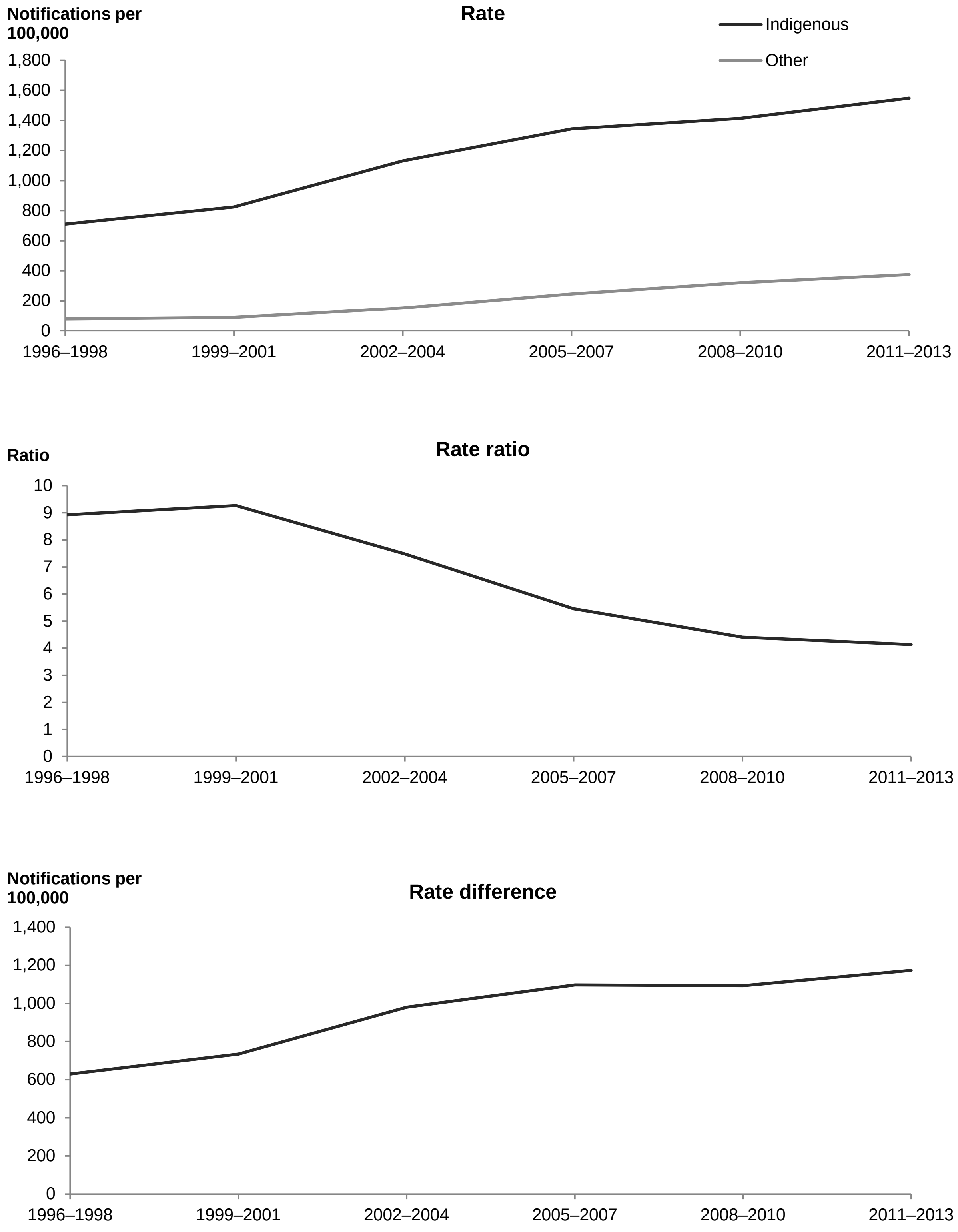
Current period

In 2010–2012:

- There were a total of 3,452 notifications of HIV. Just over 2% of these were for Indigenous Australians (Table 1.12.9).
- After adjusting for age, the notification rate of HIV for Indigenous Australians was 4 per 100,000. This is 80% of the rate of notifications for other Australians (5 per 100,000).
- Indigenous males had lower rates of HIV notifications than other Australian males (7 per 100,000 and 9 per 100,000 respectively) (Table 1.12.10).
- Of the available data on exposure categories for HIV infection, sexual contact between men was the highest HIV risk for both populations, accounting for 63% of cases for Indigenous Australians and 66% for other Australians. Injecting drug use, however, represented a greater risk of exposure for Indigenous Australians—accounting for 9% of cases, compared with 2% for other Australians (Table 1.12.11).

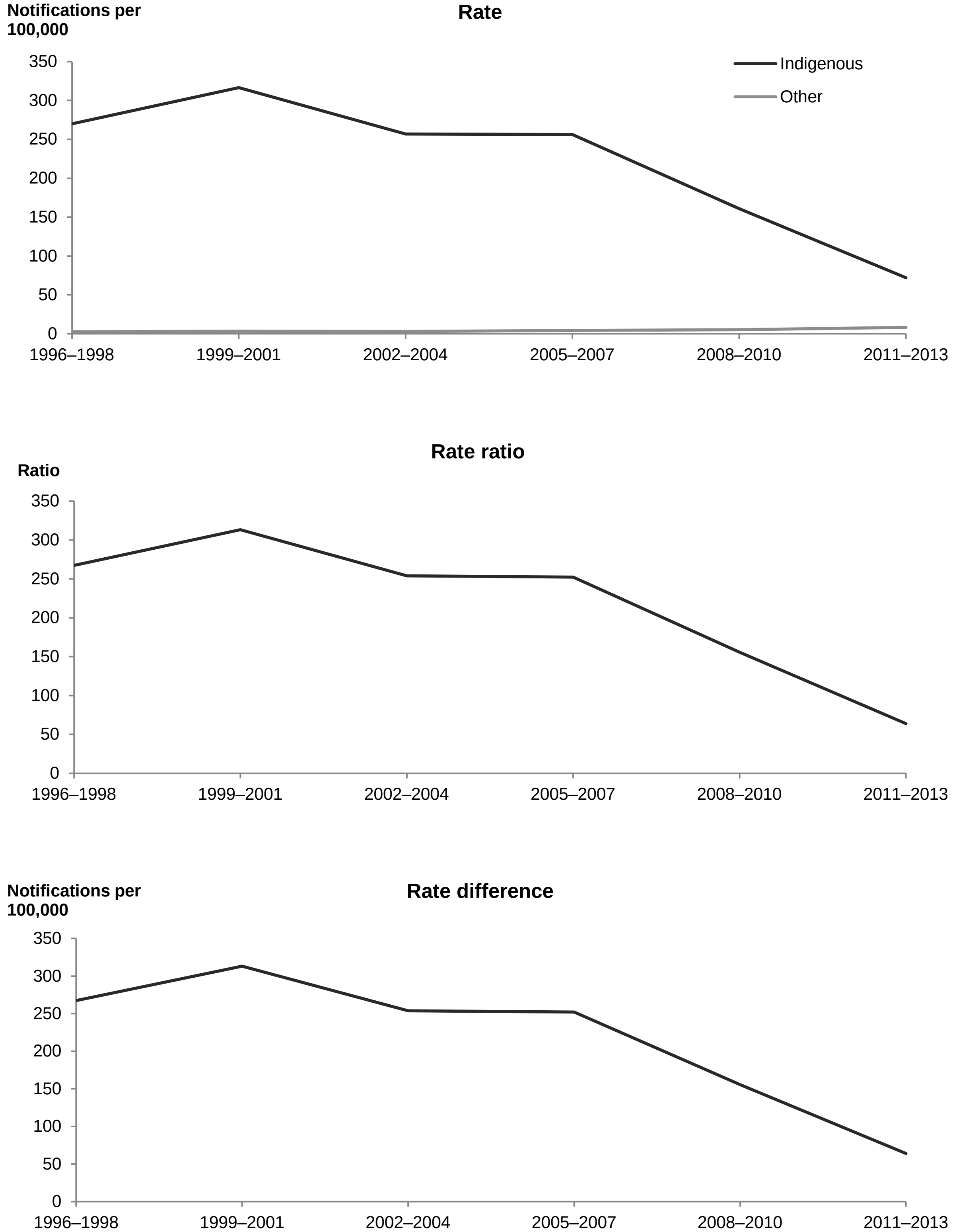
Trend

- There was not much change in the age-standardised notification rates of HIV for Indigenous Australians over the period 1998–2000 to 2010–2012.
  - Rates for other Australian Australians increased significantly from 3.9 per 100,000 to 5.1 per 100,000, however there was no significant change in the gap between Indigenous and other Australians (Table 1.12.12).



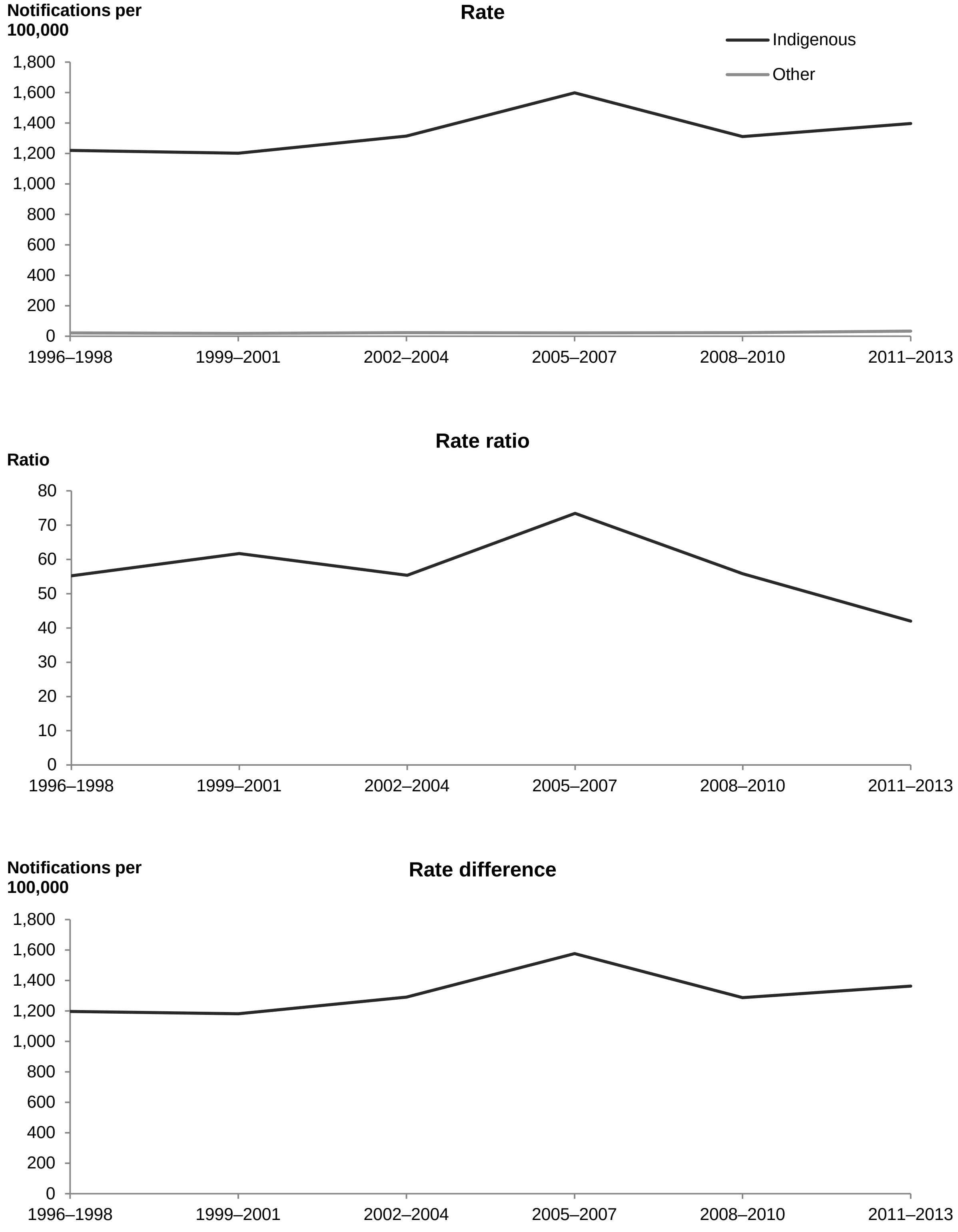
Source: Table 1.12.3.

Figure 1.12.1: Age-standardised notification rates, rate ratios and rate differences for chlamydia, WA, SA and NT, 1996–1998 to 2011–2013



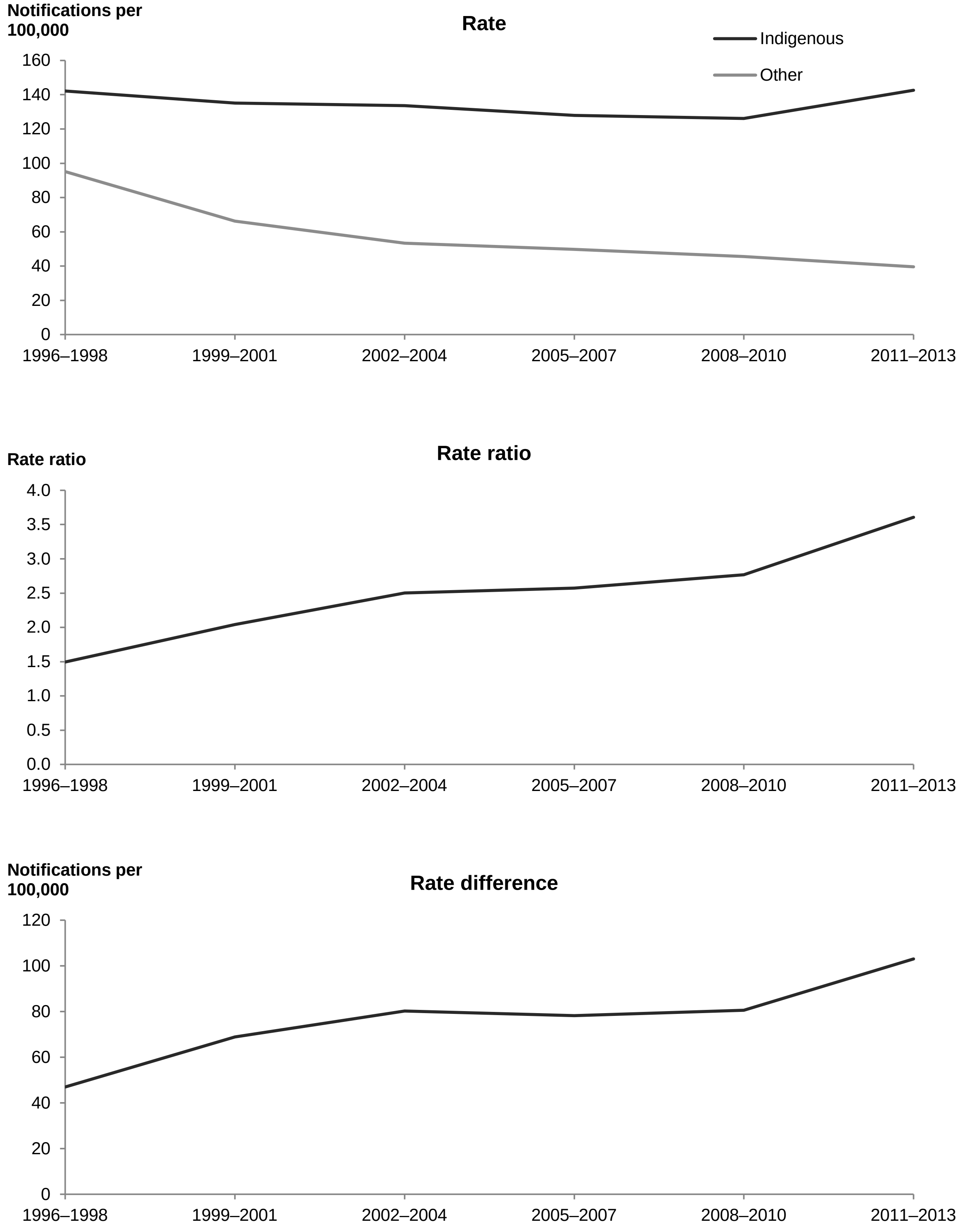
Source: Table 1.12.4.

Figure 1.12.2: Age-standardised notification rates, rate ratios and rate differences for non-congenital syphilis, WA, SA and NT, 1996–1998 to 2011–2013



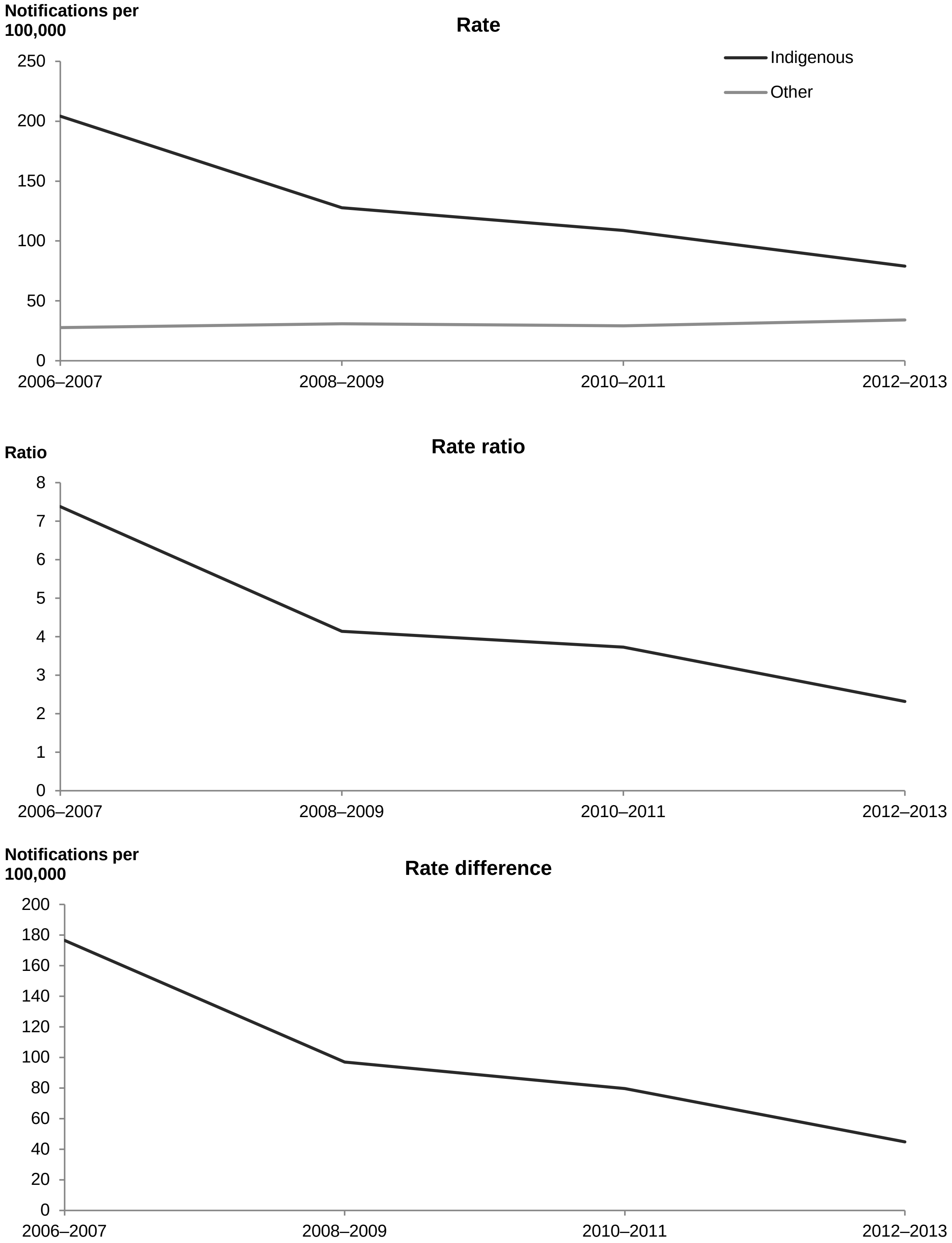
Source: Table 1.12.5.

Figure 1.12.3: Age-standardised notification rates, rate ratios and rate differences for gonorrhoea, WA, SA and NT, 1996–1998 to 2011–2013



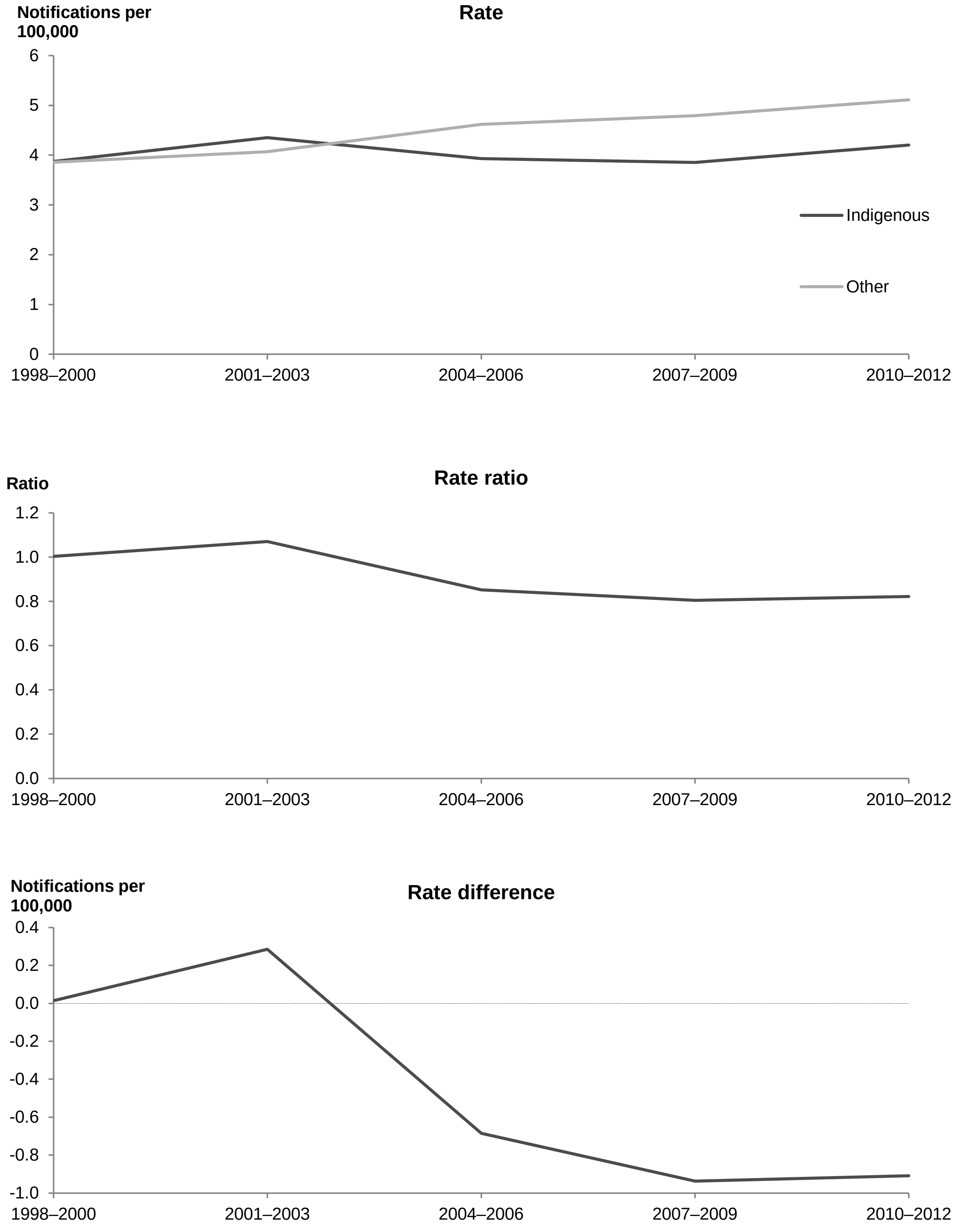
Source: Table 1.12.6.

Figure 1.12.4: Age-standardised notification rates, rate ratios and rate differences for hepatitis C, WA, SA and NT, 1996–1998 to 2011–2013



Source: Table 1.12.8.

Figure 1.12.5: Age-standardised notification rates, rate ratios and rate differences for hepatitis B, WA, SA and NT, 2006–2007 to 2012–2013



Source: Table 1.12.12.

Figure 1.12.6: Age-standardised notification rates, rate ratios and rate differences for HIV, Australia, 1998–2000 to 2010–2012

Table 1.12.1: Notification rates for chlamydia, non-congenital syphilis, gonorrhoea, hepatitis C and hepatitis B, by Indigenous status and state/territory, 2011–2013(a)(b)

					Males				**Females**				**Persons(c)**			
	No.		**Proportion**		**Rate per 100,000(d)**				**Rate per 100,000(d)**				**Rate per 100,000(d)**			
	Indig.	**Other**	**Indig.**	**Other(e)**	**Indig.**	**Other(e)**	**Rate ratio(f)**	**Rate difference(f)**	**Indig.**	**Other(e)**	**Rate ratio(f)**	**Rate difference(f)**	**Indig.**	**Other(e)**	**Rate ratio(f)**	**Rate difference(f)**
Chlamydia(g)(h)																
Qld	9,211	47,754	16.2	83.8	830.8	291.1	2.9*	539.8*	1643.3	446.4	3.7*	1,196.9*	1229.6	367.1	3.3*	862.5*
WA	4,862	30,358	13.8	86.2	980.9	343.4	2.9*	637.4*	1748.1	503.1	3.5*	1,245.0*	1355.8	420.6	3.2*	935.3*
SA	979	14,212	6.4	93.6	522.6	241.4	2.2*	281.2*	817.2	379.5	2.2*	437.6*	665.9	308.6	2.2*	357.2*
Tas	133	4,968	2.6	97.4	65.1	265.4	0.2*	–200.3*	199.5	514.4	0.4*	–314.9*	131.1	384.9	0.3*	–253.8*
NT	4,805	3,554	57.5	42.5	1486.4	551.5	2.7*	934.9*	2242.9	821.1	2.7*	1,421.8*	1855.7	671.3	2.8*	1,184.4*
Qld, WA, SA, Tas and NT	**19,990**	**100,846**	**16.5**	**83.5**	**910.2**	**301.5**	**3.0***	**608.8***	**1610.1**	**460.1**	**3.5***	**1,150.0***	**1253.0**	**378.5**	**3.3***	**874.5***
Non-congenital syphilis(i)(j)																
NSW	101	2,513	3.9	96.1	26.6	20.6	1.3*	6.0*	20.4	3.1	6.6*	17.3*	23.4	11.8	2.0*	11.7*
Vic	31	3,030	1.0	99.0	44.3	29.4	1.5	15.0	12.4	6.3	2.0	6.1	27.6	17.8	1.6*	9.9
Qld	621	1,235	33.5	66.5	138.6	15.9	8.7*	122.7*	117.0	3.0	39.5*	114.1*	127.3	9.4	13.6*	118.0*
WA	127	598	17.5	82.5	76.0	13.7	5.5*	62.3*	48.8	2.6	18.8*	46.2*	60.7	8.3	7.3*	52.5*
SA	88	275	24.2	75.8	114.8	7.6	15.2*	107.3*	82.1	2.5	32.5*	79.6*	97.4	5.0	19.4*	92.4*
Tas	n.p.	74	n.p.	n.p.	n.p.	8.5	n.p.	n.p.	n.p.	2.0	n.p.	n.p.	n.p.	5.2	n.p.	n.p.
ACT	n.p.	78	n.p.	n.p.	n.p.	11.5	n.p.	n.p.	n.p.	2.2	n.p.	n.p.	n.p.	6.8	n.p.	n.p.
NT	134	150	47.2	52.8	87.9	49.2	1.8*	38.6*	60.4	5.7	10.5*	54.6*	74.3	29.3	2.5*	45.0*
Australia	**1,111**	**7,894**	**12.3**	**87.7**	**75.1**	**20.0**	**3.8***	**55.1***	**57.5**	**3.8**	**15.2***	**53.7***	**65.8**	**11.9**	**5.5***	**54.0***

(continued)

Table 1.12.1 (continued): Notification rates for chlamydia, non-congenital syphilis, gonorrhoea, hepatitis C and hepatitis B, by Indigenous status and state/territory, 2011–2013[a][b]

					Males				Females				Persons[c]			
	No.		Proportion		Rate per 100,000[d]				Rate per 100,000[d]				Rate per 100,000[d]			
	Indig.	Other	Indig.	Other[e]	Indig.	Other[e]	Rate ratio[f]	Rate difference[f]	Indig.	Other[e]	Rate ratio[f]	Rate difference[f]	Indig.	Other[e]	Rate ratio[f]	Rate difference[f]
								Gonorrhoea[j][k]								
Vic	58	7,293	0.8	99.2	45.5	72.2	0.6*	–26.7*	29.6	13.8	2.1*	15.8*	37.3	43.2	0.9	–5.8
Qld	3,339	5,036	39.9	60.1	394.2	57.0	6.9*	337.1*	525.0	20.5	25.6*	504.5*	457.3	38.8	11.8*	418.5*
WA	3,394	2,528	57.3	42.7	992.4	49.4	20.1*	943.0*	998.7	19.2	52.0*	979.5*	992.9	34.7	28.6*	958.2*
SA	714	1,092	39.5	60.5	512.0	34.3	14.9*	477.7*	549.4	9.9	55.7*	539.6*	529.3	22.2	23.9*	507.2*
Tas	n.p.	122	n.p.	n.p.	n.p.	16.4	n.p.	n.p.	n.p.	2.2	n.p.	n.p.	n.p.	9.4	n.p.	n.p.
ACT	n.p.	329	n.p.	n.p.	n.p.	46.7	n.p.	n.p.	n.p.	6.5	n.p.	n.p.	n.p.	26.7	n.p.	n.p.
NT	5,132	599	89.5	10.5	1866.2	149.2	12.5*	1,716.9*	2176.5	73.9	29.4*	2,102.6*	2013.2	114.4	17.6*	1,898.8*
Vic, Qld, WA, SA, Tas, ACT and NT	**12,643**	**16,999**	**42.7**	**57.3**	**692.0**	**58.8**	**11.8***	**633.2***	**786.1**	**16.3**	**48.1***	**769.8***	**736.1**	**37.8**	**19.5***	**698.3***
								Hepatitis C[l][m]								
WA	540	2,690	16.7	83.3	254.8	55.9	4.6*	198.9*	144.6	26.2	5.5*	118.4*	200.1	41.4	4.8*	158.8*
SA	165	1,272	11.5	88.5	200.6	33.9	5.9*	166.7*	133.2	20.1	6.6*	113.2*	165.6	26.9	6.1*	138.7*
Tas	51	669	7.1	92.9	85.1	62.3	1.4	22.8	70.3	39.6	1.8*	30.7	77.3	50.8	1.5*	26.5*
NT	91	565	13.9	86.1	60.0	145.6	0.4*	–85.6*	35.3	52.1	0.7*	–16.8	47.6	102.1	0.5*	–54.5*
WA, SA, Tas and NT	**847**	**5,466**	**13.4**	**86.6**	**164.8**	**52.9**	**3.1***	**111.9***	**98.6**	**26.2**	**3.8***	**72.4***	**131.5**	**39.7**	**3.3***	**91.8***

(continued)

Table 1.12.1(continued): Notification rates for chlamydia, non-congenital syphilis, gonorrhoea, hepatitis C and hepatitis B, by Indigenous status and state/territory, 2011–2013(a)(b)

	No.		Proportion		Males				Females				Persons(c)			
					Rate per 100,000(d)				Rate per 100,000(d)				Rate per 100,000(d)			
	Indig.	**Other**	**Indig.**	**Other(e)**	**Indig.**	**Other(e)**	**Rate ratio(f)**	**Rate difference(f)**	**Indig.**	**Other(e)**	**Rate ratio(f)**	**Rate difference(f)**	**Indig.**	**Other(e)**	**Rate ratio(f)**	**Rate difference(f)**
									Hepatitis B(n)(o)							
WA	125	2,337	5.1	94.9	89.4	43.1	2.1*	46.3*	29.7	21.9	1.4	7.8	57.9	32.8	1.8*	25.1*
SA	70	1,087	6.1	93.9	88.6	24.9	3.6*	63.7*	90.8	22.2	4.1*	68.7*	90.1	23.5	3.8*	66.6*
Tas	n.p.	176	n.p.	n.p.	16.5	16.3	n.p.	n.p.	n.p.	11.1	n.p.	n.p.	n.p.	13.6	n.p.	n.p.
ACT	n.p.	308	n.p.	n.p.	39.7	27.2	n.p.	n.p.	n.p.	24.8	n.p.	n.p.	n.p.	25.9	n.p.	n.p.
NT	199	483	29.2	70.8	150.7	122.6	1.2*	28.2	101.2	52.3	1.9*	48.9*	124.8	90.4	1.4*	34.4*
WA, SA, Tas, ACT and NT	**402**	**4,391**	**8.4**	**91.6**	**98.3**	**36.9**	**2.7***	**61.4***	**58.5**	**22.3**	**2.6***	**36.2***	**77.4**	**29.7**	**2.6***	**47.8***

(continued)

Table 1.12.1 (continued): Notification rates for chlamydia, non-congenital syphilis, gonorrhoea, hepatitis C and hepatitis B, by Indigenous status and state/territory, 2011–2013(a)(b)

* Represents results with statistically significant differences in the Indigenous/Other Australian comparisons at the $p < 0.05$ level.

(a) Calender year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Rates are calculated using the sum of notifications divided by the sum of the populations for the relevant years.

(c) Persons data include individuals of unknown sex.

(d) Directly age-standardised using the Australian 2001 standard population using 5 year age groups up to 65+.

(e) Includes notifications for non-Indigenous Australians and those for whom Indigenous status was not stated.

(f) Rate ratio is notification rate for Indigenous divided by notification rate for Other. Rate difference is notification rate for Indigenous minus notification rate for Other.

(g) The supplied data for chlamydia for NT is for genital infections only. From 1 July 2013, the national case definition for Chlamydia excludes ocular infections.

(h) Data are reported for Qld, WA, SA, Tas and the NT. These five jurisdictions are considered to have adequate levels of Indigenous identification in these data. They do not represent a quasi-Australian figure.

(i) Data are reported for Australia. All eight jurisdictions are considered to have adequate levels of Indigenous identification in these data.

(j) Because of the very high rates of non-congenital syphilis and gonorrhoea in the Indigenous population and low rates of these STIs in the other population, rate ratios are large and may vary between reports, as small changes in rates can result in large changes in the resulting ratios.

(k) Data are reported for Vic, Qld, WA, SA, Tas, the ACT and the NT. These seven jurisdictions are considered to have adequate levels of Indigenous identification in these data. They do not represent a quasi-Australian figure.

(l) Data are reported for WA, SA, Tas and the NT. These four jurisdictions are considered to have adequate levels of Indigenous identification in these data. They do not represent a quasi-Australian figure.

(m) Hepatitis C data includes ‘newly acquired’ and ‘unspecified’ infections identified under two disease codes ‘040’ and ‘053’.

(n) Data are reported for WA, SA, Tas, the ACT and the NT. These five jurisdictions are considered to have adequate levels of Indigenous identification in these data. They do not represent a quasi-Australian figure.

(o) Hepatitis B data includes ‘newly acquired’ and ‘unspecified’ infections identified under two disease codes ‘039’ and ‘052’.

Notes

1. Individuals of unknown age were excluded from the analysis of age-standardised rates.
2. There were 22 notifications of chlamydia in Other Australians of unknown age.
3. There were 38 notifications of non-congenital syphilis in Other Australians of unknown age.
4. There were 123 notifications of gonorrhoea in Other Australians of unknown age.
5. There were 4 notifications of hepatitis C in Other Australians of unknown age.
6. There were 4 notifications of hepatitis B in Other Australians of unknown age.

Source: AIHW analyses of NNDSS data.

Table 1.12.2: Age-specific notification rates per 100,000 for chlamydia, non-congenital syphilis, gonorrhoea, hepatitis C and hepatitis B, by Indigenous status and sex, 2011–2013(a)(b)

	Males				Females				Persons(c)			
	Indig.	Other(d)	Rate ratio(e)	Rate difference(e)	Indig.	Other(d)	Rate ratio(e)	Rate difference(e)	Indig.	Other(d)	Rate ratio(e)	Rate difference(e)
						Chlamydia(f)(g)						
0–14	62.9	2.1	29.4*	60.8*	354.1	21.0	16.9*	333.1*	205.9	11.3	18.2*	194.6*
15–24	3,632.7	1,180.7	3.1*	2,452.0*	7,537.6	2,415.8	3.1*	5,121.8*	5,536.2	1,782.9	3.1*	3,753.2*
25–34	1,796.8	684.5	2.6*	1,112.3*	2,547.8	670.7	3.8*	1,877.2*	2,175.3	677.8	3.2*	1,497.5*
35–44	628.1	178.6	3.5*	449.5*	701.5	143.5	4.9*	558.0*	666.0	161.1	4.1*	504.9*
45–54	260.5	86.4	3.0*	174.1*	204.9	38.5	5.3*	166.4*	231.7	62.4	3.7*	169.3*
55–64	85.3	39.7	2.1*	45.6*	67.1	8.9	7.6*	58.3*	75.8	24.3	3.1*	51.6*
65+	n.p.	10.6	n.p.	n.p.	n.p.	0.8	n.p.	n.p.	19.4	5.4	3.6*	14.1*
Total age-standardised(h)	**910.2**	**301.5**	**3.0***	**608.8***	**1610.1**	**460.1**	**3.5***	**1,149.9***	**1253.0**	**378.5**	**3.3***	**874.5***
						Non-congenital syphilis(i)(j)						
0–14	n.p.	n.p.	n.p.	n.p.	5.3	n.p.	n.p.	n.p.	3.0	0.1	52.8*	3.0*
15–24	74.2	15.7	4.7*	58.5*	98.1	3.4	28.6*	94.6*	85.8	9.7	8.8*	76.1*
25–34	74.7	35.2	2.1*	39.5*	53.9	6.8	8.0*	47.2*	64.6	21.2	3.0*	43.4*
35–44	117.8	34.5	3.4*	83.2*	62.9	6.1	10.3*	56.8*	89.3	20.3	4.4*	69.0*
45–54	117.6	29.0	4.1*	88.6*	66.3	3.4	19.5*	62.9*	91.0	16.1	5.7*	74.9*
55–64	97.5	17.6	5.5*	79.9*	72.9	2.7	26.6*	70.2*	84.8	10.1	8.4*	74.7*
65+	81.0	14.2	5.7*	66.8*	74.8	5.3	14.1*	69.4*	77.5	9.4	8.2*	68.1*
Total age-standardised(h)	**75.1**	**20.0**	**3.8***	**55.1***	**57.5**	**3.8**	**15.2***	**53.7***	**65.9**	**11.9**	**5.5***	**54.0***

(continued)

Table 1.12.2 (continued): Age-specific notification rates per 100,000 for chlamydia, non-congenital syphilis, gonorrhoea, hepatitis C and hepatitis B, by Indigenous status and sex, 2011–2013(a)(b)

	Males				Females				Persons(c)			
	Indig.	Other(d)	Rate ratio(e)	Rate difference(e)	Indig.	Other(d)	Rate ratio(e)	Rate difference(e)	Indig.	Other(d)	Rate ratio(e)	Rate difference(e)
							Gonorrhoea(k)					
0–14	47.0	0.4	132.7*	46.6*	210.6	1.5	138.9*	209.1*	127.4	0.9	138.4*	126.4*
15–24	2,227.7	128.4	17.3*	2,099.3*	3,091.4	61.7	50.1*	3,029.7*	2,648.5	96.0	27.6*	2,552.5*
25–34	1,606.3	143.2	11.2*	1,463.2*	1,539.2	30.4	50.7*	1,508.8*	1,572.5	87.6	17.9*	1,484.8*
35–44	628.5	78.7	8.0*	549.9*	503.4	12.9	39.0*	490.5*	564.1	45.7	12.3*	518.4*
45–54	261.0	46.0	5.7*	215.0*	124.8	6.6	18.9*	118.2*	190.8	26.1	7.3*	164.7*
55–64	91.3	19.3	4.7*	72.0*	32.1	3.3	9.9*	28.8*	60.5	11.3	5.4*	49.2*
65+	29.4	4.8	6.1*	24.6*	0.0	0.4	n.p.	n.p.	12.8	2.4	5.3*	10.3*
Total age-standardised(h)	**692.0**	**58.8**	**11.8***	**633.1***	**786.1**	**16.3**	**48.1***	**769.8***	**736.1**	**37.8**	**19.5***	**698.3***
							Hepatitis C(l)(m)					
0–14	n.p.	0.5	n.p.	n.p.	n.p.	0.6	n.p.	n.p.	3.1	0.6	5.2*	2.5*
15–24	219.5	38.4	5.7*	181.1*	106.3	26.3	4.0*	80.0*	164.4	32.6	5.0*	131.8*
25–34	351.1	94.9	3.7*	256.2*	195.9	51.0	3.8*	144.8*	273.0	73.6	3.7*	199.4*
35–44	339.9	98.6	3.4*	241.3*	192.7	45.5	4.2*	147.2*	264.1	72.3	3.7*	191.8*
45–54	171.5	89.2	1.9*	82.2*	138.2	38.7	3.6*	99.4*	154.2	64.1	2.4*	90.1*
55–64	71.9	52.6	1.4	19.3	51.4	20.1	2.6*	31.3	61.3	36.3	1.7*	24.9
65+	0.0	8.6	n.p.	n.p.	n.p.	6.1	n.p.	n.p.	n.p.	7.2	n.p.	n.p.
Total age-standardised(h)	**164.8**	**52.9**	**3.1***	**111.9***	**98.6**	**26.2**	**3.8***	**72.4***	**131.5**	**39.7**	**3.3***	**91.8***

(continued)

Table 1.12.2 (continued): Age-specific notification rates per 100,000 for chlamydia, non-congenital syphilis, gonorrhoea, hepatitis C and hepatitis B, by Indigenous status and sex, 2011–2013[(a)(b)]

	Males				Females				Persons[(c)]			
	Indig.	Other[(d)]	Rate ratio[(e)]	Rate difference[(e)]	Indig.	Other[(d)]	Rate ratio[(e)]	Rate difference[(e)]	Indig.	Other[(d)]	Rate ratio[(e)]	Rate difference[(e)]
					Hepatitis B[(n)(o)]							
0–14	4.2	4.0	1.1	0.3	7.9	2.4	3.3*	5.5*	6.0	3.2	1.9*	2.8
15–24	56.4	54.9	1.0	1.5	28.4	22.9	1.2	5.5	42.8	39.4	1.1	3.4
25–34	125.0	79.9	1.6*	45.1*	62.7	61.9	1.0	0.8	93.6	71.1	1.3*	22.5*
35–44	146.3	58.8	2.5*	87.5*	86.1	31.1	2.8*	55.0*	115.4	45.1	2.6*	70.3*
45–54	116.5	31.4	3.7*	85.1*	76.1	19.7	3.9*	56.4*	95.6	25.6	3.7*	70.0*
55–64	124.0	23.2	5.4*	100.8*	95.2	13.9	6.8*	81.3*	109.1	18.5	5.9*	90.5*
65+	160.0	8.7	18.4*	151.2*	84.4	5.7	14.8*	78.7*	117.2	7.1	16.5*	110.1*
Total age-standardised[(h)]	**98.3**	**36.9**	**2.7***	**61.4***	**58.5**	**22.3**	**2.6***	**36.2***	**77.4**	**29.7**	**2.6***	**47.8***

(continued)

Table 1.12.2 (continued): Age-specific notification rates per 100,000 for chlamydia, non-congenital syphilis, gonorrhoea, hepatitis C and hepatitis B, by Indigenous status and sex, 2011–2013(a)(b)

* Represents results with statistically significant differences in the Indigenous/Other Australian comparisons at the p < 0.05 level.

(a) Calender year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Rates are calculated using the sum of notifications divided by the sum of the populations for the relevant years.

(c) Persons include individuals of unknown sex.

(d) Includes notifications for non-Indigenous Australians and those for whom Indigenous status was not stated.

(e) Rate ratio is Indigenous divided by Other. Rate difference is Indigenous minus Other.

(f) Data are reported for Qld, WA, SA, Tas and the NT. These five jurisdictions are considered to have adequate levels of Indigenous identification in these data. They do not represent a quasi-Australian figure.

(g) The supplied data for chlamydia for NT is for genital infections only. From 1 July 2013, the national case definition for chlamydia excludes ocular infections.

(h) Directly age-standardised using the Australian 2001 standard population using 5 year age groups up to 65+.

(i) Because of the very high rates of non-congenital syphilis and gonorrhoea in the Indigenous population and low rates of these STIs in the other population, rate ratios are large and may vary between reports, as small changes in rates can result in large changes in the resulting ratios.

(j) Data are reported for Australia. All eight jurisdictions are considered to have adequate levels of Indigenous identification in these data.

(k) Data are reported for Vic, Qld, WA, SA, Tas, the ACT and the NT. These seven jurisdictions are considered to have adequate levels of Indigenous identification in these data. They do not represent a quasi-Australian figure.

(l) Data are reported for WA, SA, Tas and the NT. These four jurisdictions are considered to have adequate levels of Indigenous identification in these data. They do not represent a quasi-Australian figure.

(m) Hepatitis C data includes ‘newly acquired’ and ‘unspecified’ infections identified under two disease codes ‘040’ and ‘053’.

(n) Data are reported for WA, SA, Tas, the ACT and the NT. These five jurisdictions are considered to have adequate levels of Indigenous identification in these data. They do not represent a quasi-Australian figure.

(o) Hepatitis B data includes ‘newly acquired’ and ‘unspecified’ infections identified under two disease codes ‘039’ and ‘052’.

Notes

1. Individuals of unknown age were excluded from the analysis of age-standardised rates.
2. There were 22 notifications of chlamydia in Other Australians of unknown age.
3. There were 38 notifications of non-congenital syphilis in Other Australians of unknown age.
4. There were 123 notifications of gonorrhoea in Other Australians of unknown age.
5. There were 4 notifications of hepatitis C in Other Australians of unknown age.
6. There were 4 notifications of hepatitis B in Other Australians of unknown age.

Source: AIHW analyses of NNDSS data.

Table 1.12.3: Age-standardised notification rates, rate ratios and rate differences for chlamydia[(a)], WA, SA and NT, 1996–1998 to 2011–2013

	1996–1998	1999–2001	2002–2004	2005–2007	2008–2010	2011–2013	Annual change[(b)]	% change over period[(c)]
Indigenous notifications								
Males	1,230	1,548	2,237	3,002	3,310	3,987	188.9*	249.6*
Females	2,320	2,768	4,035	5,030	5,727	6,659	300.6*	208.0*
Persons	3,551	4,316	6,272	8,032	9,037	10,646	489.5*	222.2*
Other Australian notifications[(d)]								
Males	3,440	3969	6571	11016	16013	20345	1,191.4*	1,385.6*
Females	5,137	5456	9216	15395	21745	27779	1,602.4*	1,142.9*
Persons	8,589	9438	15791	26415	37759	48124	2,793.0*	1,230.2*
Indigenous crude rate per 100,000								
Males	279.7	328.7	445.5	562.3	587.8	672.9	27.2*	148.5*
Females	528.5	587.0	798.6	934.1	1,007.5	1,115.4	41.3*	119.2*
Persons	404.1	458.0	622.6	749.0	798.6	895.0	34.3*	129.6*
Indigenous age-standardised rate per 100,000[(e)]								
Males	519.3	614.6	844.1	1,050.3	1,081.3	1,198.5	47.6*	135.5*
Females	899.7	1,029.0	1,417.7	1,638.1	1,749.7	1,907.3	70.7*	116.5*
Persons	710.0	823.9	1,131.2	1,343.5	1,413.5	1,547.6	58.8*	122.2*
Other Australian age-standardised rate per 100,000[(e)]								
Males	63.0	73.4	123.3	202.2	268.3	310.7	18.1*	722.0*
Females	96.9	105.3	180.9	293.1	377.8	443.6	25.4*	641.2*
Persons	79.6	88.9	151.2	246.2	320.8	374.3	21.6*	667.7*

(continued)

Table 1.12.3 (continued): Age-standardised notification rates, rate ratios and rate differences for chlamydia(a), WA, SA and NT, 1996–1998 to 2011–2013

	1996–1998	1999–2001	2002–2004	2005–2007	2008–2010	2011–2013	Annual change(b)	% change over period(c)
Rate ratio(f)								
Males	8.2	8.4	6.8	5.2	4.0	3.9	. .	. .
Females	9.3	9.8	7.8	5.6	4.6	4.3	. .	. .
Persons	8.9	9.3	7.5	5.5	4.4	4.1	. .	. .
Rate difference(g)								
Males	456.3	541.2	720.8	848.1	813.1	887.7	29.5*	90.4*
Females	802.8	923.8	1,236.9	1,345.1	1,371.9	1,463.7	45.3*	79.9*
Persons	630.5	734.9	980.0	1,097.3	1,092.8	1,173.3	37.2*	82.9*

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1996–1998 to 2011–2013.

(a) The supplied data for chlamydia for NT is for genital infections only. From 1 July 2013, the national case definition for chlamydia excludes ocular infections.

(b) Annual change determined using linear regression analysis.

(c) Per cent change between 1996–1998 and 2011–2013 based on the annual rate of change over the period.

(d) ‘Other’ includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(e) Directly age-standardised using the Australian 2001 standard population using 5 year age groups up to 65+.

(f) Age-standardised rate for Indigenous Australians divided by the age-standardised rate for Other Australians.

(g) Age-standardised rate for Indigenous Australians minus the age-standardised rate for Other Australians.

Notes

1. There were 60 notifications of chlamydia for Indigenous Australians and 100 notifications in Other Australians of unknown age over the time period 1996 to 2013. These records were excluded from the analysis of age-standardised rates.
2. Data for persons includes individuals of unknown sex.

Source: AIHW analyses of NNDSS data.

Table 1.12.4: Age-standardised notification rates, rate ratios and rate differences for non-congenital syphilis, WA, SA and NT, 1996–1998 to 2011–2013

	1996–1998	1999–2001	2002–2004	2005–2007	2008–2010	2011–2013	Annual change[(a)]	% change over period[(b)]
Indigenous notifications								
Males	588	665	557	520	347	198	–28.0*	–61.0*
Females	517	643	567	535	348	151	–26.2*	–59.8*
Persons	1,106	1,308	1,124	1,055	695	349	–54.2*	–60.4*
Other Australian notifications[(c)]								
Males	172	245	223	350	481	828	39.2*	658.8*
Females	104	99	80	106	121	164	3.7	66.4
Persons	276	349	303	458	602	1,023	44.3*	391.2*
Indigenous crude rate per 100,000								
Males	133.7	141.2	110.9	97.4	61.6	33.4	–7.2*	–71.7*
Females	117.8	136.4	112.2	99.4	61.2	25.3	–6.7*	–70.4*
Persons	125.9	138.8	111.6	98.4	61.4	29.3	–6.9*	–71.1*
Indigenous age-standardised rate per 100,000[(d)]								
Males	309.6	339.3	269.3	275.9	168.4	87.1	–15.4*	–64.7*
Females	234.1	295.8	246.3	242.0	154.9	58.6	–12.4*	–62.4*
Persons	270.0	316.4	256.8	256.3	160.9	72.0	–13.9*	–63.8*
Other Australian age-standardised rate per 100,000[(d)]								
Males	3.4	4.6	4.2	6.3	8.3	13.3	0.6*	404.2*
Females	2.0	1.9	1.5	2.0	2.1	2.7	0.0	38.0
Persons	2.7	3.3	2.9	4.2	5.2	8.1	0.3*	245.5*

(continued)

Table 1.12.4 (continued): Age-standardised notification rates, rate ratios and rate differences for non-congenital syphilis, WA, SA and NT, 1996–1998 to 2011–2013

	1996–1998	1999–2001	2002–2004	2005–2007	2008–2010	2011–2013	Annual change[(a)]	% change over period[(b)]
Rate ratio[(e)]								
Males	91.7	73.1	64.3	43.6	20.4	6.6	. .	. .
Females	115.5	155.4	160.2	122.1	72.4	21.6	. .	. .
Persons	99.8	95.8	89.7	61.6	30.8	8.9	. .	. .
Rate difference[(f)]								
Males	306.2	334.7	265.1	269.5	160.1	73.8	–16.0*	–67.7*
Females	232.0	293.9	244.8	240.0	152.8	55.9	–12.5*	–63.0*
Persons	267.3	313.1	253.9	252.2	155.7	63.9	–13.9*	–64.4*

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1996–1998 to 2011–2013.

(a) Annual change determined using linear regression analysis.

(b) Per cent change between 1996–1998 and 2011–2013 based on the annual rate of change over the period.

(c) 'Other' includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(d) Directly age-standardised using the Australian 2001 standard population using 5 year age groups up to 65+.

(e) Notification rate for Indigenous Australians divided by the notification rate for Other Australians.

(f) Notification rate for Indigenous Australians minus the notification rate for Other Australians.

Notes

1. There were 25 notifications of non-congenital syphilis for Indigenous Australians and 41 notifications in Other Australians of unknown age over the time period 1996 to 2013. These records were excluded from the analysis of age-standardised rates.
2. Data for persons includes individuals of unknown sex.
3. Because of the very high rates of non-congenital syphilis in the Indigenous population and low rates in the Other Australian population, rate ratios are large and may vary substantially over time, as small changes in rates can result in large changes in the resulting ratios.

Source: AIHW analyses of NNDSS data.

Table 1.12.5: Age-standardised notification rates, rate ratios and rate differences for gonorrhoea, WA, SA and NT, 1996–1998 to 2011–2013

	1996–1998	1999–2001	2002–2004	2005–2007	2008–2010	2011–2013	Annual change[(a)]	% change over period[(b)]
Indigenous notifications								
Males	2,864	2,900	3,329	4,458	3,857	4,298	106.4*	56.6*
Females	2,940	3,182	3,825	4,751	4,223	4,942	133.9*	67.6*
Persons	5,807	6,083	7,154	9,209	8,080	9,240	240.1*	62.2*
Other Australian notifications[(c)]								
Males	1,496	1,397	1,744	1,774	2,064	3,070	94.3*	116.2*
Females	830	653	749	569	645	1,060	9.0	19.8
Persons	2,339	2,058	2,497	2,354	2,738	4,219	107.6	85.2
Indigenous crude rate per 100,000								
Males	651.3	615.8	662.9	835.0	684.9	725.4	7.1	16.7
Females	669.7	674.8	757.1	882.3	742.9	827.8	10.7	23.6
Persons	660.9	645.4	710.2	858.8	714.1	776.8	8.9	20.2
Indigenous age-standardised rate per 100,000[(d)]								
Males	1,262.1	1,203.8	1,279.7	1,618.9	1,304.7	1,344.9	10.1	12.0
Females	1,183.7	1,203.6	1,357.0	1,588.4	1,325.6	1,457.7	18.7	23.2
Persons	1,220.0	1,201.8	1,315.6	1,599.2	1,311.3	1,396.6	14.2	17.3
Other Australian age-standardised rate per 100,000[(d)]								
Males	28.2	26.2	32.7	32.5	35.4	48.7	1.2*	75.4*
Females	15.8	12.6	14.6	10.8	11.3	17.2	0.0	–0.5
Persons	22.1	19.5	23.7	21.8	23.5	33.2	0.6	48.8

(continued)

Table 1.12.5 (continued): Age-standardised notification rates, rate ratios and rate differences for gonorrhoea, WA, SA and NT, 1996–1998 to 2011–2013

	1996–1998	1999–2001	2002–2004	2005–2007	2008–2010	2011–2013	Annual change[(a)]	% change over period[(b)]
Rate ratio[(e)]								
Males	44.7	46.0	39.1	49.7	36.9	27.6	. .	. .
Females	75.0	95.7	92.9	147.1	117.5	84.6	. .	. .
Persons	55.2	61.7	55.4	73.5	55.8	42.0	. .	. .
Rate difference[(f)]								
Males	1,233.9	1,177.7	1,247.0	1,586.3	1,269.3	1,296.2	8.8	10.7
Females	1,167.9	1,191.0	1,342.4	1,577.6	1,314.3	1,440.5	18.7	23.5
Persons	1,197.9	1,182.4	1,291.8	1,577.4	1,287.8	1,363.4	13.6	16.8

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1996–1998 to 2011–2013.

(a) Annual change determined using linear regression analysis.

(b) Per cent change between 1996–1998 and 2011–2013 based on the annual rate of change over the period.

(c) 'Other' includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(d) Directly age-standardised using the Australian 2001 standard population using 5 year age groups up to 65+.

(e) Notification rate for Indigenous Australians divided by the notification rate for Other Australians.

(f) Notification rate for Indigenous Australians minus the notification rate for Other Australians.

Notes

1. There were 78 notifications of gonorrhoea for Indigenous Australians and 186 notifications in Other Australians of unknown age over the time period 1996 to 2013. These records were excluded from the analysis of age-standardised rates.
2. Data for persons includes individuals of unknown sex.
3. Because of the very high rates of gonorrhoea in the Indigenous population and low rates in the Other Australian population, rate ratios are large and may vary substantially over time, as small changes in rates can result in large changes in the resulting ratios.

Source: AIHW analyses of NNDSS data.

Table 1.12.6: Age-standardised notification rates, rate ratios and rate differences for hepatitis C[(a)], WA, SA and NT, 1996–1998 to 2011–2013

	1996–1998	1999–2001	2002–2004	2005–2007	2008–2010	2011–2013	Annual change[(b)]	% change over period[(c)]
Indigenous notifications								
Males	365	353	372	371	382	508	7.6	34.2
Females	207	262	267	259	273	288	4.1*	26.9*
Persons	572	615	639	630	655	796	11.7*	31.2*
Other Australian notifications[(d)(e)]								
Males	6,403	4,451	3,530	3,431	3,293	3,271	–183.2*	–50.5*
Females	3,332	2,430	2,055	1,884	1,864	1,521	–104.0*	–52.7*
Persons	9,760	6,908	5,586	5,315	5,157	4,797	–288.9*	–51.5*
Indigenous crude rate per 100,000								
Males	83.0	75.0	74.1	69.5	67.8	85.7	–0.1	–2.3
Females	47.2	55.6	52.8	48.1	48.0	48.2	–0.2	–6.1
Persons	65.1	65.3	63.4	58.7	57.9	66.9	–51.3	–3.9
Indigenous age-standardised rate per 100,000[(e)]								
Males	183.1	161.5	158.8	155.8	151.3	182.8	–0.3	–3.0
Females	102.3	110.1	109.7	101.4	102.1	103.2	–0.3	–3.7
Persons	142.1	135.1	133.7	127.9	126.2	142.6	–0.3	–3.2
Other Australian age-standardised rate per 100,000[(d)(e)]								
Males	124.8	85.2	67.1	63.6	57.8	53.4	–4.2*	–59.1*
Females	65.3	46.8	39.5	35.5	33.3	25.3	–2.3*	–59.7*
Persons	95.1	66.2	53.4	49.7	45.6	39.5	–3.3*	–59.3*

(continued)

Table 1.12.6 (continued): Age-standardised notification rates, rate ratios and rate differences for hepatitis C[(a)], WA, SA and NT, 1996–1998 to 2011–2013

	1996–1998	1999–2001	2002–2004	2005–2007	2008–2010	2011–2013	Annual change[(b)]	% change over period[(c)]
Rate ratio[(f)]								
Males	1.5	1.9	2.4	2.4	2.6	3.4	. .	. .
Females	1.6	2.4	2.8	2.9	3.1	4.1	. .	. .
Persons	1.5	2.0	2.5	2.6	2.8	3.6	. .	. .
Rate difference[(g)]								
Males	58.3	76.3	91.8	92.1	93.5	129.5	3.9*	95.3*
Females	37.1	63.3	70.2	65.9	68.8	77.9	2.1*	63.8*
Persons	47.0	68.9	80.2	78.2	80.6	103.0	3.0*	82.9*

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1996–1998 to 2011–2013.

(a) Hepatitis C data includes ‘newly acquired’ and ‘unspecified’ infections identified under two disease codes ‘040’ and ‘053’.

(b) Annual change determined using linear regression analysis.

(c) Per cent change between 1996–1998 and 2011–2013 based on the annual rate of change over the period.

(d) ‘Other’ includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(e) Directly age-standardised using the Australian 2001 standard population using 5 year age groups up to 65+.

(f) Notification rate for Indigenous Australians divided by the notification rate for Other Australians.

(g) Notification rate for Indigenous Australians minus the notification rate for Other Australians.

Notes

1. There were 2 notifications of hepatitis C for Indigenous Australians and 58 notifications in Other Australians of unknown age over the time period 1996 to 2013. These records were excluded from the analysis of age-standardised rates.
2. Data for persons includes individuals of unknown sex.

Source: AIHW analyses of NNDSS data.

Table 1.12.7: Age-standardised notification rates, rate ratios and rate differences for hepatitis B[(a)], WA, SA and NT, 2005–2007 to 2011–2013[(b)]

	2005–2007	2008–2010	2011–2013	Annual change[(c)]	% change over period[(d)]
Indigenous notifications					
Males	471	263	239	. .	. .
Females	299	201	155	. .	. .
Persons	770	464	394	. .	. .
Other Australian notifications[(e)]					
Males	1,520	2,053	2,496	. .	. .
Females	1,202	1,535	1,409	. .	. .
Persons	2,722	3,588	3,907	. .	. .
Indigenous crude rate per 100,000					
Males	88.2	46.7	40.3	. .	. .
Females	55.5	35.4	26.0	. .	. .
Persons	71.8	41.0	33.1	. .	. .
Indigenous age-standardised rate per 100,000[(f)]					
Males	262.0	145.6	114.4	. .	. .
Females	143.9	102.8	67.3	. .	. .
Persons	198.5	122.6	89.5	. .	. .
Other Australian age-standardised rate per 100,000[(f)]					
Males	27.9	35.4	40.2	. .	. .
Females	22.6	27.3	23.6	. .	. .
Persons	25.3	31.4	32.1	. .	. .
Rate ratio[(g)]					
Males	9.4	4.1	2.8	. .	. .
Females	6.4	3.8	2.9	. .	. .
Persons	7.9	3.9	2.8	. .	. .
Rate difference[(h)]					
Males	234.1	110.2	74.2	. .	. .
Females	121.2	75.5	43.7	. .	. .
Persons	173.2	91.2	57.4	. .	. .

(continued)

Table 1.12.7 (continued): Age-standardised notification rates, rate ratios and rate differences for hepatitis B(a), WA, SA and NT, 2005–2007 to 2011–2013(b)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 2005–2007 to 2011–2013.

(a) Hepatitis B data includes ‘newly acquired’ and ‘unspecified’ infections identified under two disease codes ‘039’ and ‘052’.

(b) Complete and consistent data on hepatitis B notifications are not available before 2005.

(c) Annual change was not calculated as there were less than four data points.

(d) Per cent change between 2005–2007 and 2011–2013 was not calculated as there were less than four data points.

(e) ‘Other’ includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(f) Directly age-standardised using the Australian 2001 standard population using 5 year age groups up to 65+.

(g) Notification rate for Indigenous Australians divided by the notification rate for Other Australians.

(h) Notification rate for Indigenous Australians minus the notification rate for Other Australians.

Notes

1. There were 0 notifications of hepatitis B for Indigenous Australians and 8 notifications in Other Australians of unknown age over the time period 1996 to 2013. These records were excluded from the analysis of age-standardised rates.
2. Data for persons includes individuals of unknown sex.

Source: AIHW analyses of NNDSS data.

Table 1.12.8: Age-standardised notification rates, rate ratios and rate differences for hepatitis B[(a)], WA, SA and NT, 2006–2007 to 2012–2013[(b)]

	2006–2007	2008–2009	2010–2011	2012–2013	Annual change[(c)]	% change over period[(d)]
Indigenous notifications						
Males	312	195	162	145	–26.7	–56.5
Females	204	133	127	96	–16.5	–52.2
Persons	516	328	289	241	–43.2	–54.8
Other Australian notifications[(e)]						
Males	1,086	1,341	1347	1,861	116.6	66.0
Females	914	1,018	962	964	4.7	3.0
Persons	2,000	2,359	2309	2,827	121.6	36.3
Indigenous crude rate per 100,000						
Males	173.6	104.8	84.3	72.7	–16.2	–61.6
Females	112.5	70.8	65.4	47.8	–10.0	–57.5
Persons	142.9	87.7	74.8	60.2	–13.0	–60.0
Indigenous age-standardised rate per 100,000[(f)]						
Males	264.1	154.0	130.7	101.0	–25.6	–64.3
Females	152.4	103.8	90.4	59.8	–14.6*	–60.1*
Persons	204.2	127.9	108.8	78.9	–19.7*	–62.6*
Other Australian age-standardised rate per 100,000[(f)]						
Males	29.6	34.5	33.5	44.2	2.1	44.0
Females	25.6	27.3	24.7	23.5	–0.4	–10.0
Persons	27.7	30.9	29.2	34.1	0.9	18.9
Rate ratio[(g)]						
Males	8.9	4.5	3.9	2.3	. .	. .
Females	5.9	3.8	3.7	2.5	. .	. .
Persons	7.4	4.1	3.7	2.3	. .	. .
Rate difference[(h)]						
Males	234.5	119.4	97.2	56.8	–27.8	–79.2
Females	126.7	76.5	65.7	36.2	–14.1*	–71.4*
Persons	176.6	97.0	79.7	44.9	–20.6*	–76.7*

(continued)

Table 1.12.8 (continued): Age-standardised notification rates, rate ratios and rate differences for hepatitis B(a), WA, SA and NT, 2006–2007 to 2012–2013(b)

* Represents results with statistically significant increases or declines at the p < 0.05 level over the period 2006–2007 to 2012–2013.

(a) Hepatitis B data includes ‘newly acquired’ and ‘unspecified’ infections identified under two disease codes ‘039’ and ‘052’.

(b) Complete and consistent data on hepatitis B notifications are not available before 2005.

(c) Annual change determined using linear regression analysis.

(d) Per cent change between 2006–2007 and 2012–2013 based on the annual rate of change over the period.

(e) ‘Other’ includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(f) Directly age-standardised using the Australian 2001 standard population using 5 year age groups up to 65+.

(g) Notification rate for Indigenous Australians divided by the notification rate for Other Australians.

(h) Notification rate for Indigenous Australians minus the notification rate for Other Australians.

Notes

1. There were 0 notifications of hepatitis B for Indigenous Australians and 8 notifications in Other Australians of unknown age over the time period 1996 to 2013. These records were excluded from the analysis of age-standardised rates.
2. Data for persons includes individuals of unknown sex.

Source: AIHW analyses of NNDSS data.

Table 1.12.9: Notification rates for HIV, by Indigenous status, sex and state/territory, 2010–2012(a)

				Males				**Females**				**Persons(b)**			
		Proportion (%)		**No. per 100,000(c)**				**No. per 100,000(c)**				**No. per 100,000(c)**			
	Total number	**Indig.**	**Other(d)**	**Indig.**	**Other(d)**	**Ratio(e)**	**Rate difference(f)**	**Indig.**	**Other(d)**	**Ratio(e)**	**Rate difference(f)**	**Indig.**	**Other(d)**	**Ratio(e)**	**Rate difference(f)**
NSW	1,200	1.9	98.1	n.p.	10.1	n.p.	n.p.	n.p.	1.0	n.p.	n.p.	4.4	5.6	0.8*	–1.2*
Vic	926	1.0	99.0	n.p.	9.5	n.p.	n.p.	n.p.	1.2	n.p.	n.p.	n.p.	5.3	n.p.	n.p.
Qld	724	4.1	95.6	8.6	9.3	0.9*	–0.7*	n.p.	1.5	n.p.	n.p.	5.6	5.4	1.0*	0.1*
WA	330	2.1	97.9	n.p.	6.8	n.p.	n.p.	n.p.	2.5	n.p.	n.p.	n.p.	4.7	n.p.	n.p.
SA	150	n.p.	n.p.	n.p.	4.9	n.p.	n.p.	n.p.	1.5	n.p.	n.p.	n.p.	3.2	n.p.	n.p.
NT	42	11.9	88.1	n.p.	10.5	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	7.3	n.p.	n.p.
TAS	38	n.p.	n.p.	n.p.	4.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	2.8	n.p.	n.p.
ACT	42	0.0	100.0	n.p.	6.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	3.6	n.p.	n.p.
Australia	**3,452**	**2.3**	**97.7**	**6.5**	**8.9**	**0.7***	**–2.3***	**n.p.**	**1.4**	**n.p.**	**n.p.**	**4.2**	**5.1**	**0.8***	**–0.9***

* Represents results with statistically significant differences in the Indigenous/Other Australian comparisons at the p < 0.05 level.

(a) Calendar year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Persons includes 8 people whose sex was reported as transgender.

(c) Directly age-standardised using the Australian 2001 standard population using age 5 year age groups up to 65+.

(d) Other' includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(e) Rate ratio is Indigenous divided by Other.

(f) Rate difference is Indigenous minus Other.

Source: AIHW analyses of National HIV Registry.

Table 1.12.10: Age-specific notification rates per 100,000 for HIV, by Indigenous status and sex, 2010–2012(a)

	Males				Females				Persons(b)			
	Indig.	**Other(c)**	**Rate ratio(d)**	**Rate difference(e)**	**Indig.**	**Other(c)**	**Rate ratio(d)**	**Rate difference(e)**	**Indig.**	**Other(c)**	**Rate ratio(d)**	**Rate difference(e)**
0–14	n.p.	0.1	n.p.	n.p.	n.p.	0.1	n.p.	n.p.	n.p.	0.1	n.p.	n.p.
15–24	5.3	6.6	0.8	–1.2	n.p.	1.4	n.p.	n.p.	3.0	6.6	0.5	–3.6*
25–34	17.0	19.8	0.9	–2.8	7.2	4.0	1.8	3.3	12.0	19.8	0.6	–7.7*
35–44	14.4	18.0	0.8	–3.5	n.p.	2.4	n.p.	n.p.	8.6	18.0	0.5	–9.4*
45–54	7.7	11.1	0.7	–3.4	n.p.	1.1	n.p.	n.p.	4.8	11.1	0.4	–6.4*
55–64	n.p.	5.8	n.p.	n.p.	n.p.	0.4	n.p.	n.p.	n.p.	5.8	n.p.	n.p.
65+	n.p.	1.8	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	1.8	n.p.	n.p.
Total crude	**5.9**	**8.8**	**0.7**	**–2.9***	**1.9**	**1.3**	**1.4**	**0.6**	**3.9**	**5.0**	**0.8**	**–1.2***
Total age-standardised(f)	**6.5**	**8.9**	**0.7**	**–2.3***	**n.p.**	**1.4**	**n.p.**	**n.p.**	**4.2**	**5.1**	**0.8**	**–0.9***

* Represents results with statistically significant differences in the Indigenous/Other Australian comparisons at the $p < 0.05$ level.

(a) Calendar year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Persons includes 8 people whose sex was reported as transgender.

(c) Includes notifications for non-Indigenous Australians and those for whom Indigenous status was not stated.

(d) Rate ratio is Indigenous divided by Other.

(e) Rate difference is Indigenous minus Other.

(f) Directly age-standardised using the Australian 2001 standard population using age 5 year age groups up to 65+.

Source: AIHW analyses of National HIV Registry.

Table 1.12.11: Exposure categories for HIV, by Indigenous status, 2010–2012[(a)]

	Number		Per cent		No. per 100,000[(b)]			
Exposure category	**Indigenous**	**Other**[(c)]	**Indigenous**	**Other**[(c)]	**Indigenous**	**Other**[(c)]	**Ratio**[(d)]	**Rate difference**[(d)]
Male homosexual/bisexual contact[(e)]	49	2,216	62.8	65.7	5.5	6.9	0.8*	–1.4*
Male homosexual/bisexual contact and injecting drug use[(e)]	<5	85	n.p.	2.5	n.p.	0.3	n.p.	n.p.
Heterosexual contact	15	801	19.2	23.7	n.p.	1.2	n.p.	n.p.
Injecting drug use	7	65	9.0	1.9	n.p.	0.1	n.p.	n.p.
Mother with/at risk of HIV infection	<5	19	n.p.	0.6	n.p.	n.p.	n.p.	n.p.
Other[(f)]	<5	188	n.p.	5.6	n.p.	0.3	n.p.	n.p.
Total	**78**	**3,374**	100.0	100.0	**4.2**	**5.1**	**0.8***	**–0.9***

* Represents results with statistically significant differences in the Indigenous/Other Australian comparisons at the $p < 0.05$ level.

(a) Calendar year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Directly age-standardised using the Australian 2001 standard population using age 5 year age groups up to 65+.

(c) 'Other' includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(d) Rate ratio is Indigenous divided by Other. Rate difference is Indigenous minus Other.

(e) Age-standardised rates were calculated from crude rates based on the male population.

(f) Includes: Haemophilia/coagulation disorder, receipt of blood/tissue, and exposure category undetermined.

Source: AIHW analyses of National HIV Registry.

Table 1.12.12: Crude and age-standardised notification rates, rate ratios and rate differences for HIV[(a)], Australia, 1998–2000 to 2010–2012

	1998–2000	2001–2003	2004–2006	2007–2009	2010–2012	Annual change[(b)]	% change over period[(c)]
Indigenous notifications	55	64	65	62	78	1.5	31.4
Other Australian notifications[(d)]	2,210	2,459	2,845	3,074	3,374	98.1*	53.4*
Indigenous crude rate per 100,000	3.6	3.9	3.7	3.3	3.9	0.0	–0.7
Indigenous age-standardised[(e)] rate per 100,000	3.9	4.4	3.9	3.9	4.2	0.0	1.6
Other Australian[(d)] age-standardised[(e)] rate per 100,000	3.9	4.1	4.6	4.8	5.1	0.1*	33.6*
Rate difference[(f)]	**0.0**	**0.3**	**–0.7**	**–0.9**	**–0.9**	**–0.1**	**–733.8**
Rate ratio[(g)]	**1.0**	**1.1**	**0.9**	**0.8**	**0.8**	**n.p.**	**n.p.**

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1998–2000 to 2010–2012.

(a) Calendar year reporting. Data are presented in 3-year groupings because of small numbers each year.

(b) Annual change determined using linear regression analysis.

(c) Per cent change between 1998–2000 and 2010–2012 based on the annual change over the period.

(d) ‘Other’ includes notifications for non-Indigenous people and those for whom Indigenous status was not stated.

(e) Directly age-standardised using the Australian 2001 standard population using age 5 year age groups up to 65+.

(f) Notification rate for Indigenous Australians minus the notification rate for Other Australians.

(g) Notification rate for Indigenous Australians divided by the notification rate for Other Australians.

Note: Data are continuously updated back to 1998, and should not be directly compared with previously published data.

Source: AIHW analyses of National HIV Registry.

Data quality issues

National Notifiable Diseases Surveillance System

Notifications

Incidence of sexually transmissible infections is 1 indicator of unsafe sexual practices.

Notification statistics do not measure the incidence or prevalence of these infections in the community. NNDSS data represent only a proportion of the total cases occurring in the community, that is only those cases for which health care was sought, a test conducted and a diagnosis made, followed by a notification to health authorities. Under-reporting of these infections can occur at a number of stages:

- a person infected may not have symptoms
- a person may not seek medical care
- no testing performed
- a false negative result may occur
- there may be a positive test result but for some reason a notification may not occur
- the case may not be reported to the NNDSS (for more information see Figure 1 in NNDSS 2008).

The level of under-reporting can vary by disease, jurisdiction and over time. The method of surveillance can vary between jurisdictions with different requirements for notification by medical practitioners, laboratories and hospitals. These can also change over time.

Notification statistics can provide insights into the health of the population which has been diagnosed with a notifiable illness and changes over time.

Notification statistics do not necessarily capture the mode of transmission, NNDSS data on the diseases discussed in this indicator are known to include infections acquired through non-sexual modes of transmission. For example, although data on hepatitis C is included in this indicator, sexual transmission is not considered the main route of transmission, hepatitis C primarily occurs among those with a history of injecting drug use.

Due to the high proportion of asymptomatic presentations of STI infections, diagnoses are heavily influenced by testing patterns. High rates of STI diagnoses in Indigenous populations may be due to higher levels of screening and not necessarily associated with increased levels of transmission among Indigenous persons.

Under-identification

The incompleteness of Indigenous identification means the number of notifications recorded as Indigenous is likely to be an under-estimate of Indigenous notifications rates.

The completeness of Indigenous identification in notifiable disease registries varies between the states and territories and by disease. Information on the occurrence of sexually transmitted infections is included in this indicator if information on Indigenous status was reported for at least 50% of diagnoses in a state or territory health jurisdiction for the period 1996–98 to 2011–13 (for time series data) or 2011–13 (for current period). Based on this cut-off, Western Australia, South Australia, Tasmania and the Northern Territory were assessed to have adequate identification for chlamydia, syphilis, gonorrhoea, hepatitis B and hepatitis C. Of the remaining states and territories: Queensland and Victoria had adequate identification for syphilis, gonorrhoea and chlamydia; the Australian Capital Territory had adequate identification for syphilis, gonorrhoea and hepatitis B; and New South Wales had adequate identification for syphilis only.

Numerator and denominator

Rate and ratio calculations rely on good population estimates. The changes in the completeness of identification of Indigenous Australians in notification records may take place at different rates from changes in the identification of Indigenous Australians in the population estimates. Denominators used here are sourced from *Experimental estimates and projections: Aboriginal and Torres Strait Islander Australians 1996 to 2026* (ABS 2014).

AIDS and HIV notifications

National surveillance for newly diagnosed HIV infection is coordinated by the Kirby Institute, in collaboration with state and territory health authorities, the Australian Government Department of Health, the Australian Institute of Health and Welfare and other collaborating networks in surveillance for HIV, viral hepatitis and sexually transmissible infections.

Cases of HIV infection are notified to the National HIV Registry on the first occasion of diagnosis in Australia, either by the diagnosing laboratory (Australian Capital Territory and Tasmania), by doctor notification (Western Australia) or by a combination of laboratory and doctor sources (New South Wales, Northern Territory, Queensland, South Australia and Victoria). Information sought at notification of HIV infection included State/Territory of diagnosis, name code (based on the first 2 letters of the family name and the first 2 letters of the given name), sex, date of birth, Indigenous status, date of HIV diagnosis, CD4+ cell count at diagnosis, source of exposure to HIV and evidence of newly acquired HIV infection.

Information on Indigenous status was routinely sought at diagnosis of HIV infection in the Northern Territory, Queensland, South Australia, Tasmania and Western Australia from 1985. Information on Indigenous status was available for cases of HIV infection newly diagnosed in New South Wales from January 1992, from June 1998 in Victoria and from January 2005 in the Australian Capital Territory. Nationally, information on Indigenous status at diagnosis of HIV infection was sought prospectively from May 1995. For HIV diagnoses before 1995, Indigenous status was obtained retrospectively through health authorities. In 2000–2009, Indigenous status was reported at HIV diagnosis by state and territory health authorities other than the Australian Capital Territory before January 2005 and Victoria before June 1998 in 98% of Australian-born cases (Guthrie et al. 2000; The Kirby Institute 2014).

National HIV Registry

National surveillance for newly diagnosed HIV infection is coordinated by the Kirby Institute, in collaboration with state and territory health authorities, the Australian Government Department of Health, the Australian Institute of Health and Welfare and other collaborating networks in surveillance for HIV, viral hepatitis and sexually transmissible infections.

Cases of HIV infection are notified to the National HIV Registry on the first occasion of diagnosis in Australia, either by the diagnosing laboratory (the Australian Capital Territory and Tasmania), by doctor notification (Western Australia) or by a combination of laboratory and doctor sources (New South Wales, the Northern Territory, Queensland, South Australia and Victoria). Information sought at notification of HIV infection included state/territory of diagnosis, name code (based on the first 2 letters of the family name and the first 2 letters of the given name), sex, date of birth, Indigenous status, date of HIV diagnosis, CD4+ cell count at diagnosis, source of exposure to HIV, and evidence of newly acquired HIV infection.

Information on Indigenous status was routinely sought at diagnosis of HIV infection in the Northern Territory, Queensland, South Australia, Tasmania and Western Australia from 1985. Information on Indigenous status was available for cases of HIV infection newly diagnosed in New South Wales from January 1992, from June 1998 in Victoria and from January 2005 in the Australian Capital Territory. Nationally, information on Indigenous status at diagnosis of HIV infection was sought prospectively from May 1995. For HIV diagnoses before 1995, Indigenous status was obtained retrospectively through health authorities. In 2000–2009, Indigenous status was reported at HIV diagnosis by State/Territory health authorities other than the Australian Capital Territory before January 2005 and Victoria before June 1998 in 98% of Australian-born cases (Guthrie et al. 2000; The Kirby Institute 2014).

List of symbols used in tables

0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 13 of 68

Detailed analyses

1.13 Community functioning

This measure reports on the analysis of factors to describe community functioning for Aboriginal and Torres Strait Islander Australians

Introduction

This is no. 13 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data source

National Aboriginal and Torres Strait Islander Social Survey.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

This measure is defined as the ability and freedom of Aboriginal and Torres Strait Islander community members and communities to determine the context of their lives (for example social, cultural, spiritual and organisational aspects) and to translate their knowledge, skills, and understanding (capabilities) into positive actions towards a valued life. It incorporates a range of methods and analyses:

- A qualitative method to determine thematic descriptors of community functioning determined by Aboriginal and Torres Strait Islander people.
- National survey results from the 2008 NATSISS related to each community functioning theme.
- Survey results for a selection of variables from the 2008 NATSISS related to each community functioning theme, for persons aged 15 and over, by age group, sex, remoteness and jurisdiction.
- Community Functioning Scores derived from available variables related to each community functioning theme, for persons aged 0–14 and aged 15 and over, presented by age group, sex, remoteness and jurisdiction.
- Cross tabulations of community functioning themes, significance testing of ratios and chi-squared significance testing of associations between community functioning variables. Summaries of these findings are under development.
- Multivariate analyses of factors contributing to community functioning are also under development.

Workshops drawing together Aboriginal and Torres Strait Islander participants from across Australia were held in 2008 and 2010 to explore key features of functioning in families and communities (see Table 1.13.1).

Table 1.13.1: Community functioning themes identified at workshops, 2008 and 2010

Year	Workshop themes
2008	• Power to control choices and options • Connectedness to family, land, and history • Health, chronic disease and substance use • Culture, identity • Employment, education, income • Infrastructure and community • Coping with the internal and external world • Structure and routine
2010	• Connectedness to country, land and history; culture and identity • Resilience • Leadership • Having a role, structure and routine • Feeling safe • Vitality

Source: 2008 and 2010 OATSIH Community consultation workshops—community functioning.

See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- National survey results from the 2008 NATSISS related to each community functioning theme, see tables 1.13.3–8.
- Survey results for a selection of variables from the 2008 NATSISS related to each community functioning theme by age group, sex, remoteness and jurisdiction, see tables 1.13.9–12.
- Results related to Community Functioning Scores derived from the 2008 NATSISS, see Table 1.13.13, figures 1.13.1–8.

Selected national findings

Current period

National survey results from the 2008 NATSISS related to each community functioning theme are presented in tables 1.13.3 to 1.13.8 with comparable data from the 2002 NATSISS where possible. These results are summarised below.

Connectedness to country, land and history; culture and identity

In 2008, of the Aboriginal and Torres Strait Islanders aged 15 and over who were surveyed:

- 72% recognised their homelands.
- 62% identified with a clan or language group, an increase from 54% in 2002.
- 89% 'feel able to have a say with family and friends' some, most or all of the time.
- 94% had contact with family or friends outside the household at least once per week.
- 75% had friends to confide in.

- 51% provided support to relatives outside the household.
- 63% had attended an Indigenous cultural event in the last 12 months (Table 1.13.3).

Resilience

In 2008, of the Aboriginal and Torres Strait Islanders aged 15 and over who were surveyed:

- 69% reported that they did not avoid situations due to past discrimination.
- 80% agreed that their doctor can be trusted and 69% agreed that the local school could be trusted.
- 89% felt they were able to find general support from outside the household.
- 56% had provided support to someone outside their household in the last 4 weeks.
- 89% had participated in sport, social or community activities in last 3 months.
- 54% in *Non-remote* areas knew someone in an organisation they would feel comfortable contacting.
- 44% of employed people said work allowed them to fulfil cultural responsibilities (Table 1.13.4).

Leadership

In 2008, of the Aboriginal and Torres Strait Islanders who were surveyed:

- 42% of children aged 3–14 had spent time with an Indigenous leader or Elder in the last week (Table 1.13.5).

Having a role, structure and routine

In 2008, of the Aboriginal and Torres Strait Islanders who were surveyed:

- 78% of Indigenous Australians had lived in only 1 dwelling in the last 12 months.
- 73% were in households that had not experienced cash flow problems in the last 12 months.
- 86% were in households in which there had been no days without money for basic living expenses in the last 2 weeks.
- 94% of children aged 0–14 had participated in informal learning activities with their main carer in the last week (Table 1.13.6).

Feeling safe

In 2008, of the Aboriginal and Torres Strait Islanders aged 15 and over who were surveyed:

- 75% reported not being a victim of physical or threatened violence in the past 12 months.
- 80% felt safe at home alone after dark.
- In the 5 years prior to the survey, 97% had not been incarcerated. 91% had never been incarcerated in their lifetime (Table 1.13.7).

Vitality

In 2008, of the Aboriginal and Torres Strait Islanders who were surveyed:

- 50% had no disability or long-term health condition.
- 68% reported low to moderate levels of psychological distress in the last 4 weeks.
- 76% of children aged 0–14 did not have problems sleeping in the last 4 weeks.

- 74% of children aged 4–14 spent at least 60 minutes every day in the last week being physically active.
- 74% of people aged 15 and over said they can easily get to places as needed.
- 41% of those aged 15 and over (who were not currently studying) intended to study in the future.
- Schoolwork was the main purpose of internet use for children (77%). About 30% of those aged 5 and over reported using the internet for education or study (Table 1.13.8).

Community Functioning Scores

The distributions of the derived Community Functioning Scores for Indigenous Australians, by age, sex, remoteness and jurisdiction, are presented in figures 1.13.1 to 1.13.8. Table 1.13.2 shows how community functioning scores were calculated.

Score distributions are presented separately for ages 0–14, and ages 15 and over, because different variables were available for each. Community Functioning Scores for persons aged 0–14 cannot be compared with Scores for persons aged 15 and over. For each distribution, the total area under the curve is 100 per cent, whereby the weight for each community functioning theme and the weight for each variable within each community functioning theme have been taken into account. The greater the Community Functioning Score, the stronger the community functioning.

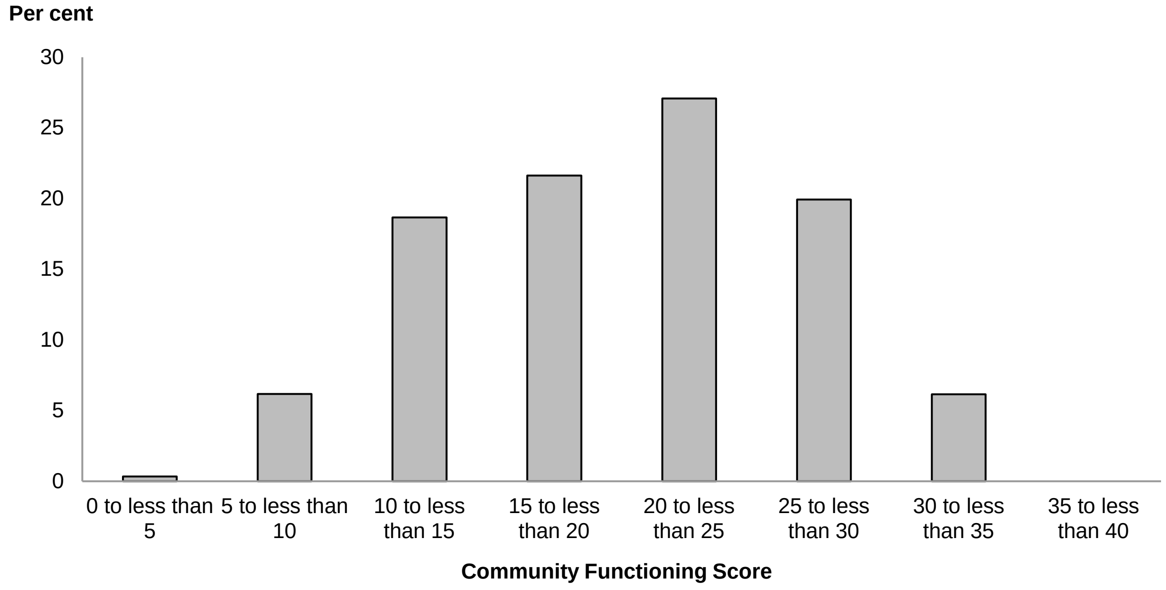
Median scores were calculated to describe the middle of each distribution (see Table 1.13.13):

- Community Functioning Scores did not vary much by sex for persons aged 0–14 (median score 20 for males, 21 for females), or for persons aged 15 and over (median score 44 for males, 43 for females).
- Community Functioning Scores were higher for persons aged 0–14 in *Remote* (median score 23) than in *Non-remote* areas (median score 20), and but did not vary much by remoteness for persons aged 15 and over (median score 44 in *Remote* areas, 43 in *Non-remote* areas).
- Community Functioning Scores varied by jurisdiction. For persons aged 0–14, scores were highest in the Northern Territory (median score 23). For persons aged 15 and over, scores were highest in the Australian Capital Territory (median score 49) (Table 1.13.13).

Table 1.13.2: Description of themes contributing to community functioning for Indigenous Australians, 2008

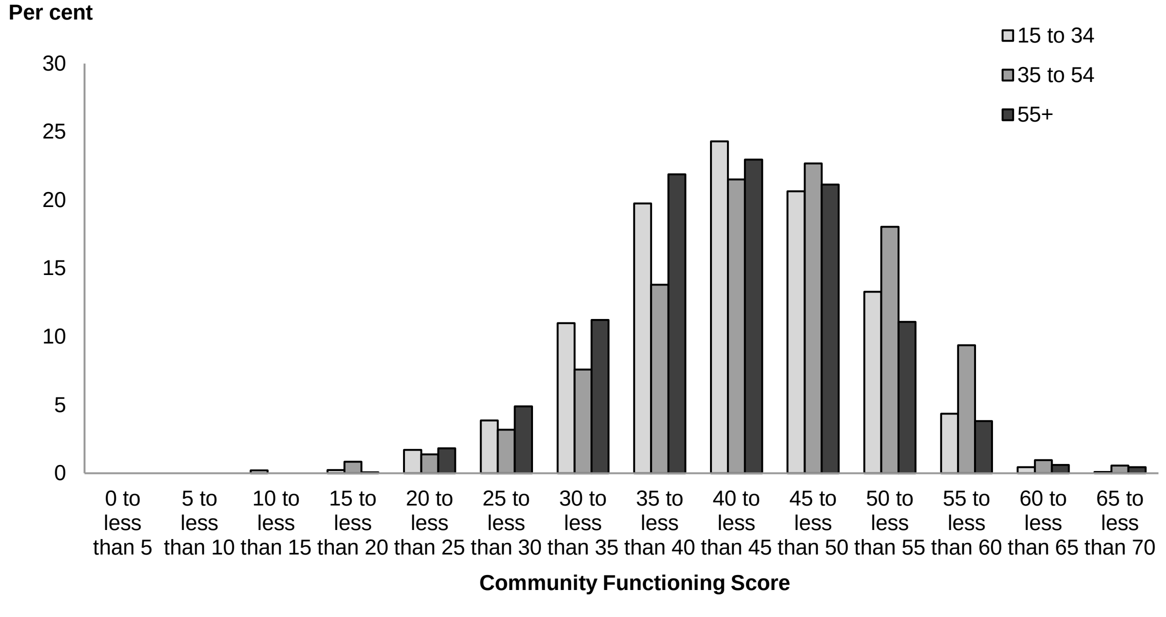
Functioning	Descriptor	Weight for Community Functioning Scores
Connectedness to country, land and history; culture and identity	• Being connected to country, land, family and spirit • Strong and positive social networks with Indigenous Australians • Strong sense of identity and being part of a collective (that is, knowing where you are from, who is your family) • Sharing, giving and receiving, trust, love, looking out for others • Engaged/communicative	25%
Resilience	• Coping with the internal and external world • Power to control choices and options • Ability to proceed in public without shame • Optimising what you have • Challenge injustice and racism, stand up when required • Cope well with difference, flexibility and accommodating • Ability to walk in 2 worlds • Engaged in decision making • External social contacts	20%
Leadership	• Strong Elders in family and community, both male and female • Role models both male and female • Strong direction, vision • The ‘rock’, someone who has time to listen and advise	20%
Having a role, structure and routine	• Having a role for self: participation, contributing through paid and unpaid roles • Capabilities and skills derived through social structures and experience through non-formal education • Knowing boundaries and acceptable behaviours • Sense of place—knowing your place in family and society • Being valued and acknowledged • Disciplined	15%
Feeling safe	• Lack of physical and lateral violence • Safe places • Emotional security • Cultural competency • Relationships that can sustain disagreement	10%
Vitality	• Infrastructure of community • Access to services • Education • Health • Income • Employment	10%

Source: 2008 OATSIH Community consultation workshops—community functioning.



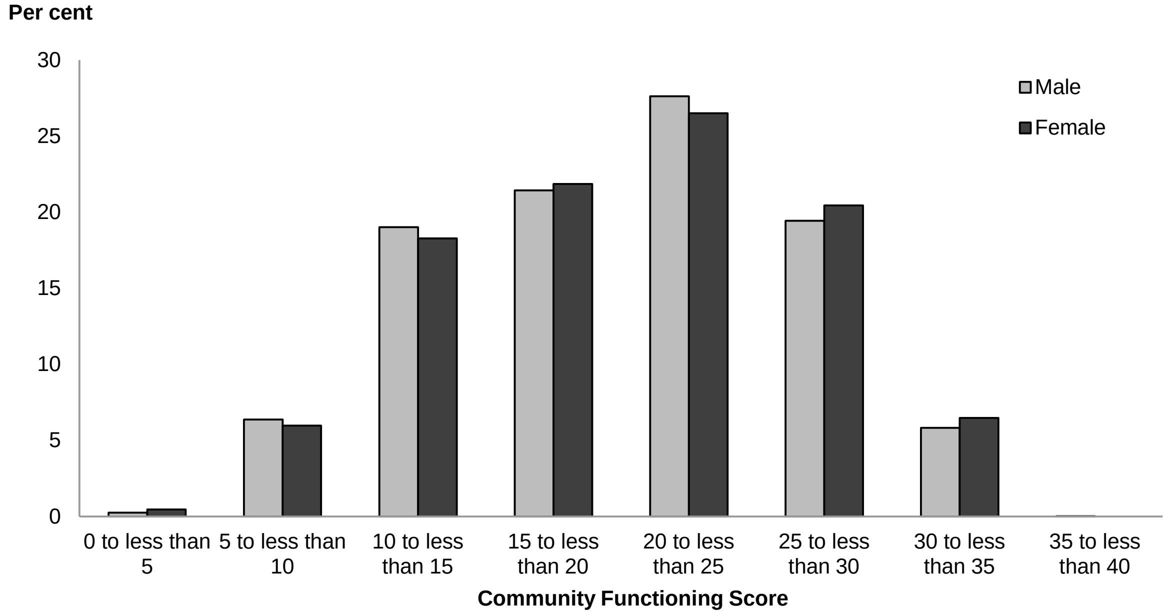
Source: ABS analysis (unpublished) of Community Functioning Scores derived from 2008 NATSISS.

Figure 1.13.1: Distribution of Community Functioning Scores for Indigenous Australians aged 0–14, Australia 2008



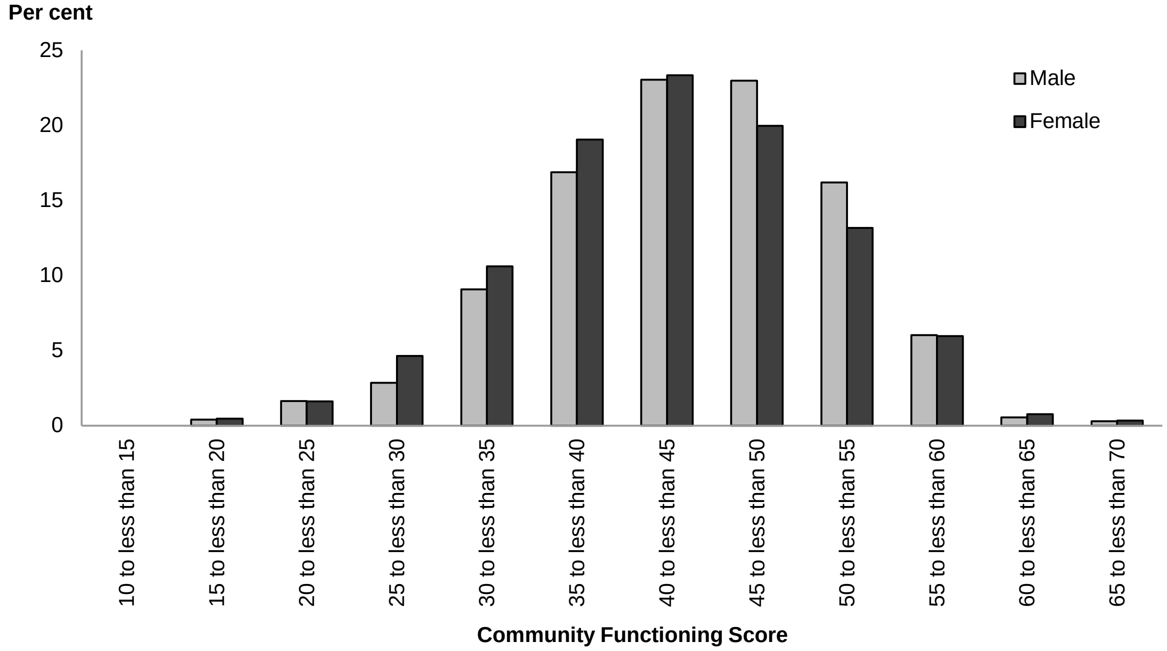
Source: ABS analysis (unpublished) of Community Functioning Scores derived from 2008 NATSISS.

Figure 1.13.2: Distribution of Community Functioning Scores for Indigenous Australians aged 15 and over, Australia 2008



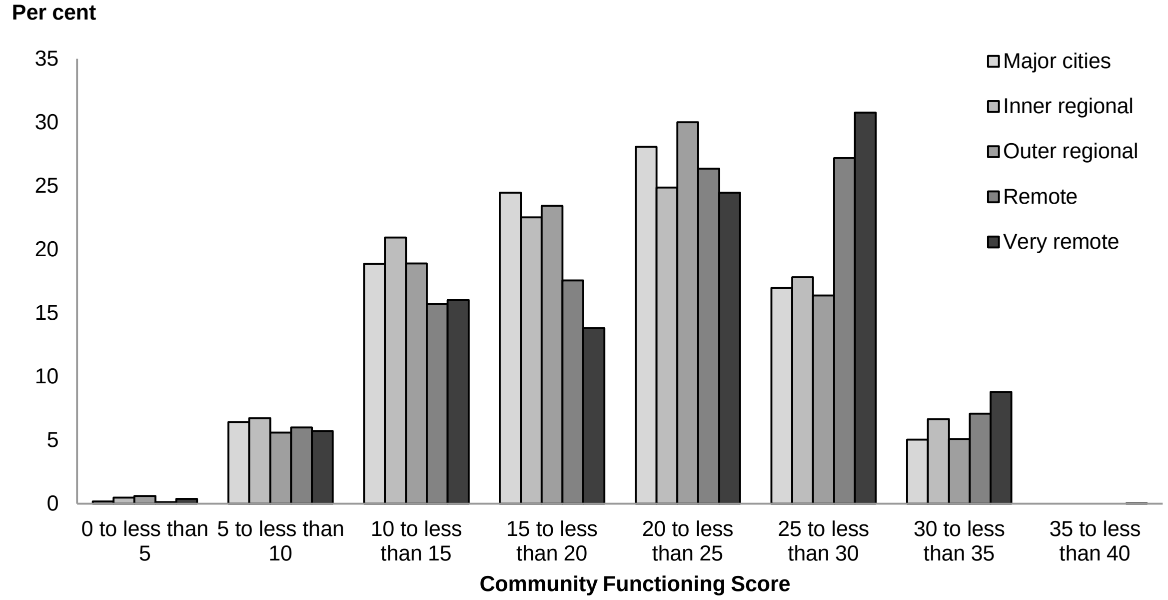
Source: ABS analysis (unpublished) of Community Functioning Scores derived from 2008 NATSISS.

Figure 1.13.3: Distribution of Community Functioning Scores for Indigenous Australians aged 0–14, by sex, Australia 2008



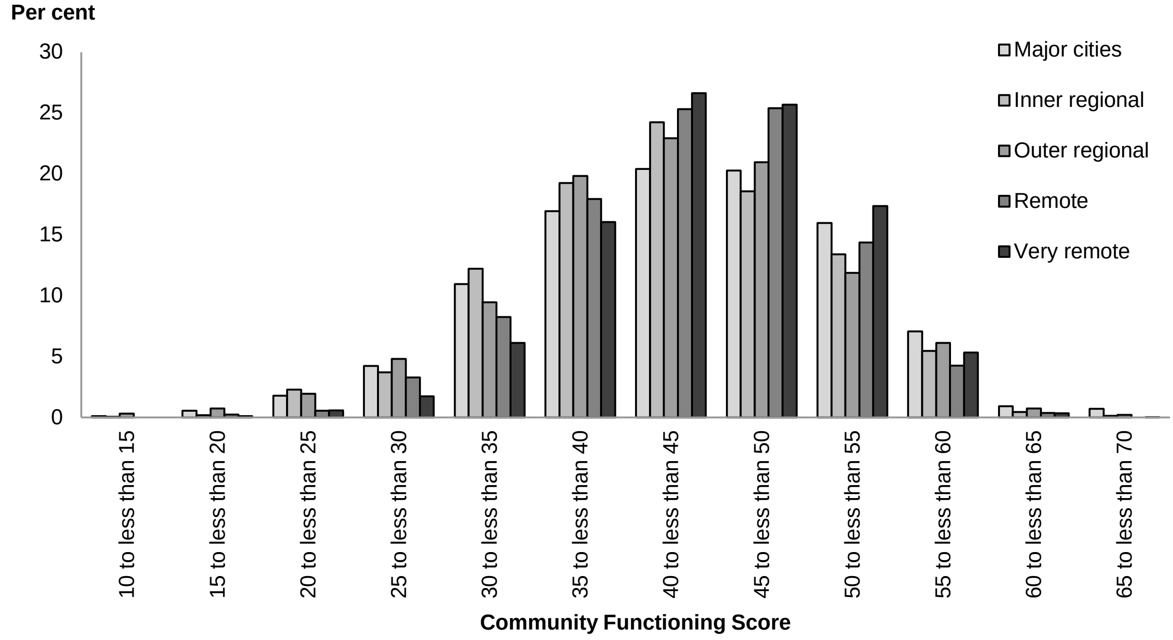
Source: ABS analysis (unpublished) of Community Functioning Scores derived from 2008 NATSISS.

Figure 1.13.4: Distribution of Community Functioning Scores for Indigenous Australians aged 15 and over, by sex, Australia 2008



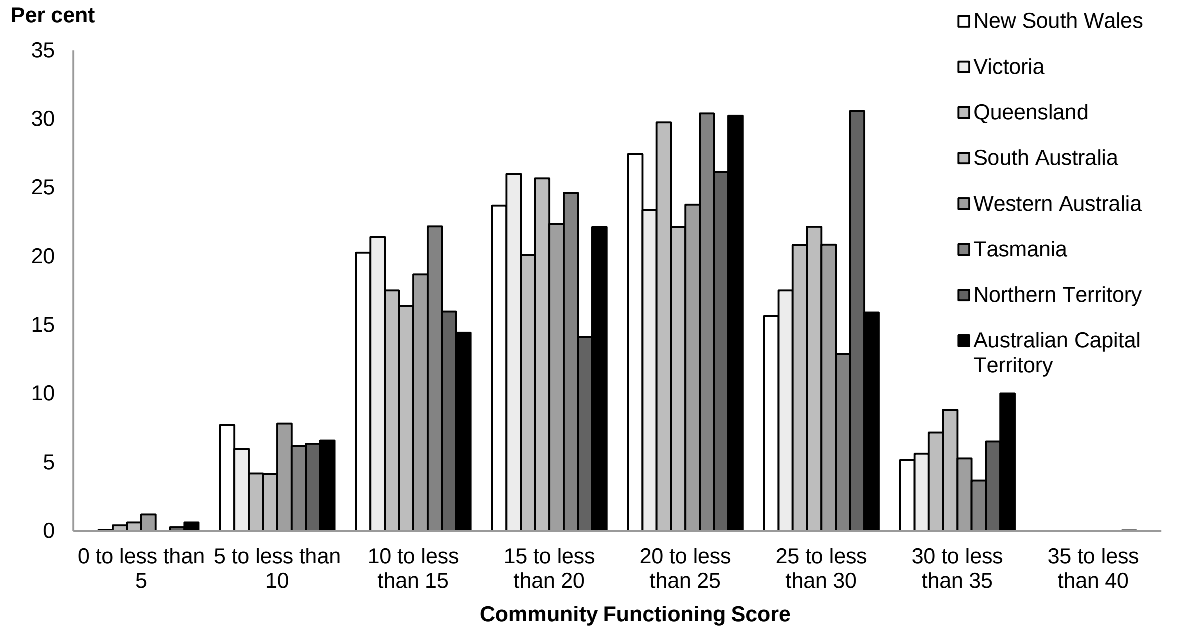
Source: ABS analysis (unpublished) of Community Functioning Scores derived from 2008 NATSISS.

Figure 1.13.5: Distribution of Community Functioning Scores for Indigenous Australians aged 0–14, by remoteness, Australia 2008



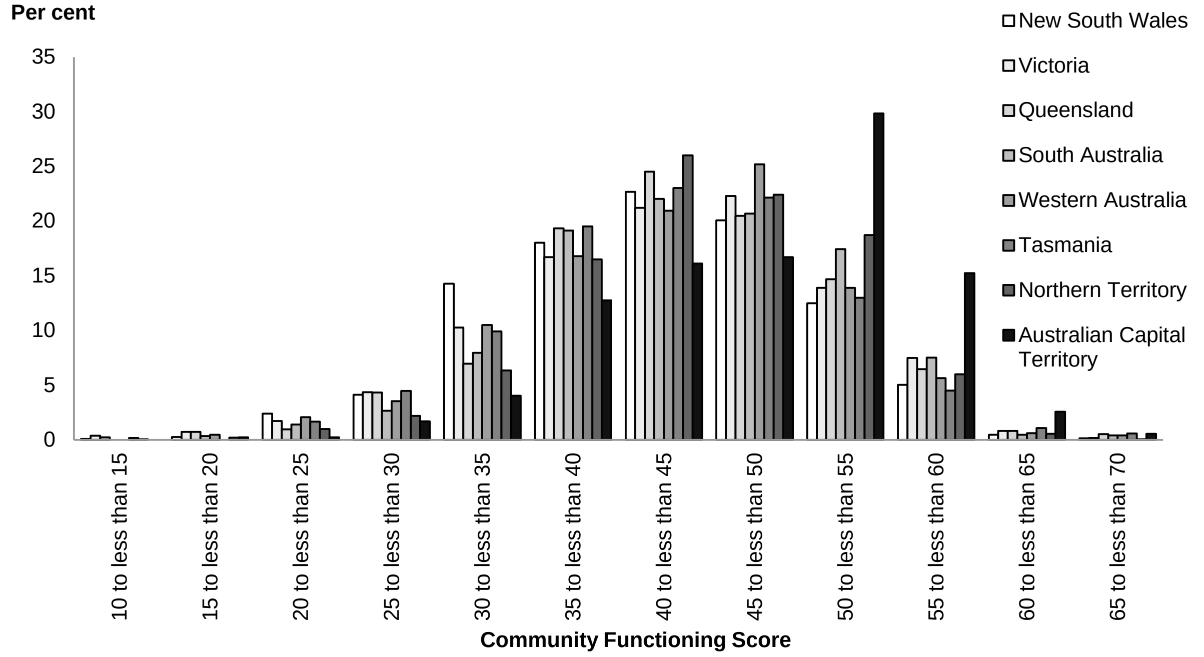
Source: ABS analysis (unpublished) of Community Functioning Scores derived from 2008 NATSISS.

Figure 1.13.6: Distribution of Community Functioning Scores for Indigenous Australians aged 15 and over, by remoteness, Australia 2008



Source: ABS analysis (unpublished) of Community Functioning Scores derived from 2008 NATSISS.

Figure 1.13.7: Distribution of Community Functioning Scores for Indigenous Australians aged 0–14, by state/territory, Australia 2008



Source: ABS analysis (unpublished) of Community Functioning Scores derived from 2008 NATSISS.

Figure 1.13.8: Distribution of Community Functioning Scores for Indigenous Australians aged 15 and over, by state/territory, Australia 2008

Table 1.13.3: Variables related to community functioning theme 'Connectedness to country, land and history; culture and identity' for Indigenous Australians[(a)], Australia 2008 and 2002

Connectedness to country, land and history; culture and identity		2008 No.	2008 (%)	2002 (%)
Access to traditional lands	Recognises homelands	234,383	72	70
	Lives in homelands	82,607	25	22
Removal	Respondent not removed from natural family	293,463	90	87
	Relatives not removed from natural family	157,767	48	44
	Was removed, but has seen relatives since	22,337	7	. .
Protection and maintenance of culture	Main language spoken at home is Aboriginal language/Torres Strait Islander language	37,552	12	12
	Speaks an Aboriginal/Torres Strait Islander language	62,629	19	21
Participation in cultural events	Attended Aboriginal and Torres Strait Islander cultural event in last 12 months:	205,674	63	68
	– Attended ceremony	52,435	16	24
	– Attended NAIDOC week activities	116,849	36	. .
	– Attended sports carnival (excluding NAIDOC week activities)	79,658	24	30
	– Attended festival/carnival involving arts, crafts, music or dance	75,272	23	36
	– Involved with Aboriginal/Torres Strait Islander organisation	59,516	18	. .
	– Funerals/Sorry business	126,693	39	47
Identity	Identifies with clan group or language group	203,106	62	54
Sense of efficacy	Feels able to have a say with family and friends some, most or all of the time	292,375	89	. .
	Feels able to have a say within community on important issues some, most or all of the time	157,312	48	. .
Social networks	Contact with family or friends outside household at least once per week	307,515	94	. .
	Face-to-face contact with family or friends outside household at least once a week	274,681	84	. .
	Made other types of contact with family or friends outside household in the last 3 months:	294,163	90	. .
	– Landline phone	183,766	56	. .
	– Mobile phone for calls	230,008	70	. .
	– Mobile phone for SMS	151,134	46	. .
	– Internet	88,840	27	. .
	– Mail or fax	28,211	9	. .
	– Other forms of contact	1,508	1	. .
	Has family members can confide in outside household	251,534	77	. .
	Has friends can confide in	246,649	75	. .

(continued)

Table 1.13.3 (continued): Variables related to community functioning theme 'Connectedness to country, land and history; culture and identity' for Indigenous Australians[a], Australia 2008 and 2002

Connectedness to country, land and history; culture and identity		**2008** **No.**	**2008** **(%)**	**2002** **(%)**
Social support (see also 'Resilience')	Able to get support in time of crisis from outside household—from family member:	261,506	80	. .
	Provides support to relatives outside household	166,892	51	. .
	Provides support to anyone outside household in last 4 weeks—type of support for example:			
	– Provided transport or running errands	95,786	29	. .
	– Unpaid child care	53,471	16	. .
	– Emotional support	93,700	29	. .
Used informal child care in last week (aged 0–12) (see also 'Resilience')	Carer who usually looks after child, of those who used informal care in last week aged 0–12:	83,971	50	. .
	– Mother living elsewhere	3,757	5	. .
	– Father living elsewhere	10,147	12	. .
	– Grandparent	43,984	52	. .
	– Brother or sister	7,523	9	. .
	– Any other relative	25,880	31	. .
Education—child	Types of assistance that would help child in secondary school complete Year 12 (of those aged 2–14 currently attending secondary school):			
	– A relative to support if goes away to boarding school	4,100	12	. .
Total aged 15 and over		**327,001**	**100**	**. .**

(a) Aged 15 and over unless otherwise stated.

Source: ABS analysis of 2008 NATSISS.

Table 1.13.4: Variables related to community functioning theme 'Resilience' for Indigenous Australians[(a)], Australia 2008 and 2002

Resilience		2008 No.	2008 (%)	2002 (%)
Power to control choices and options	Did not feel discriminated against in last 12 months	237,812	73	. .
	Did not avoid situations due to past discrimination	225,507	69	. .
	Can visit homelands	146,017	45	46
	Involvement with Aboriginal/Torres Strait Islander organisation	59,516	18	26
	Work allows for cultural responsibilities to be met (of employed persons)	75,028	44	22[(b)]
	Used strategies to meet living expenses	119,147	36	49
Household finances	Has a bank account	309,547	95	94
	Could raise $2,000 within a week	150,004	46	41
Community problems	No community problems reported	84,327	26	25
	Community problems reported, but less than 3 types:	73,788	23	. .
	– No problems reported for theft	192,535	59	57
	– No problems reported for alcohol	192,138	59	67
	– No problems reported for illicit drugs	208,039	64	68
	– No problems reported for family violence	245,938	75	79
	– No problems reported for assault	253,009	77	80
	– No problems reported for sexual assault	288,926	88	92
	Total persons who reported a community problem	**232,592**	**71**	**74**
Stressors	No stressors reported in last 12 months	74,413	23	18
	Less than 3 types of stressors reported in the last 12 months:	116,369	36	. .
	– No stressors reported for death of a family member or close friend	200,011	61	54
	– No stressor reported for serious disability	305,205	93	. .
	– No stressor reported for serious illness	233,202	71	. .
	– No stressors reported for not able to get a job	255,386	78	73
	– No stressors reported for witness to violence	299,054	91	84
	– No stressors reported for member of family sent to jail/currently in jail	287,458	88	81
	Total persons who reported a stressor	**252,503**	**77**	**82**
Trust	Agrees that most people can be trusted	118,975	36	. .
	Agrees that their doctor can be trusted	260,777	80	. .
	Agrees that the hospital can be trusted	204,189	62	. .
	Agrees that police in the local area can be trusted	170,317	52	. .
	Agrees that police outside the local area can be trusted	133,362	41	. .
	Agrees that the local school can be trusted	224,734	69	. .

(continued)

Table 1.13.4 (continued): Variables related to community functioning theme 'Resilience' for Indigenous Australians[(a)], Australia 2008 and 2002

Resilience		2008 No.	2008 (%)	2002 (%)
Sense of efficacy	Does know a member of parliament/comfortable contacting	65,670	20	. .
	Knows someone in organisation/comfortable contacting	132,011	54	. .
	Types of organisations would feel comfortable contacting—*Non-remote* only:			
	– State or territory government department	32,644	13	. .
	– Federal government department	18,952	8	. .
	– Local council	38,606	16	. .
	– Legal system	35,824	15	. .
	– Healthcare	51,057	21	. .
	– Trade union	13,296	5	. .
	– Political party	11,681	5	. .
	– Media	12,732	5	. .
	– University/TAFE/business college	34,805	14	. .
	– Religious/spiritual group	29,822	12	. .
	– School-related group	33,766	14	. .
	– Big business	14,447	6	. .
	– Small business	31,418	13	. .
Social contact (See also 'Having a role, structure and routine')	Adult participated in sport/social/community activities in last 3 months for example:	289,381	89	. .
	– Attended sporting event as a spectator	127,180	39	. .
	– Recreational or cultural group	46,263	14	. .
	– Attended a native title meeting	18,504	6	. .
	– Community or special interest group activities	42,274	13	. .
	– Church or religious activities	49,393	15	24
	– Went out to a cafe, restaurant or bar	171,233	52	57
	– Visited library, museum or art gallery	85,306	26	. .
	– Attended movies, theatre or concert	102,056	31	. .
	– Visited park, botanic gardens, zoo or theme park	101,152	31	. .
	– Watched Indigenous TV	177,695	54	. .
	– Listened to Indigenous radio	85,682	26	. .

(continued)

Table 1.13.4 (continued): Variables related to community functioning theme 'Resilience' for Indigenous Australians(a), Australia 2008 and 2002

Resilience		2008 No.	2008 (%)	2002 (%)
Social support	Able to get general support from outside household	291,459	89	. .
(See also 'Connectedness')	Able to get support in time of crisis from outside household—source of support for example:	290,463	89	. .
	– Friend	208,326	64	. .
	– Neighbour	90,117	28	. .
	– Work colleague	62,338	19	. .
	– Community, charity or religious organisation	42,538	13	. .
	– Local council or other government service	19,708	6	. .
	– Health, legal or financial professional	29,798	9	. .
	Provides support to anyone outside household in last 4 weeks	184,537	56	. .
	– Domestic work, home maintenance or gardening	80,045	25	. .
	– Teaching, coaching or practical advice	37,496	12	. .
	– Other support	20,543	6	. .
Health—child	No selected stressors experienced by children aged 0–3 in last 12 months	30,146	56	. .
(aged 0–14)	No selected stressors experienced by children aged 4–14 in the last 12 months	49,058	35	. .
Used informal child care in last week (see also 'Connectedness')	Carer who usually looks after child, of those who used informal child care in last week aged 0–12:			
	– Family friend	5,292	6	. .
	– Baby sitter(c)	368	0.5	. .
	– Nanny	n.p.	n.p.	. .
	– Neighbour(d)	999	1	. .
	– Any other person (other than relatives)(c)	733	1	. .
	– An organisation (other than formal care)(c)	482	1	. .
Education—child (aged 2–14)	Child usually attends school (aged 2–14)	138,426	83	. .
	– Children aged 2–4	13,964	36	. .
	– Children aged 5–14	124,462	98	. .
	Did not miss days at school/preschool/kindergarten in last week	99,913	60	. .
	Types of assistance that would help child in secondary school complete Year 12 (of those aged 2–14 currently attending secondary school):			
	– Support from family, friends and school	28,273	83	. .
	– Provision of coaches or mentors	8,104	24	. .
	– Career guidance	12,341	36	. .
	– Assistance for students with a disability	2,711	8	. .
	– Support networks	8,575	25	. .
Total aged 15 and over		**327,001**	**100**	**. .**

(a) Aged 15 and over unless otherwise stated.

(b) The 2002 proportion was calculated in relation to number of Indigenous Australians aged 15 and over. The 2008 proportion was calculated in relation to number of Indigenous Australians aged 15 and over who were employed.

(c) Estimate has a relative standard error between 25% and 50% and should be used with caution.

(d) Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

Source: ABS analysis of 2008 NATSISS.

Table 1.13.5: Variables related to community functioning theme 'Leadership' for Indigenous Australians aged 0–14, Australia 2008 and 2002

Leadership		2008 No.	2008 (%)	2002 (%)
Social contact	Child spent time with an Indigenous leader or Elder in last week (children aged 3–14)	65,035	42	. .
Education—child	Types of assistance that would help child in secondary school complete Year 12:			
	– Encouragement from Elders and council (children aged 2–14)	7,504	22	. .

Source: ABS analysis of 2008 NATSISS.

Table 1.13.6: Variables related to community functioning theme 'Having a role, structure and routine' for Indigenous Australians(a), Australia 2008 and 2002

Having a role, structure and routine		2008 No.	2008 (%)	2002 (%)
Structure and routine	Can communicate with English speakers without difficulty (of those where Indigenous language is main language spoken at home):	27,179	72	. .
	In the last 12 months, has lived in only 1 dwelling	255,157	78	69
	No days without money for basic living expenses in the last 12 months	233,805	72	56
	No days without money for basic living expenses in the last 2 weeks	281,429	86	68
	Did not have a cash flow problem in last 12 months	238,750	73	46
Social contact	Adult participated in sport/social/community activities in last 3 months:			
(See also 'Resilience')	– Coach, instructor or teacher	28,152	9	. .
	– Referee, umpire or official	15,218	5	. .
	– Committee member or administrator	22,850	7	. .
	– Took part in sport or physical activities	82,227	25	60
Education—child	Children participating in informal learning activities with their main carer in the last week (aged 0–14)	180,736	94	. .
	Types of assistance that would help child in secondary school complete Year 12 (of those aged 2–14 currently attending secondary school):			
	– More discipline	5,354	16	. .
Health—child	Child cleans teeth once or twice per day (children aged 0–14)	137,034	71	. .
Total aged 15 and over		**327,001**	**100**	**. .**

(a) Aged 15 and over unless otherwise stated.

Source: ABS analysis of 2008 NATSISS.

Table 1.13.7: Variables related to community functioning theme 'Feeling safe' for Indigenous Australians(a), Australia 2008 and 2002

Feeling safe		**2008 No.**	**2008 (%)**	**2002 (%)**
Safety	Felt safe at home alone during the day	305,892	94	. .
	Felt safe at home alone after dark	261,414	80	. .
	Felt safe walking alone in local area after dark	172,047	53	. .
Crime and justice	Not a victim of physical or threatened violence in the last 12 months	246,372	75	76
	Has not been a victim of physical violence in last 12 months	278,880	85	. .
	Has not been a victim of threatened physical violence in last 12 months	267,344	82	. .
	Did not use legal services in the last 12 months	269,938	83	80
	Not arrested by police in the last 5 years	277,702	85	84
	Not incarcerated in the last 5 years	316,033	97	93
	Has never been incarcerated in lifetime	297,030	91	. .
Cultural identification, participation and education	Indigenous culture taught at school (children aged 2–14)	87,833	53	. .
	Was taught Indigenous culture at school or as part of further studies	148,592	45	. .
	Received Indigenous cultural education (where received):			
	– Primary school	81,630	25	. .
	– Secondary school	88,285	27	. .
	– University/other higher education	15,586	5	. .
	– TAFE/technical college	14,682	5	. .
	– Business college	136	0	. .
	– Adult or community education centre	2,576	1	. .
	– Industry skills centre	417	0.1	. .
	– Other organisation	4,993	2	. .
	– None of the above	998	0.3	. .
	Learnt about own Indigenous clan/language	55,947	17	. .
Education—child	Child neither bullied nor treated unfairly at school because Indigenous (children aged 2–14 attending school, excluding home school)	112,159	81	. .
Total aged 15 and over		**327,001**	**100**	**. .**

(a) Ages 15 and over unless otherwise stated.

Source: ABS analysis of 2008 NATSISS.

Table 1.13.8: Variables related to community functioning theme 'Vitality' for Indigenous Australians(a), Australia 2008 and 2002

Vitality		2008 No.	2008 (%)	2002 (%)
Child health	Not concerned about child's learning due to health (aged 1–14)	153,971	86	. .
	Child does not have eye or sight problems (aged 0–14)	177,125	92	. .
	Child does not have ear or hearing problems (aged 0–14)	175,065	91	. .
	Child does not have teeth or gum problems (aged 0–14)	121,177	63	. .
	Child born on time (37–41 weeks) (aged 0–3)	29,998	56	. .
	Child weighed between 2,500 grams and 4,500 grams at birth (aged 0–3)	39,560	73	. .
	Child's mother had regular check-ups while pregnant (aged 0–3)	47,014	87	. .
	Child's mother did not have diabetes or sugar problems (aged 0–3)	47,149	88	. .
	Child's mother did not have high blood pressure (aged 0–3)	43,806	81	. .
	Child's mother took folate prior to and during pregnancy (aged 0–3)	8,257	15	. .
	Child's mother took medications or supplements during pregnancy (aged 0–3)	22,381	42	. .
	Child's mother did not drink alcohol during pregnancy (aged 0–3)	34,359	64	. .
	Child's mother did not smoke/chew tobacco during pregnancy (aged 0–3)	24,781	46	. .
	Child's mother did not use illicit drugs/substances during pregnancy (aged 0–3)	40,649	75	. .
	Child was breastfed (aged 0–3)	40,696	76	. .
	Child usually eats 2 or more serves of fruit per day—non remote —(aged 1–14)	82,580	60	. .
	Child usually eats 5 or more serves of vegetables per day—non remote —(aged 1–14)	6,979	5	. .
	Child does not spend more than 2 hours per day being inactive (aged 5–14)	42,887	34	. .
	Child spent 60 minutes or more per day being physically active in last week (aged 4–14)	103,279	74	. .
	Child did not have problems sleeping in last 4 weeks (aged 0–14)	146,366	76	. .
Adult health, social and emotional wellbeing, chronic disease and substance use	Self-assessed health status excellent or very good	143,004	44	44
	Has no disability or long-term health condition	164,157	50	64
	Has not consumed alcohol in last 12 months at risky/high-risk levels	266,458	82	84
	Has not used substances illicitly in last 12 months	228,799	70	71
	Low/moderate level of psychological distress (5–11 K5 score) in last 4 weeks	221,717	68	. .
Smoking	Not a regular smoker	176,408	54	51
	– Tried to quit smoking	39,539	12	. .
	– Tried to reduce smoking	26,313	8	. .
	– Tried both	27,069	8	. .
	No current daily smoker(s) in household—all ages	171,617	33	. .
	No household members smoke inside the house—all ages	372,379	72	. .
Continuing employment	Employed	169,098	54	. .
	2 years or more in current job	90,372	28	. .
	Current job is permanent	129,786	40	. .

(continued)

Table 1.13.8 (continued): Variables related to community functioning theme 'Vitality' for Indigenous Australians[(a)], Australia 2008 and 2002

Vitality		2008 No.	2008 (%)	2002 (%)
Main difficulty finding work (Unemployed)	Transport problems/distance	4,674	14	15
	No jobs at all	2,739	8	11
	No jobs in local area or line of work	4,908	15	11
	Insufficient education, training, skills	6,214	19	26
	Own ill health or disability	2,328	7	6
	Racial discrimination(b)	1,466	4	2
	Age(b)	589	2	6
	Have criminal record	811	2	. .
	Don't have driver's licence	2,214	7	. .
	Unable to find suitable child care	979	3	. .
	Total with difficulties	**29,679**	**89**	**91**
Use of employment support services in last 12 months (Unemployed)	Used services	22,402	67	68
	Did not use services	10,994	33	32
	Needed services	2,482	7	9
	Did not need services	8,512	26	23
Education	Year 12 highest year of school completed, not currently attending secondary school	66,220	20	18
	Total persons aged 15 and over not at school	**299,689**	**92**	**. .**
	Has a non-school qualification (persons aged 25–64)	83,257	40	32
Education—adult	Intends to study in the future and currently not studying	109,245	41	. .
	Reasons for future educational intentions, of all aged 15 and over:			
	– To gain a promotion	5,874	2	. .
	– To get a better job	32,528	10	. .
	– To get a job	23,693	7	. .
	– Requirement of current job	3,576	1	. .
	– Update training	12,505	4	. .
	– Improve knowledge or skills	47,768	15	. .
	– Improve qualifications	34,584	11	. .
	– Interest	15,568	5	. .
Education—child	Types of assistance that would help child in secondary school complete Year 12 (of those aged 2–14 currently attending secondary school):			
	– Greater access to apprenticeships	8,391	25	. .
	– More individual tutoring	11,064	32	. .
	– Schools suitable for culture and/or beliefs	5,901	17	. .
	– Suitable or reliable transport	5,048	15	. .
	– Accessible secondary schools	3,505	10	. .
	– Subsidies or grants to help affordability	8,667	25	. .

(continued)

Table 1.13.8 (continued): Variables related to community functioning theme 'Vitality' for Indigenous Australians[(a)], Australia 2008 and 2002

Vitality		2008 No.	2008 (%)	2002 (%)
Child care	Used child care(informal and formal care) in last week (aged 0–12)	93,838	56	. .
	Used formal child care in last week (aged 0–4)	14,356	22	. .
	Used formal child care in last week (aged 5–12)	9,389	9	. .
	Total used formal child care in last week (aged 0–12)	**23,745**	**14**	**. .**
Main reasons attends formal child care (aged 0–12, attended formal childcare in last week)	Parental work commitments	12,408	52	. .
	Parental study commitments	977	4	. .
	Parent looking for work	537	2	. .
	Parental sport/social/volunteer/community activities	319	1	. .
	To give parent a break or some time alone	2,352	10	. .
	A good way to prepare child for school	1,665	7	. .
	Good for child's intellectual or language development	739	3	. .
	Good for child's social development	3,930	17	. .
Housing (all age groups)	Living in a dwelling that has no major structural problems	370,606	71	60
	Dwelling not overcrowded (Canadian National Occupancy Standard)	375,341	72	74
	Working household facilities for:			
	– Washing people	507,710	98	99
	– Washing clothes and bedding	483,623	93	98
	– Storing/preparing foods	473,942	91	92
	– Sewerage facilities	508,071	98	98
Communication services	Household members used telephone(s) in last month	317,203	97	. .
	Used computer in last 12 months	218,006	67	56
	Used Internet in last 12 months	192,852	59	41
Information Technology—adult	Working computer in home—all ages	299,854	58	. .
	Computer connected to Internet—all ages	224,024	43	. .
	Used computer in last 12 months (reasons)—of all persons aged 15 and over:			
	– Work or business	95,495	29	. .
	– Education or study	75,712	23	. .
	– Volunteer or community group activities	14,795	5	. .
	– Personal or private	187,012	57	. .
	Used Internet in last 12 months (purpose)—of all persons aged 5 and over:			
	– Work/business	79,101	17	. .
	– To pay bills	51,434	11	. .
	– Education/study	135,646	30	. .
	– Volunteer/community groups	12,404	3	. .
	– Buying goods online new/used goods	48,457	11	. .
	– Entertainment or leisure online or general browsing	154,270	34	. .
	– Talking/communicating with people emails/chat rooms	125,142	28	. .
	– Personal/private reasons	88,461	20	. .

(continued)

Table 1.13.8 (continued): Variables related to community functioning theme 'Vitality' for Indigenous Australians[(a)], Australia 2008 and 2002

Vitality		2008 No.	2008 (%)	2002 (%)
Information technology—child	Used computer in last 12 months (reasons)— (of all persons aged 5–14):			
	– School work	98,030	77	. .
	– Playing games	82,542	65	. .
	– Hobbies/non-school activities	36,054	29	. .
	Used Internet in last 12 months (purpose)— (of all persons aged 5–14):			
	– Education/study	68,072	54	. .
	– Entertainment or leisure on-line or general browsing	52,450	41	. .
	– Talking/communicating with people emails/chat rooms	22,729	18	. .
	– Personal/private reasons	12,420	10	. .
	Total used Internet all persons	**281,009**	**62**	**. .**
Transport	Has access to motor vehicles whenever needed	215,689	66	55
	Holds a current driver's licence (aged 18+)	184,117	63	. .
	Can easily get to places needed	241,481	74	70
	Used transport in last 2 weeks	317,084	97	. .
	Used public transport in last 2 weeks	91,673	28	. .
	Main reason for not using public transport (of all persons aged 15 and over):			
	– Prefer to use own transport (or walk)	100,311	31	29
	– No service available (to destination)	3,509	1	. .
	– No service available/convenient time	10,495	3	4
	– Cost considerations	2,819	1	1
	– Takes too long	3,461	1	. .
	– Health reasons	3,106	1	. .
Main current source of personal income	Community Development Employment Projects (CDEP)	15,023	5	10
	Other wages/salaries	131,781	40	29
	Government pensions and allowances	132,841	41	50
	Other sources	6,948	2	. .
	Total in labour force	**202,511**	**62**	**60**
Total persons aged 15 and over		**327,001**	**100**	**. .**

(a) Ages 15 and over unless otherwise stated.

(b) Estimate has a relative standard error between 25% and 50% and should be used with caution.

Source: ABS analysis of 2008 NATSISS.

Table 1.13.9: Select variables contributing to community functioning for Indigenous Australians aged 15 and over[(a)], by age group, Australia 2008

	15–34		35–54		55 and over		Total 15+	
	Number	%	Number	%	Number	%	Number	%
Connectedness to country, land and history; culture and identity								
Recognises homelands	113,764	66	87,918	79	32,700	77	234,383	72
Speaks an Aboriginal/Torres Strait Islander language	29,738	17	23,105	21	9,787	23	62,629	19
Attended Aboriginal and Torres Strait Islander cultural event in last 12 months	108,638	63	72,084	65	24,952	59	205,674	63
Identifies with clan group or language group	97,157	56	77,812	70	28,138	66	203,106	62
Feels able to have a say with family and friends some, most or all of the time	153,957	89	100,991	91	37,427	88	292,375	89
Contact with family or friends outside household at least once per week	166,284	96	102,217	92	39,014	92	307,515	94
Has friends can confide in	136,084	78	80,530	73	30,034	71	246,649	75
Able to get support in time of crisis from outside household—from family member	141,102	81	88,227	80	32,177	76	261,506	80
Provides support to relatives outside household	74,459	43	71,281	64	21,152	50	166,892	51
Resilience								
Did not feel discriminated against in last 12 months	125,838	72	77,102	70	34,872	82	237,812	73
Did not avoid situations due to past discrimination	119,322	69	72,855	66	33,330	78	225,507	69
Can visit homelands[(b)]	67,801	70	56,649	73	21,566	77	146,017	72
Involvement with Aboriginal/Torres Strait Islander organisation	23,361	13	27,545	25	8,611	20	59,516	18
Work allows for and can meet cultural responsibilities[(c)]	35,923	41	32,534	47	6,571	55	75,028	44
Used strategies to meet living expenses	71,078	41	37,359	34	10,711	25	119,147	36
No community problems reported	46,208	27	24,621	22	13,498	32	84,327	26
No problems reported for alcohol	101,512	58	61,953	56	28,674	67	192,138	59
No problems reported for illicit drugs	109,330	63	68,697	62	30,012	70	208,039	64
No problems reported for family violence	132,287	76	80,209	72	33,442	79	245,938	75
No problems reported for sexual assault	154,233	89	95,411	86	39,281	92	288,926	88
Agrees that most people can be trusted	62,102	36	40,184	36	16,689	39	118,975	36
Agrees that their doctor can be trusted	138,253	80	86,543	78	35,980	84	260,777	80
Agrees that the hospital can be trusted	114,324	66	61,636	56	28,229	66	204,189	62
Agrees that police in the local area can be trusted	88,337	51	57,187	52	24,793	58	170,317	52
Agrees that police outside the local area can be trusted	72,504	42	43,389	39	17,470	41	133,362	41

(continued)

Table 1.13.9 (continued): Select variables contributing to community functioning for Indigenous Australians aged 15 and over[(a)], by age group, Australia 2008

	15–34		35–54		55 and over		Total 15+	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Agrees that the local school can be trusted	120,787	70	76,510	69	27,437	64	224,734	69
Adult participated in sport/social/community activities in last 3 months	156,169	90	97,358	88	35,855	84	289,381	89
Leadership								
Not applicable	. .	. .	. .	. .	. .	. .	. .	. .
Having a role, structure and routine								
In the last 12 months, has lived in only 1 dwelling	124,532	72	92,545	84	38,080	89	255,157	78
Feeling safe								
Felt safe at home alone during the day	162,309	93	103,883	94	39,701	93	305,892	94
Felt safe at home alone after dark	133,812	77	93,873	85	33,729	79	261,414	80
Felt safe walking alone in local area after dark	95,346	55	59,863	54	16,838	40	172,047	53
Not a victim of physical or threatened violence in the last 12 months	121,750	70	85,553	77	39,069	92	246,372	75
Was taught Indigenous culture at school or as part of further studies	102,907	59	39,118	35	6,567	15	148,592	45
Learnt about own Indigenous clan/language	35,203	20	17,818	16	2,926	7	55,947	17
Vitality								
Self-assessed health status excellent or very good	95,001	55	38,609	35	9,394	22	143,004	44
Has no disability or long term-health condition	107,629	62	46,932	42	9,597	23	164,157	50
Low/moderate level of psychological distress (5–11 K5 score)	119,341	69	73,076	66	29,301	69	221,717	68
Living in a dwelling that has no major structural problems	121,544	70	79,248	72	32,160	75	232,951	71
Household members used telephone(s) in last month	169,038	97	107,196	97	40,968	96	317,203	97
Used computer in last 12 months	134,313	77	70,066	63	13,627	32	218,006	67
Used Internet in last 12 months	122,876	71	60,184	54	9,793	23	192,852	59
Has access to motor vehicles whenever needed	98,481	57	88,115	80	29,093	68	215,689	66
Can easily get to places needed	122,099	70	86,247	78	33,135	78	241,481	74
Total persons aged 15 and over	**173,711**	**100**	**110,763**	**100**	**42,627**	**100**	**327,101**	**100**

(a) Proportions calculated in relation to all Indigenous Australians in the relevant age group unless otherwise stated.

(b) Proportions calculated in relation to number of Indigenous Australians who identify with a clan group.

(c) Proportions calculated in relation to number of Indigenous Australians who are employed.

Source: ABS analysis of 2008 NATSISS.

Table 1.13.10: Select variables contributing to community functioning for Indigenous Australians aged 15 and over[(a)(b)], by sex, Australia 2008

	Males		Females		Total	
	No.	%	No.	%	No.	%
Connectedness to country, land and history; culture and identity						
Recognises homelands	114,402	73	119,981	70	234,383	72
Speaks an Aboriginal/Torres Strait Islander language	31,994	21	30,636	18	62,629	19
Attended Aboriginal and Torres Strait Islander cultural event in last 12 months	91,804	59	113,871	67	205,674	63
Identifies with clan group or language group	98,781	63	104,325	61	203,106	62
Feels able to have a say with family and friends some, most or all of the time	138,155	89	154,220	90	292,375	89
Contact with family or friends outside household at least once per week	144,391	93	163,124	95	307,515	94
Has friends can confide in	114,720	74	131,929	77	246,649	75
Able to get support in time of crisis from outside household—from family	122,982	79	138,523	81	261,506	80
Provides support to relatives outside household	77,654	50	89,238	52	166,892	51
Resilience						
Did not feel discriminated against in last 12 months	112,582	72	125,230	73	237,812	73
Did not avoid situations due to past discrimination	107,002	69	118,505	69	225,507	69
Can visit homelands[(c)]	70,387	71	75,629	72	146,017	72
Involvement with Aboriginal/Torres Strait Islander organisation	24,411	16	35,105	21	59,516	18
Work allows for cultural responsibilities—can meet responsibilities[(d)]	41,488	44	33,541	45	75,028	44
Used strategies to meet living expenses	53,036	34	66,112	39	119,147	36
No community problems reported	42,324	27	42,003	25	84,327	26
No problems reported for alcohol	90,537	58	101,601	59	192,138	59
No problems reported for illicit drugs	98,665	63	109,374	64	208,039	64
No problems reported for family violence	119,543	77	126,395	74	245,938	75
No problems reported for sexual assault	138,589	89	150,337	88	288,926	88
Agrees that most people can be trusted	62,527	40	56,448	33	118,975	36
Agrees that their doctor can be trusted	122,755	79	138,022	81	260,777	80
Agrees that the hospital can be trusted	103,454	66	100,735	59	204,189	62
Agrees that police in the local area can be trusted	79,367	51	90,950	53	170,317	52
Agrees that police outside the local area can be trusted	64,110	41	69,251	41	133,362	41
Agrees that the local school can be trusted	107,062	69	117,672	69	224,734	69
Adult participated in sport/social/community activities in last 3 months	136,826	88	152,555	89	289,381	89

(continued)

Table 1.13.10 (continued): Select variables contributing to community functioning for Indigenous Australians aged 15 and over[(a)(b)], by sex, Australia 2008

	Males		Females		Total	
	No.	%	No.	%	No.	%
Leadership						
Not applicable	. .	. .	. .	. .	. .	. .
Having a role, structure and routine						
In the last 12 months, has lived in only1 dwelling	121,703	78	133,454	78	255,157	78
Feeling safe						
Felt safe at home alone during the day	150,733	97	155,159	91	305,892	94
Felt safe at home alone after dark	142,431	91	118,983	70	261,414	80
Felt safe walking alone in local area after dark	112,743	72	59,305	35	172,047	53
Not a victim of physical or threatened violence in the last 12 months	117,868	76	128,504	75	246,372	75
Was taught Indigenous culture at school or as part of further studies	69,089	44	79,504	47	148,592	45
Learnt about own Indigenous clan/language	25,817	17	30,129	18	55,947	17
Vitality						
Self-assessed health status excellent or very good	72,507	47	70,497	41	143,004	44
Has no disability or long term-health condition	80,396	52	83,761	49	164,157	50
Low/moderate level of psychological distress (5–11 K5 score)	111,245	71	110,473	65	221,717	68
Living in a dwelling that has no major structural problems	112,896	72	120,056	70	232,951	71
Household members used telephone(s) in last month	151,574	97	165,629	97	317,203	97
Used computer in last 12 months	98,348	63	119,659	70	218,006	67
Used Internet in last 12 months	87,879	56	104,973	61	192,852	59
Has access to motor vehicles whenever needed	105,546	68	110,142	64	215,689	66
Can easily get to places needed	118,978	76	122,503	72	241,481	74
Total persons aged 15 and over	**156,052**	**100**	**171,049**	**100**	**327,101**	**100**

(a) Unless otherwise indicated, data are for Indigenous Australians aged 15 and over.

(b) Unless otherwise indicated, proportions are of the estimated total Aboriginal and Torres Strait Islander population aged 15 and over. Where another population is indicated, this has been used to calculate proportions.

(c) Proportions calculated in relation to number of Indigenous Australians aged 15 and over who identify with a clan group.

(d) Proportions calculated in relation to number of Indigenous Australians aged 15 and over who are employed.

Source: ABS analysis of 2008 NATSISS.

Table 1.13.11: Select variables contributing to community functioning for Indigenous Australians aged 15 and over(a)(b), by remoteness, Australia, 2008

	Major cities		Inner regional		Outer regional		Total non-remote		Remote		Very remote		Total remote		Australia	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Connectedness to country, land and history; culture and identity																
Recognises homelands	70,638	67	42,750	63	50,847	70	164,235	67	23,877	80	46,271	90	70,148	86	234,383	72
Speaks an Aboriginal/Torres Strait Islander language	8,274	8	2,373	4	8,369	12	19,017	8	9,406	32	34,207	66	43,613	54	62,629	19
Attended Aboriginal and Torres Strait Islander cultural event in last 12 months	59,370	56	35,423	53	45,307	62	140,100	57	22,393	75	43,181	84	65,574	81	205,674	63
Identifies with clan group or language group	60,403	57	35,259	52	42,008	58	137,670	56	21,372	72	44,065	85	65,437	80	203,106	62
Feels able to have a say with family and friends some, most or all of the time	95,217	91	62,342	93	64,657	89	222,216	91	26,512	89	43,647	85	70,159	86	292,375	89
Contact with family or friends outside household at least once per week	98,999	94	63,159	94	68,578	94	230,735	94	28,391	95	48,389	94	76,779	94	307,515	94
Has friends can confide in	85,855	82	54,594	81	55,993	77	196,442	80	21,871	73	28,336	55	50,207	62	246,649	75
Able to get support in time of crisis from outside household—from family member	83,858	80	53,940	80	56,615	78	194,413	79	25,763	86	41,330	80	67,092	82	261,506	80
Provides support to relatives outside household	52,796	50	28,219	42	36,624	50	117,639	48	17,728	59	31,525	61	49,253	60	166,892	51
Resilience																
Did not feel discriminated against in last 12 months	75,139	71	50,498	75	52,115	71	177,752	72	20,913	70	39,148	76	60,060	74	237,812	73
Did not avoid situations due to past discrimination	71,270	68	48,861	73	49,053	67	169,185	69	19,746	66	36,576	71	56,322	69	225,507	69
Can visit homelands(c)	58,248	96	23,890	68	30,581	73	112,719	82	13,672	64	19,626	45	33,297	51	146,017	72

(continued)

Table 1.13.11 (continued): Select variables contributing to community functioning for Indigenous Australians aged 15 and over[(a)(b)], by remoteness, Australia 2008

	Major cities		Inner regional		Outer regional		Total non-remote		Remote		Very remote		Total remote		Australia	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Involvement with Aboriginal/Torres Strait Islander organisation	22,346	21	12,277	18	12,280	17	46,903	19	5,051	17	7,563	15	12,613	16	59,516	18
Work allows for cultural responsibilities—can meet responsibilities[(d)]	21,091	35	11,840	36	14,683	41	47,614	37	7,508	54	19,906	75	27,414	68	75,028	44
Used strategies to meet living expenses	40,081	38	22,070	33	25,663	35	87,815	36	12,816	43	18,517	36	31,333	38	119,147	36
No community problems reported	22,107	21	20,618	31	22,745	31	65,469	27	5,993	20	12,864	25	18,857	23	84,327	26
No problems reported for alcohol	64,327	61	46,305	69	43,932	60	154,564	63	12,834	43	24,741	48	37,575	46	192,138	59
No problems reported for illicit drugs	64,970	62	46,642	69	49,584	68	161,196	66	16,913	57	29,930	58	46,843	58	208,039	64
No problems reported for family violence	82,384	78	55,264	82	56,829	78	194,477	79	18,707	63	32,754	63	51,461	63	245,938	75
No problems reported for sexual assault	92,713	88	62,427	93	65,184	89	220,324	90	25,505	86	43,096	83	68,601	84	288,926	88
Agrees that most people can be trusted	37,951	36	22,682	34	23,487	32	84,120	34	11,431	38	23,424	45	34,855	43	118,975	36
Agrees that their doctor can be trusted	85,133	81	56,331	84	56,829	78	198,293	81	23,214	78	39,270	76	62,484	77	260,777	80
Agrees that the hospital can be trusted	62,001	59	41,123	61	41,062	56	144,185	59	20,145	68	39,859	77	60,004	74	204,189	62
Agrees that police in the local area can be trusted	55,047	52	35,192	52	32,474	45	122,713	50	15,888	53	31,716	61	47,604	58	170,317	52
Agrees that police outside the local area can be trusted	45,966	44	29,363	44	24,705	34	100,034	41	10,498	35	22,829	44	33,327	41	133,362	41

(continued)

Table 1.13.11 (continued): Select variables contributing to community functioning for Indigenous Australians aged 15 and over[(a)(b)], by remoteness, Australia 2008

	Major cities		Inner regional		Outer regional		Total non-remote		Remote		Very remote		Total remote		Australia	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Agrees that the local school can be trusted	69,805	66	42,575	63	48,244	66	160,625	65	21,607	72	42,503	82	64,110	79	224,734	69
Adult participated in sport/ social/community activities in last 3 months	92,036	88	59,611	88	63,525	87	215,172	88	27,128	91	47,081	91	74,209	91	289,381	89
Leadership																
Not applicable	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Having a role, structure and routine																
In the last 12 months, has lived in only 1 dwelling	83,802	80	49,366	73	57,751	79	190,919	78	23,509	79	40,729	79	64,237	79	255,157	78
Feeling safe																
Felt safe at home alone during the day	97,045	92	62,775	93	68,344	94	228,164	93	28,191	95	49,537	96	77,729	95	305,892	94
Felt safe at home alone after dark	83,590	79	53,426	79	57,915	79	194,931	79	23,284	78	43,199	84	66,483	82	261,414	80
Felt safe walking alone in local area after dark	53,476	51	31,413	47	37,718	52	122,607	50	15,807	53	33,633	65	49,440	61	172,047	53
Not a victim of physical or threatened violence in the last 12 months	77,391	74	51,088	76	54,334	75	182,813	74	22,331	75	41,229	80	63,559	78	246,372	75
Was taught Indigenous culture at school or as part of further studies	47,953	46	29,875	44	30,048	41	107,877	44	12,782	43	27,933	54	40,716	50	148,592	45
Learnt about own Indigenous clan/language	12,621	12	7,763	12	9,433	13	29,816	12	6,777	23	19,353	38	26,130	32	55,947	17

(continued)

Table 1.13.11 (continued): Select variables contributing to community functioning for Indigenous Australians aged 15 and over(a)(b), by remoteness, Australia 2008

	Major cities		Inner regional		Outer regional		Total non-remote		Remote		Very remote		Total remote		Australia	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Vitality																
Self-assessed health status excellent or very good	45,988	44	32,847	49	28,430	39	107,265	44	11,565	39	24,174	47	35,739	44	143,004	44
Has no disability or long-term health condition	48,867	46	36,272	54	37,262	51	122,402	50	14,333	48	27,422	53	41,755	51	164,157	50
Low/moderate level of psychological distress (5–11 K5 score)	71,015	68	47,349	70	48,290	66	166,654	68	19,981	67	35,082	68	55,063	68	221,717	68
Living in a dwelling that has no major structural problems	79,594	76	54,273	81	49,679	68	183,546	75	19,667	66	29,738	58	49,405	61	232,951	71
Household members used telephone(s) in last month	104,137	99	67,080	100	71,694	98	242,911	99	27,686	93	46,606	90	74,291	91	317,203	97
Used computer in last 12 months	85,626	81	50,771	75	46,467	64	182,864	75	14,133	47	21,009	41	35,142	43	218,006	67
Used Internet in last 12 months	77,637	74	45,903	68	41,111	56	164,652	67	11,801	40	16,400	32	28,201	35	192,852	59
Has access to motor vehicles whenever needed	74,416	71	45,288	67	49,885	68	169,589	69	17,931	60	28,168	55	46,100	57	215,689	66
Can easily get to places needed	83,514	79	50,059	74	53,876	74	187,449	76	21,115	71	32,917	64	54,032	66	241,481	74
Total persons aged 15 and over	**105,217**	**100**	**67,416**	**100**	**72,967**	**100**	**245,600**	**100**	**29,839**	**100**	**51,662**	**100**	**81,501**	**100**	**327,101**	**100**

(a) Unless otherwise indicated, data are for Aboriginal and Torres Strait Islander population aged 15 and over.

(b) Unless otherwise indicated, proportions are of the estimated total Aboriginal and Torres Strait Islander population aged 15 and over. Where another population is indicated, this has been used to calculate proportions.

(c) Proportions calculated in relation to number of Indigenous Australians aged 15 and over who identify with a clan group.

(d) Proportions calculated in relation to number of Indigenous Australians aged 15 and over who are employed.

Source: ABS analysis of 2008 NATSISS.

Table 1.13.12: Select variables contributing to community functioning for Indigenous Australians aged 15 and over(a)(b), by state/territory, Australia 2008

	NSW		Vic		Qld		SA		WA		Tas		ACT		NT		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Connectedness to country, land and history; culture and identity																		
Recognises homelands	62,120	65	14,917	68	66,089	73	14,374	80	32,705	75	5,717	46	2,151	77	36,309	88	234,383	72
Speaks an Aboriginal/Torres Strait Islander language	3,056	3	1,342	6	17,316	19	4,648	26	9,907	23	198	2	326	12	25,837	63	62,629	19
Attended Aboriginal and Torres Strait Islander cultural event in last 12 months	53,100	55	11,711	53	59,051	65	11,665	65	30,673	70	3,887	32	2,033	72	33,554	81	205,674	63
Identifies with clan group or language group	49,842	52	12,952	59	58,122	64	13,046	73	27,325	62	4,571	37	1,983	71	35,265	85	203,106	62
Feels able to have a say with family and friends some, most or all of the time	87,059	90	19,578	89	82,323	91	16,095	90	39,019	89	11,536	93	2,658	95	34,107	83	292,375	89
Contact with family or friends outside household at least once per week	91,738	95	20,299	93	83,605	92	17,368	97	41,515	95	11,978	97	2,733	97	38,278	93	307,515	94
Has friends can confide in	78,095	81	17,501	80	70,146	77	13,845	77	30,901	71	10,324	84	2,334	83	23,503	57	246,649	75
Resilience																		
Did not feel discriminated against in last 12 months	72,679	75	15,874	72	64,923	72	12,149	68	29,042	66	11,205	91	1,803	64	30,136	73	237,812	73
Did not avoid situations due to past discrimination	70,442	73	14,709	67	61,503	68	11,128	62	26,719	61	10,837	88	1,662	59	28,508	69	225,507	69
Can visit homelands(c)	31,698	64	10,473	81	49,716	86	10,711	82	19,223	70	3,024	66	1,895	96	19,277	55	146,017	72
Involvement with Aboriginal/Torres Strait Islander organisation	16,907	18	5,954	27	16,493	18	3,880	22	7,143	16	1,084	9	1,169	42	6,886	17	59,516	18
Work allows for cultural responsibilities—can meet responsibilities(d)	16,923	39	3,831	33	21,573	42	4,396	49	12,558	53	1,488	21	797	40	13,462	67	75,028	44
Used strategies to meet living expenses	35,055	36	8,347	38	30,020	33	7,094	40	18,393	42	3,649	30	811	29	15,778	38	119,147	36
No community problems reported	22,155	23	5,572	25	26,566	29	4,354	24	10,116	23	3,369	27	717	26	11,478	28	84,327	26
No problems reported for alcohol	55,245	57	13,780	63	56,040	62	10,967	61	22,229	51	8,763	71	2,063	73	23,052	56	192,138	59

(continued)

Table 1.13.12 (continued): Select variables contributing to community functioning for Indigenous Australians aged 15 and over(a)(b), by state/territory, Australia 2008

	NSW		Vic		Qld		SA		WA		Tas		ACT		NT		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No problems reported for illicit drugs	56,777	59	14,575	66	60,459	67	11,917	66	25,281	58	8,707	71	2,120	75	28,203	68	208,039	64
No problems reported for family violence	71,788	75	17,662	81	72,392	80	13,847	77	28,906	66	10,909	88	2,422	86	28,012	68	245,938	75
No problems reported for sexual assault	83,117	86	19,885	91	80,626	89	16,341	91	38,433	88	11,746	95	2,642	94	36,136	88	288,926	88
Agrees that most people can be trusted	35,105	36	7,473	34	31,669	35	6,038	34	15,158	35	4,918	40	1,127	40	17,486	42	118,975	36
Agrees that their doctor can be trusted	79,460	83	17,622	80	71,202	79	14,253	79	34,625	79	10,882	88	2,333	83	30,399	74	260,777	80
Agrees that the hospital can be trusted	56,586	59	12,623	58	54,747	60	12,293	69	29,138	67	7,861	64	1,656	59	29,286	71	204,189	62
Agrees that police in the local area can be trusted	47,827	50	11,313	52	44,837	50	9,750	54	23,225	53	8,369	68	1,545	55	23,452	57	170,317	52
Agrees that police outside the local area can be trusted	38,633	40	9,249	42	34,923	39	6,686	37	18,771	43	7,588	61	1,078	38	16,434	40	133,362	41
Agrees that the local school can be trusted	61,921	64	14,170	65	61,065	67	11,906	66	32,502	74	8,478	69	1,816	65	32,877	80	224,734	69
Adult participated in sport/social/community activities in last 3 months	81,452	85	19,740	90	82,146	91	16,132	90	38,040	87	11,081	90	2,661	95	38,129	92	289,381	89
Leadership																		
Not applicable	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Having a role, structure and routine																		
In the last 12 months, has lived in only 1 dwelling	77,568	81	17,242	79	67,796	75	14,060	78	33,537	77	9,853	80	2,302	82	32,798	80	255,157	78

(continued)

Table 1.13.12 (continued): Select variables contributing to community functioning for Indigenous Australians aged 15 and over[(a)(b)], by state/territory, Australia 2008

	NSW		Vic		Qld		SA		WA		Tas		ACT		NT		Total	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Feeling safe																		
Felt safe at home alone during the day	89,826	93	20,290	93	85,420	94	16,510	92	40,690	93	11,773	95	2,643	94	38,739	94	305,892	94
Felt safe at home alone after dark	76,426	79	17,165	78	73,439	81	13,609	76	35,438	81	10,197	83	2,305	82	32,836	80	261,414	80
Felt safe walking alone in local area after dark	47,930	50	10,978	50	47,219	52	9,352	52	25,112	57	6,765	55	1,497	53	23,194	56	172,047	53
Not a victim of physical or threatened violence in the last 12 months	72,095	75	15,616	71	70,726	78	13,538	75	31,678	72	9,037	73	1,948	69	31,734	77	246,372	75
Was taught Indigenous culture at school or as part of further studies	43,392	45	9,418	43	36,090	40	8,535	48	20,770	47	6,315	51	1,326	47	22,747	55	148,592	45
Learnt about own Indigenous clan/language	11,505	12	3,361	15	12,211	14	3,658	20	8,293	19	932	8	313	11	15,673	38	55,947	17
Vitality																		
Self-assessed health status excellent or very good	41,492	43	10,489	48	39,433	44	6,778	38	17,407	40	6,591	53	1,297	46	19,517	47	143,004	44
Has no disability or long-term health condition	45,911	48	9,684	44	47,136	52	8,113	45	23,736	54	6,189	50	1,231	44	22,159	54	164,157	50
Low/moderate level of psychological distress (5–11 K5 score)	65,839	68	14,111	64	62,433	69	11,526	64	29,206	67	8,776	71	1,991	71	27,836	67	221,717	68
Living in a dwelling that has no major structural problems	69,843	73	15,734	72	66,682	74	12,434	69	29,752	68	9,518	77	2,413	86	26,575	64	232,951	71

(continued)

Table 1.13.12 (continued): Select variables contributing to community functioning for Indigenous Australians aged 15 and over[(a)(b)], by state/territory, Australia 2008

	NSW		Vic		Qld		SA		WA		Tas		ACT		NT		Total	
	No.	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**	**No.**	**%**
Household members used telephone(s) in last month	95,488	99	21,595	98	87,635	97	17,555	98	42,253	96	12,307	100	2,796	100	37,573	91	317,203	97
Used computer in last 12 months	69,588	72	17,707	81	60,620	67	12,621	70	27,555	63	9,017	73	2,553	91	18,346	44	218,006	67
Used Internet in last 12 months	62,543	65	15,544	71	54,037	60	11,231	63	23,892	55	8,248	67	2,425	86	14,931	36	192,852	59
Has access to motor vehicles whenever needed	62,768	65	15,481	71	61,436	68	12,356	69	29,699	68	9,457	77	2,212	79	22,280	54	215,689	66
Can easily get to places needed	69,293	72	16,119	74	72,521	80	12,825	72	31,000	71	9,538	77	2,287	81	27,899	68	241,481	74
Total persons aged 15 and over	**96,367**	**100**	**21,938**	**100**	**90,587**	**100**	**17,948**	**100**	**43,826**	**100**	**12,351**	**100**	**2,810**	**100**	**41,274**	**100**	**327,101**	**100**

(a) Unless otherwise indicated, data are for Aboriginal and Torres Strait Islander population aged 15 and over.

(b) Unless otherwise indicated, proportions are of the estimated total Aboriginal and Torres Strait Islander population aged 15 and over. Where another population is indicated, this has been used to calculate proportions.

(c) Proportions calculated in relation to number of Aboriginal and Torres Strait Islander Australians aged 15 and over who identify with a clan group.

(d) Proportions calculated in relation to number of Aboriginal and Torres Strait Islander Australians aged 15 and over who are employed.

Source: ABS analysis of 2008 NATSISS.

Table 1.13.13: Median Community Functioning Scores for Indigenous Australians, by age-group, sex, jurisdiction and remoteness, Australia 2008

	Median score	
Age-group		
0–14	21	
15–34	43	
35–54	45	
55+	42	
	Age-group	
	0–14	**15+**
Sex		
Male	20	44
Female	21	43
State/territory		
New South Wales	20	42
Victoria	19	44
Queensland	21	44
South Australia	21	44
Western Australia	20	44
Tasmania	19	43
Northern Territory	23	45
Australian Capital Territory	21	49
Remoteness		
Major cities	20	44
Inner regional	20	43
Outer regional	20	43
Total non-remote	*20*	*43*
Remote	22	44
Very remote	23	45
Total remote	*23*	*44*

Source: ABS analysis (unpublished) of Community Functioning Scores derived from 2008 NATSISS.

Data quality issues

National Aboriginal and Torres Strait Islander Social Survey

The NATSISS is conducted in all states and territories and includes *Remote* and *Non-remote* areas. The 2008 survey was undertaken between August 2008 and April 2009, with a sample size of 13,300 persons (5,500 aged 0–14 and 7,800 aged 15 and over) in 6,900 households, and a response rate of 82% of households. Up to 3 randomly selected Indigenous Australians were chosen from selected households to participate in the survey. Trained ABS interviewers conducted the survey using face-to-face interviews. In *Non-remote* areas interviewers used a notebook computer to record responses, while in *Remote* areas a paper questionnaire was used. Interviewers obtained the consent of a parent or guardian before interviewing those aged 15–17. Indigenous persons usually resident in non-private dwellings, such as hotels, motels, hostels, hospitals, short-stay caravan parks, prisons and other correctional facilities were excluded.

The NATSISS uses the standard Indigenous status question. The NATSISS sample was specifically designed to select a representative sample of Indigenous Australians.

As with other surveys, the NATSISS is subject to sampling and non-sampling errors.

Care has been taken to ensure that the results of this survey are as accurate as possible. Trained ABS officers conducted all interviews. However, some factors may affect the reliability of the data.

Information recorded in this survey is 'as reported' by respondents, and therefore may differ from information available from other sources or collected using different methodologies.

Data on health-related indicators have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the states and territories and the Indigenous and non-Indigenous population.

Time series comparisons for the 2008 survey are available through the 1994 National Aboriginal and Torres Strait Islander Survey and the 2002 NATSISS. However not all data elements align across the 3 (1994, 2001 and 2008) NATSISS surveys, hence care is required when reviewing results across the 3 surveys.

There are no strictly comparable non-Indigenous results available for the 2008 NATSISS. Where possible, the ABS has provided recommendations for non-Indigenous data comparisons (such as the 2007–08 National Health Survey) and these have been adopted in this report.

The 2008 NATSISS had a relatively large level of under-coverage when compared with other ABS surveys. There was also an increase in under-coverage compared to previous ABS Indigenous surveys. For example, the estimated under-coverage in the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) was 42%. The overall under-coverage rate for the 2008 NATSISS was approximately 53% of the in-scope population at the national level. This rate varied across the states and territories (ABS 2010).

Further information on NATSISS data quality issues can be found in the *National Aboriginal and Torres Strait Islander Social Survey: User's guide, 2008* (ABS 2010).

List of symbols used in tables

. .	not applicable

n.p.	not available for publication but included in totals where applicable, unless otherwise indicated

List of tables

List of figures

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 14 of 68

Detailed analyses

1.14 Disability

This measure reports on the prevalence of disability among Aboriginal and Torres Strait Islander people, including children with special needs, and users of disability support services

Introduction

This is no. 14 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- Australian Aboriginal and Torres Strait Islander Health Survey
- Census of Population and Housing
- Disability Services National Minimum Data Set.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

The 2012–13 Health Survey collected data on a broad definition of disability (that is, those reporting a limitation, restriction, impairment, disease or disorder that has lasted, or is expected to last, for 6 months or more, which restricts everyday activities). Results are self-reported and therefore could be under-stated.

For more information related to disability, see 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Self-reported disability prevalence, see tables 1.14.1–10
- Self-reported need for assistance with core activities and carer status, see tables 1.14.11–16
- Disability support services use, see tables 1.14.17–18.

Self-reported disability prevalence

Current period

In 2012–13:

- An estimated 36% of Indigenous Australians reported they had a disability or restrictive long-term health condition (Table 1.14.2). After adjusting for age, the rate for Indigenous Australians was 1.5 times the rate for non-Indigenous Australians (Table 1.14.1).
- The prevalence of disability increased with age. For Indigenous Australians, the proportion with disability ranged from 19% of those aged 0–14, to 67% of those aged 55 and over (Table 1.14.1, Figure 1.14.1).
- An estimated 10% of Indigenous Australians had a profound, severe or moderate core activity limitation with at least 1 activity of everyday living (self-care, mobility or communication) (Table 1.14.4). After adjusting for age, the rate for Indigenous Australians was 1.6 times the rate for non-Indigenous Australians (Table 1.14.3).

In 2011:

- 5.7% of the Indigenous population needed assistance with a core activity (self-care, mobility or communication) some or all of the time. After adjusting for age, the rate for Indigenous Australians was twice the rate for non-Indigenous Australians (Table 1.14.11).

Disability support services use

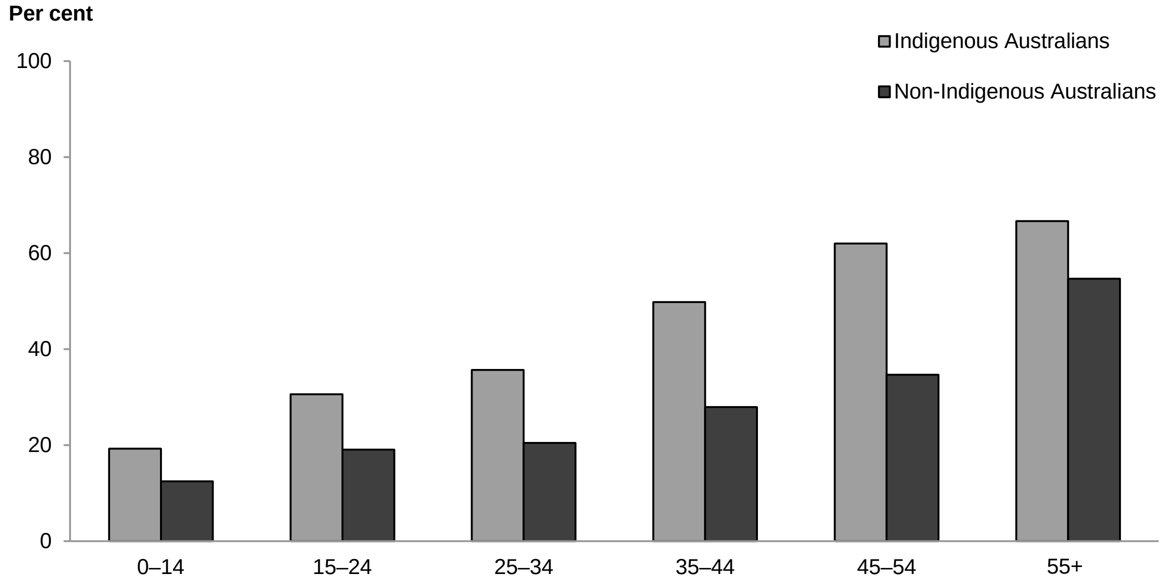
Current period

In 2012–13:

- The rate of disability support service use by Indigenous Australians aged under 65 was 25 per 1,000. After adjusting for age, the rate for Indigenous Australians was 1.9 times the rate for non-Indigenous Australians (Table 1.14.17).
- The rate of disability support service use by Indigenous Australians aged under 65 was higher in *Non-remote* areas (27 per 1,000) than *Remote* areas (18 per 1,000) (Table 1.14.18).

Trend

- In 2012–13, around 17,400 or 5.8% of disability support services users of all ages were Indigenous, compared with 4.8% in 2008–09 (AIHW 2014b, AIHW 2011).



Source: Table 1.14.1.

Figure 1.14.1: Persons reporting a disability or restrictive long-term health condition, by Indigenous status and age, 2012–13

Table 1.14.1: Persons reporting a disability or restrictive long-term health condition, by Indigenous status, remoteness, age, sex and state/territory, 2012–13[(a)]

	Remoteness[(b)]											Overall population distribution	
	Non-remote			Remote			Australia						
	Indig.	Non-Indig.	Rate ratio[(c)]	Indig.	Non-Indig.	Rate ratio[(c)]	Indig.	Non-Indig.	Rate ratio[(c)]	Indig.	Non-Indig.	Indig.	Non-Indig.
	Rate[(d)]									Number		Per cent[(e)]	
Age[(f)]													
0–14	19.7	12.6	1.6*	18.0	5.3‡	3.4*	19.3	12.5	1.5*	44,341	502,700	35.9	18.6
15–24	32.2	19.0	1.7*	24.2	28.0†	0.9	30.6	19.1	1.6*	39,064	561,972	20.0	13.6
25–34	36.4	20.4	1.8*	33.6	30.0	1.1	35.7	20.5	1.7*	30,989	645,706	13.6	14.6
35–44	50.5	27.8	1.8*	47.7	39.6	1.2	49.8	27.9	1.8*	38,798	860,562	12.2	14.2
45–54	61.9	34.6	1.8*	62.2	40.5	1.5*	62.0	34.7	1.8*	37,197	1,031,409	9.4	13.7
55+	66.8	54.6	1.2*	66.2	57.8	1.1	66.7	54.7	1.2*	37,780	2,979,829	8.9	25.2
Sex													
Males	45.4	29.7	1.5*	42.1	34.5	1.2	44.7	29.8	1.5*	112,987	3,294,395	49.8	49.9
Females	44.1	28.7	1.5*	42.6	32.3	1.3*	43.8	28.7	1.5*	115,182	3,287,783	50.2	50.1
State/territory													
NSW	46.2	28.3	1.6*	51.7	—	n.p.	46.6	28.2	1.7*	76,534	2,080,095	31.5	32.5
Vic	51.2	27.9	1.8*	. .	. .	. .	51.2	27.9	1.8*	20,156	1,600,270	7.2	25.5
Qld	41.1	30.9	1.3*	37.7	46.4	0.8	40.4	31.0	1.3*	56,977	1,367,671	28.3	19.8
SA	48.7	30.0	1.6*	47.8	43.3	1.1	48.3	30.4	1.6*	13,930	515,779	5.6	7.3
WA	39.0	30.7	1.3*	52.6	31.6	1.7*	44.8	30.7	1.5*	28,602	700,426	12.8	10.3
Tas	47.1	33.5	1.4*	51.7†	59.4†	0.9	47.4	33.8	1.4*	9,573	173,263	3.7	2.2
NT	44.0	26.9	1.6*	35.8	21.6	1.7*	37.5	25.7	1.5*	19,678	36,858	10.1	0.7
ACT	52.7	30.3	1.7*	. .	. .	. .	52.7	30.3	1.7*	2,718	107,816	0.9	1.6
Total per cent	**44.7**	**29.2**	**1.5***	**42.3**	**33.7**	**1.3***	**44.2**	**29.3**	**1.5***	**. .**	**. .**	**100.0**	**100.0**
Total number	**181,403**	**6,493,076**	**. .**	**46,766**	**89,102**	**. .**	**228,169**	**6,582,178**	**. .**	**228,169**	**6,582,178**	**638,324**	**21,622,358**

(continued)

Table 1.14.1 (continued): Persons reporting a disability or restrictive long-term health condition, by Indigenous status, remoteness, age, sex and state/territory, 2012–13(a)

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Persons who reported having a disability or restrictive long-term health condition which has lasted, or is expected to last for six months or more, and restricts everyday activities.

(b) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(c) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(d) Rate per 100.

(e) Percentages add within columns.

(f) Data for specific age groups are not age-standardised, only the totals.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.14.2: Indigenous persons reporting a disability/restrictive long-term health condition, by remoteness, by age, sex and state/territory, 2012–13[(a)]

	Remoteness						Overall population distribution
	Non-remote		Remote		Australia		
	Number	Rate[(b)]	Number	Rate[(b)]	Number	Rate[(b)]	Per cent[(c)]
Age[(d)]							
0–14	36,204	19.7	8,137	18.0	44,341	19.3	35.9
15–24	32,841	32.2*	6,223	24.2*	39,064	30.6*	20.0
25–34	23,976	36.4*	7,013	33.6*	30,989	35.7*	13.6
35–44	30,260	50.5*	8,538	47.7*	38,798	49.8*	12.2
45–54	28,830	61.9*	8,367	62.2*	37,197	62.0*	9.4
55+	29,291	66.8*	8,489	66.2*	37,780	66.7*	8.9
Sex							
Males	90,402	36.1	22,585	33.3*	112,987	35.5*	49.8
Females	91,001	36.1	24,181	35.4	115,182	36.0	50.2
State/territory							
NSW	72,331	37.7*	4,203	46.4*	76,534	38.1*	31.5
Vic	20,156	44.1*	. .	. .	20,156	44.1*	7.2
Qld	46,561	31.8*	10,416	30.4*	56,977	31.6*	28.3
SA	11,782	40.0	2,147	35.6*	13,930	39.2*	5.6
WA	14,317	29.3*	14,284	43.6*	28,602	35.1*	12.8
Tas	9,110	39.8†	464†	60.3*†	9,573	40.4*	3.7
NT	4,427	39.1	15,252	28.7	19,678	30.5	10.1
ACT	2,718	46.1*	. .	. .	2,718	46.1*	0.9
Total per cent	**. .**	**36.1**	**. .**	**34.4***	**. .**	**35.7***	**100.0**
Total number	**181,403**	**. .**	**46,766**	**. .**	**228,169**	**. .**	**638,324**

* Represents statistically significant differences at the $p < 0.05$ level. Differences between rates were tested within each remoteness category, using 0–14 as the reference category for Age, females as the reference category for Sex, and NT as the reference category for State/territory. Differences between the overall rates for remoteness categories were also tested, using non-remote as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities.

(b) Rate per 100.

(c) Distribution of total Indigenous population. Percentages add within columns.

(d) Data for specific age groups are not age-standardised, only the totals

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.14.3: Indigenous status, age, sex and remoteness, by disability status 2012–13(a)

		Age						Sex		Remoteness		Total	
		0–14	15–24	25–34	35–44	45–54	55+	Males	Females	Non-remote	Remote		
		Per cent(b)						Per cent(b)				Per cent(b)	Number
Disability status	**Indig. status**												
Has profound core activity limitation	Indig.	2.9	1.0†	1.9†	2.2†	4.0	6.8	3.3	3.4	3.5	3.0	3.4	17,351
	Non-Indig.	2.1	0.8†	0.4†	1.0	1.4	3.5	1.9	1.5	1.7	3.3†	1.7	381,781
	Rate ratio(c)	1.4	1.3	4.8	2.2	2.9	1.9	1.7	2.3	2.1	0.9	2.0	. .
Has severe core activity limitation	Indig.	1.8	3.7	3.3	5.8	6.4	6.2	4.1	4.9	4.6	4.1†	4.5	23,642
	Non-Indig.	1.4	1.1†	1.1	1.7	3.0	4.5	2.0	2.4	2.2	2.1	2.2	503,346
	Rate ratio(c)	1.3	3.4	3.0	3.4	2.1	1.4	2.1	2.0	2.1	2.0	2.0	. .
Has moderate core activity limitation	Indig.	0.9†	2.5	2.7	6.6	6.6	10.9	4.9	5.5	5.7	3.7	5.2	22,928
	Non-Indig.	0.7	2.4	2.5	4.4	5.4	9.7	4.1	4.7	4.4	3.0	4.4	1,007,480
	Rate ratio(c)	1.3	1.0	1.1	1.5	1.2	1.1	1.2	1.2	1.3	1.2	1.2	. .
Subtotal with profound/severe/ moderate core activity limitation(d)	*Indig.*	*5.6*	*7.2*	*7.8*	*14.6*	*16.9*	*23.8*	*12.3*	*13.8*	*13.7*	*10.8*	*13.1*	*63,922*
	Non-Indig.	*4.2*	*4.3*	*4.0*	*7.0*	*9.8*	*17.7*	*8.0*	*8.6*	*8.3*	*8.4*	*8.3*	*1,892,608*
	Rate ratio(c)	*1.3**	*1.7**	*2.0**	*2.1**	*1.7**	*1.3**	*1.5**	*1.6**	*1.7**	*1.3**	*1.6**	. .
Has schooling/employment restriction only(e)	Indig.	4.2	8.3	11.3	11.6	16.6	9.1	10.7	8.8	10.0	8.8	9.7	54,237
	Non-Indig.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Rate ratio(c)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(continued)

Table 1.14.3 (continued): Indigenous status, age, sex and remoteness, by disability status 2012–13[a]

		Age						Sex		Remoteness		Total	
		0–14	**15–24**	**25–34**	**35–44**	**45–54**	**55+**	**Males**	**Females**	**Non-remote**	**Remote**		
		Per cent[b]						**Per cent**[b]				**Per cent**[b]	**Number**
Has unspecified limitation or restriction	Indig.	9.5	15.0	16.6	23.6	28.5	33.8	21.7	21.3	21.1	22.7	21.4	110,010
	Non-Indig.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	Rate ratio[c]	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Subtotal with an unspecified limitation/restriction or schooling/employment restriction[e]	*Indig.*	*13.7*	*23.4*	*27.9*	*35.2*	*45.1*	*42.9*	*32.4*	*30.0*	*31.0*	*31.5*	*31.1*	*164,247*
	Non-Indig.	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
	Rate ratio[c]	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
Subtotal with other disability or restrictive long-term health condition[e][f]	*Indig.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
	Non-Indig.	*8.3*	*14.8*	*16.5*	*20.9*	*24.9*	*37.0*	*21.8*	*20.1*	*20.9*	*25.2*	*20.9*	*4,689,570*
	Rate ratio[c]	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*	*n.a.*
Total with a disability or restrictive long-term health condition	**Indig.**	**19.3**	**30.6**	**35.7**	**49.8**	**62.0**	**66.7**	**44.7**	**43.8**	**44.7**	**42.3**	**44.2**	**228,169**
	Non-Indig.	**12.5**	**19.1**	**20.5**	**27.9**	**34.7**	**54.7**	**29.8**	**28.7**	**29.2**	**33.7**	**29.3**	**6,582,178**
	Rate ratio[c]	**1.5***	**1.6***	**1.7***	**1.8***	**1.8***	**1.2***	**1.5***	**1.5***	**1.5***	**1.3***	**1.5***	**. .**
No disability or restrictive long-term health condition	Indig.	80.7	69.4	64.3	50.2	38.0	33.3	55.3	56.2	55.3	57.7	55.8	410,155
	Non-Indig.	87.5	80.9	79.5	72.1	65.3	45.3	70.2	71.3	70.8	66.3	70.7	15,040,180
	Rate ratio[c]	0.9	0.9	0.8	0.7	0.6	0.7	0.8	0.8	0.8	0.9	0.8	. .

(continued)

Table 1.14.3 (continued): Indigenous status, age, sex and remoteness, by disability status 2012–13[(a)]

		Age						Sex		Remoteness		Total	
		0–14	15–24	25–34	35–44	45–54	55+	Males	Females	Non-remote	Remote		
Total number	**Indig.**	**229,383**	**127,722**	**86,720**	**77,855**	**60,002**	**56,642**	**317,958**	**320,366**	**502,291**	**136,033**	**. .**	**638,324**
	Non-Indig.	**4,027,049**	**2,943,483**	**3,149,999**	**3,080,345**	**2,972,123**	**5,449,359**	**10,786,126**	**10,836,232**	**21,370,360**	**251,998**	**. .**	**21,622,358**
	Rate ratio[(c)]	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**	**. .**
Disability type[(g)]				**Per cent[(b)]**					**Per cent[(b)]**			**Per cent[(b)]**	**Number**
Sight/hearing/speech	Indig.	56.0	38.3	31.8	41.7	49.7	53.4	49.2	43.6	44.4	53.7	46.4	104,461
	Non-Indig.	61.9	33.0	31.0	31.5	40.1	55.3	49.6	39.1	44.4	30.7	44.3	3,030,128
	Rate ratio[(c)]	0.9	1.2	1.0	1.3	1.2	1.0	1.0	1.1	1.0	1.7	1.0	. .
Physical	Indig.	21.9	49.4	63.2	69.2	71.7	74.1	53.1	61.6	57.3	57.9	57.3	130,097
	Non-Indig.	27.3	56.2	65.1	72.3	69.2	71.6	55.6	62.4	59.2	65.3	59.2	4,342,132
	Rate ratio[(c)]	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	. .
Intellectual	Indig.	31.4	28.5	19.4	13.9	13.7	7.3	22.4	15.4	20.9	10.3	18.8	44,312
	Non-Indig.	35.2	19.0	7.6	5.5	7.4	6.3	15.9	12.0	14.2	14.7†	14.2	644,236
	Rate ratio[(c)]	0.9	1.5	2.6	2.5	1.9	1.2	1.4	1.3	1.5	0.7	1.3	. .
Psychological	Indig.	11.2	20.5	30.2	25.3	28.0	15.2	18.6	22.4	23.3	10.9	20.6	48,345
	Non-Indig.	6.1	15.9	18.6	18.3	18.1	12.3	11.6	16.8	14.0	21.2†	14.2	949,531
	Rate ratio[(c)]	1.8	1.3	1.6	1.4	1.5	1.2	1.6	1.3	1.7	0.5	1.5	. .
Head injury, stroke or brain damage	Indig.	1.1†	1.7†	4.8†	6.5†	8.3	7.2	4.9	4.9	5.4	3.1	4.9	10,999
	Non-Indig.	0.6‡	2.8†	2.0†	3.7	4.2	4.3	3.2	2.5	2.8	6.1†	2.9	234,475
	Rate ratio[(c)]	1.8	0.6	2.4	1.8	2.0	1.7	1.5	2.0	1.9	0.5	1.7	. .
Other	Indig.	25.2	19.6	30.9	35.7	48.0	54.1	33.2	39.5	39.0	26.3	36.3	80,498
	Non-Indig.	16.2	17.0	21.3	28.8	34.3	41.5	24.7	29.2	27.0	35.5†	27.0	2,151,953
	Rate ratio[(c)]	1.6	1.2	1.5	1.2	1.4	1.3	1.3	1.4	1.4	0.7	1.3	. .

(continued)

Table 1.14.3 (continued): Indigenous status, age, sex and remoteness, by disability status 2012–13(a)

		Age						Sex		Remoteness			
		0–14	15–24	25–34	35–44	45–54	55+	Males	Females	Non-remote	Remote		Total
Total with a disability or long-term health condition	**Indig.**	**44,341**	**39,064**	**30,989**	**38,798**	**37,197**	**37,780**	**112,987**	**115,182**	**181,403**	**46,766**	**. .**	**228,169**
	Non-Indig.	**502,700**	**561,972**	**645,706**	**860,562**	**1,031,409**	**2,979,829**	**3,294,395**	**3,287,783**	**6,493,076**	**89,102**	**. .**	**6,582,178**

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios for ‘Subtotal with profound/severe/moderate core activity limitation’ and ‘Subtotal with disability or restrictive long-term health condition’ tested.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities.

(b) Rates per 100. Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(c) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(d) Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities.

(e) Only current difficulties with education and/or employment were collected. Respondents aged 65 and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(f) Includes mild core activity limitation, schooling/employment restriction only, and no limitation or specific restriction.

(g) Multiple responses allowed. Sum of components may exceed total.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.14.4: Disability status, type and impacts, reported by Indigenous persons by age, sex and remoteness, 2012–13

	Age								**Sex**		**Remoteness**			
	0–5	**6–14**	**15–24**	**25–34**	**35–44**	**45–54**	**55–64**	**65+**	**Males**	**Females**	**Non-remote**	**Remote**		**Total**
	Per cent[(a)]													**Number**
Disability status[(b)]														
Has profound core activity limitation	3.0†	2.7	1.0†	1.9†	2.2†	4.0	5.9	n.p.	2.9	2.6	2.9	2.2	2.7	17,351
Has severe core activity limitation	1.4†	2.2	3.7	3.3	5.8	6.4	6.5†	5.7†	3.4	4.0	3.8	3.5	3.7	23,642
Has moderate core activity limitation	0.4†	1.3†	2.5	2.7	6.6	6.6	9.3	13.5	3.4	3.7	3.8	2.7	3.6	22,928
Sub-total profound/severe/moderate core activity limitation[(c)]	*4.8*	*6.2*	*7.2*	*7.8*	*14.6*	*16.9*	*21.6*	*27.3*	*9.8*	*10.3*	*10.5*	*8.4*	*10.0*	*63,922*
Has schooling/employment restriction only[(d)]	1.2‡	6.4	8.3	11.3	11.6	16.6	14.6	n.p.	9.1	7.9	8.7	7.7	8.5	54,237
Has unspecified limitation or restriction	6.7	11.5	15.0	16.6	23.6	28.5	28.3	42.7	16.7	17.8	16.9	18.3	17.2	110,010
Sub-total with a limitation or restrictive long-term health condition	*7.9*	*17.8*	*23.4*	*27.9*	*35.2*	*45.1*	*42.9*	*42.9*	*25.8*	*25.7*	*25.7*	*26.0*	*25.7*	*164,247*
No limitation or restrictive long-term health condition	87.4	75.9	69.4	64.3	50.2	38.0	35.5	29.8	64.5	64.0	63.9	65.6	64.3	410,155
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*638,324*
Disability type														
Sight/hearing/speech	67.5	51.7	38.3	31.8	41.7	49.7	46.4	63.8	49.0	42.6	43.8	53.5	45.8	104,461
Physical	20.0†	22.5	49.4	63.2	69.2	71.7	78.0	68.3	51.4	62.5	56.5	59.0	57.0	130,097
Intellectual	19.6†	35.8	28.5	19.4	13.9	13.7	9.4	4.2†	23.7	15.3	21.9	9.9	19.4	44,312
Psychological	3.6†	14.0	20.5	30.2	25.3	28.0	18.9	9.8	18.8	23.5	23.7	11.3	21.2	48,345
Head injury, stroke or brain damage	n.p.	1.4†	1.7†	4.8†	6.5†	8.3	6.8†	7.9†	4.8	4.8	5.2	3.3	4.8	10,999
Other	28.8	23.8	19.6	30.9	35.7	48.0	56.2	51.0	32.0	38.5	37.5	26.8	35.3	80,498
Total with disability[(e)]	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*228,169*

(continued)

Table 1.14.4 (continued): Disability status, type and impacts, reported by Indigenous persons by age, sex and remoteness, 2012–13

	Age								**Sex**		**Remoteness**			
	0–5	**6–14**	**15–24**	**25–34**	**35–44**	**45–54**	**55–64**	**65+**	**Males**	**Females**	**Non-remote**	**Remote**		**Total**
	Per cent$^{(a)}$													**Number**
Total per cent with disability/restrictive long-term condition	*12.7*	*24.0*	*30.4*	*35.8*	*50.1*	*61.8*	*63.8*	*70.8*	*35.5*	*36.0*	*36.1*	*34.4*	*35.7*	*. .*
Total number with disability	*11,990*	*32,351*	*39,064*	*30,989*	*38,798*	*37,197*	*22,518*	*15,262*	*112,987*	*115,182*	*181,403*	*46,766*	*. .*	*228,169*
Overall population distribution	*14.9*	*21.1*	*20.0*	*13.6*	*12.2*	*9.4*	*5.5*	*3.4*	*49.8*	*50.2*	*78.7*	*21.3*	*100.0*	*638,324*
Total number	**94,973**	**134,410**	**127,722**	**86,720**	**77,855**	**60,002**	**34,901**	**21,741**	**317,958**	**320,366**	**502,291**	**136,033**	**. .**	**638,324**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Percentages add within columns.

(b) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities.

(c) Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities.

(d) Only current difficulties with education and/or employment were collected. Respondents aged 65 and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(e) Multiple responses allowed, sum of components may exceed total.

Notes:

1. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.
2. These data were extracted using Table Builder and results may be slightly different to those in other tables.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.14.5: Impact of disability on study and employment reported by Indigenous persons with a disability by age, sex and remoteness, 2012–13(a)

	Age				Sex		Remoteness		
	5–14	**15–24**	**25–44**	**45–64**	**Males**	**Females**	**Non-remote**	**Remote**	**Total**
Difficulties with education(b)(c)									
Not attending school/further study due to condition	3,847†	n.p.	n.p.	230‡	3,366†	2,769†	5,371	764†	6,134
Need time off school/study	6,695	2,454	1,759†	1,069†	3,008	8,970	10,633	1,344†	11,977
Attend special classes/school	6,244	n.p.	n.p.	—	5,849	2,461†	7,699	611†	8,310
Other related difficulties	5,429	1,344†	877†	606‡	4,407	3,849	6,379	1,877†	8,256
Total with difficulties	*18,304*	*5,490*	*2,276*	*1,791†*	*13,273*	*14,588*	*23,697*	*4,164*	*27,861*
No difficulties	17,882	9,268	7,507	2,529	18,107	19,078	31,687	5,499	37,186
Total with disability(b)(c)	*36,186*	*14,758*	*9,782*	*4,320*	*31,380*	*33,667*	*55,383*	*9,664*	*65,047*
Difficulties with employment(c)(d)									
Type of job can do	. .	6,580	14,876	10,766	18,211	14,011	25,534	6,688	32,222
Number of hours that can be worked	. .	3,371†	9,582	7,010	8,746	11,217	17,482	2,481	19,963
Finding suitable work	. .	3,422†	8,957	5,064	10,123	7,321	15,129	2,314	17,443
Needing time off work	. .	2,495	10,501	5,352	7,511	10,837	16,016	2,332	18,348
Permanently unable to work	. .	1,381†	7,009	11,431	11,490	8,330	15,403	4,417	19,821
Total with difficulties	. .	*11,729*	*29,809*	*25,105*	*34,715*	*31,928*	*53,888*	*12,755*	*66,643*
No difficulties	. .	12,648	22,842	15,641	25,795	25,334	39,090	12,040	51,130
Total with an employment restriction due to a disability aged 15–64	. .	*24,377*	*52,650*	*40,745*	*60,510*	*57,262*	*92,978*	*24,795*	*117,772*
Total number with a disability aged 5–64	**36,186**	**39,064**	**69,787**	**59,715**	**100,846**	**103,906**	**162,283**	**42,468**	**204,752**

(continued)

Table 1.14.5 (continued): Impact of disability on study and employment reported by Indigenous persons with a disability by age, sex and remoteness, 2012–13(a)

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Only current difficulties with education and/or employment were collected.

(b) Respondents with a disability aged 5–14 and 15 and over who are currently studying.

(c) Multiple responses allowed, sum of components may be greater than total.

(d) Persons aged 15–64 with a disability.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.14.6: Impact of disability on study and employment reported by Indigenous persons with a disability by age, sex and remoteness, 2012–13[(a)]

	Age				Sex		Remoteness		
	5–14	**15–24**	**25–44**	**45–64**	**Males**	**Females**	**Non-remote**	**Remote**	**Total**
					Per cent				
Difficulties with education[(b)(c)]									
Not attending school/further study due to condition	10.6†	n.p.	n.p.	5.3‡	10.7	8.2†	9.7	7.9†	9.4
Need time off school/study	18.5	16.6	18.0	24.7†	9.6	26.6	19.2	13.9†	18.4
Attend special classes/school	17.3	n.p.	n.p.	—	18.6	7.3	13.9	6.3†	12.8
Other related difficulties	15.0	9.1†	9.0†	14.0†	14.0	11.4	11.5	19.4†	12.7
Total with difficulties	*50.6*	*37.2*	*23.3*	*41.5†*	*42.3*	*43.3*	*42.8*	*43.1*	*42.8*
No difficulties	49.4	62.8	76.7	58.5	57.7	56.7	57.2	56.9	57.2
Total with disability[(b)]	**36,186**	**14,758**	**9,782**	**4,320**	**31,380**	**33,667**	**55,383**	**9,664**	**65,047**
Difficulties with employment[(c)(d)]									
Type of job can do	. .	27.0	28.3	26.4	30.1	24.5	27.5	27.0	27.4
Number of hours that can be worked	. .	13.8†	18.2	17.2	14.5	19.6	18.8	10.0	17.0
Finding suitable work	. .	14.0†	17.0	12.4	16.7	12.8	16.3	9.3	14.8
Needing time off work	. .	10.2	19.9	13.1	12.4	18.9	17.2	9.4	15.6
Permanently unable to work	. .	5.7†	13.3	28.1	19.0	14.5	16.6	17.8	16.8
Total with difficulties	. .	*48.1*	*56.6*	*61.6*	*57.4*	*55.8*	*58.0*	*51.4*	*56.6*
No difficulties	. .	51.9	43.4	38.4	42.6	44.2	42.0	48.6	43.4
Total with an employment restriction due to a disability aged 15–64	**. .**	**24,377**	**52,650**	**40,745**	**60,510**	**57,262**	**92,978**	**24,795**	**117,772**
Total number with a disability aged 5–64	**36,186**	**39,064**	**69,787**	**59,715**	**100,846**	**103,906**	**162,283**	**42,468**	**204,752**

(continued)

Table 1.14.6 (continued): Impact of disability on study and employment reported by Indigenous persons with a disability by age, sex and remoteness, 2012–13(a)

(a) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Only current difficulties with education and/or employment were collected.

(b) Respondents with a disability aged 5–14 and 15 and over who are currently studying. Those aged over 64 were excluded from this table.

(c) Multiple responses allowed, sum of components may be greater than total.

(d) Persons aged 15–64 with a disability.

Note: Percentages add within columns. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.14.7: Disability status(a) by selected socioeconomic and health characteristics, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/ moderate core activity limitation	Has a schooling/ employment restriction only	Has unspecified limitation or restriction	Total with a disability or long-term health condition	No disability or long-term health condition	Total		Overall population distribution
	Percent(b)					Percent(b)	Number	Percent(c)
SEIFA(d)								
1st quintile (most disadvantaged)	13.5	11.5	23.3	48.3	51.7	100.0	211,804	51.8
5th quintile (most advantaged)	7.4†	11.9†	20.0	39.3	60.7	100.0	15,072	3.7
Ratio most disadvantaged/most advantaged	1.8*	1.0	1.2*	1.2*	0.9*	1.0	14.1	14.0
Employment								
Employed	6.9	8.2	20.0	35.0	65.0	100.0	187,107	45.8
Unemployed	8.4	13.1	20.5	42.0	58.0	100.0	50,987	12.5
Not in the labour force	19.8	13.2	23.6	56.7	43.3	100.0	170,847	41.8
Ratio unemployed/employed	1.2*	1.6*	1.0*	1.2*	0.9	1.0	0.3	0.3
Has non-school qualification(e)								
Yes	12.4	10.0	21.7	44.1	55.9	100.0	163,249	39.9
No	12.5	11.5	21.5	45.6	54.4	100.0	245,692	60.1
Ratio no/yes	1.0	1.2*	1.0	1.03*	1.0	1.0	1.5	1.5
Highest year of school completed								
Year 12	10.7	8.7	15.0	34.5	65.5	100.0	100,362	24.5
Year 9 or below (f)	18.8	13.5	26.1	58.4	41.6	100.0	119,529	29.2
Ratio Year 9 or below/Year 12	1.8*	1.6*	1.7*	17*	0.6*	1.0	1.2	1.2

(continued)

Table 1.14.7 (continued): Disability status[(a)] by selected socioeconomic and health characteristics, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/ moderate core activity limitation	Has a schooling/ employment restriction only	Has unspecified limitation or restriction	Total with a disability or long-term health condition	No disability or long-term health condition	Total		Overall population distribution
	Percent(b)					Percent(b)	Number	Percent(c)
Smoker status								
Current smoker (g)	12.6	12.2	21.1	45.9	54.1	100.0	175,768	43.0
Non-smoker(h)	12.3	9.9	22.0	44.3	55.7	100.0	233,173	57.0
Ratio smoker/non-smoker	1.0*	1.2*	1.0*	1.0*	1.0*	1.0	0.8	0.8
Adequate daily vegetable intake(i)								
Yes	13.6	8.5†	29.6	51.7	48.3	100.0	20,158	4.9
No	12.4	11.0	21.2	44.6	55.4	100.0	388,783	95.1
Ratio no/yes	0.9*	1.3*	0.7*	0.9*	1.1*	1.0	19.3	19.4
Adequate daily fruit intake(j)								
Yes	11.0	9.0	21.5	41.5	58.5	100.0	175,227	42.8
No	13.5	12.3	21.6	47.5	52.5	100.0	233,714	57.2
Ratio no/yes	1.2*	1.4*	1.0	1.1*	0.9	1.0	1.3	1.3
Obese(k)								
Yes	15.2	11.7	24.1	51.0	49.0	100.0	124,997	37.0
No	10.0	10.9	21.0	41.8	58.2	100.0	212,509	63.0
Ratio yes/no	1.5*	1.1*	1.1*	1.2*	0.8*	1.0	0.6	0.6
Total number (l)	*40,219*	*37,660*	*74,688*	*152,567*	*184,939*	*100.0*	*337,506*	*337,506*

(continued)

Table 1.14.7 (continued): Disability status(a) by selected socioeconomic and health characteristics, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/ moderate core activity limitation	Has a schooling/ employment restriction only	Has unspecified limitation or restriction	Total with a disability or long-term health condition	No disability or long-term health condition	Total	Total	Overall population distribution
	Percent(b)					Percent(b)	Number	Percent(c)
Self-assessed health status								
Excellent/very good/good	7.0	7.8	20.2	35.0	65.0	100.0	307,649	75.2
Fair/poor	28.9	20.2	25.9	75.1	24.9	100.0	101,292	24.8
Ratio fair, poor/excellent, very good, good	4.1*	2.6*	1.3*	2.1*	0.4	1.0	0.3	0.3
Heart/circulatory disease(l)(m)								
Yes	25.4	14.3	29.7	69.4	30.6	100.0	72,617	17.8
No	9.7	10.2	19.8	39.7	60.3	100.0	336,324	82.2
Ratio yes/no	2.6*	1.4*	1.5*	1.7*	0.5*	1.0	0.2	0.2
Diabetes(l)(n)								
Yes	26.0	11.4	31.0	68.3	31.7	100.0	47,898	11.7
No	10.7	10.8	20.3	41.8	58.2	100.0	361,043	88.3
Ratio yes/no	2.4*	1.1*	1.5*	1.6*	0.5*	1.0	0.1	0.1
Kidney disease(l)(o)								
Yes	42.3	15.4†	23.1	80.9	19.1	100.0	9,819	2.4
No	11.7	10.8	21.5	44.1	55.9	100.0	399,122	97.6
Ratio yes/no	3.6*	1.4*	1.1*	1.8*	0.3*	1.0	0.0	0.0
Total(p)	**12.5***	**10.9***	**21.6***	**45.0***	**55.0**	**100.0**	**408,941**	**100.0**
Total number of persons 15+	**51,009**	**44,580**	**88,239**	**183,828**	**225,113**	**408,941**	**408,941**	**408,941**

(continued)

Table 1.14.7 (continued): Disability status[(a)] by selected socioeconomic and health characteristics, Indigenous persons (15 years and over), 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Overall population distribution columns not tested.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person's overall level of core activity limitation is determined by their highest level of limitation in any of these activities. Only current difficulties with education and/or employment were collected. Respondents aged 65 years and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned 'schooling/employment restriction only' had they been asked the question.

(b) Percentages add within rows.

(c) Distribution of total population.

(d) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(e) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED) (includes e.g. Bachelor degree or higher, diploma, advanced diploma, certificate).

(f) Year 9 or below includes never attended school.

(g) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(h) Includes ex-smoker and those who have never smoked.

(i) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 and over, with the exception of 18–49 year old males who eat 6 serves.

(j) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 and over.

(k) Body Mass Index greater than 30.0 for people aged 18 and over. For information on the calculation of BMI scores for people aged 15–17, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001).

(l) Total excludes measurement not taken.

(m) Self-reported data consisting of persons reporting they have a current heart or circulatory condition which has lasted, or is likely to last, for six months or more.

(n) Self-reported data consisting of persons reporting diabetes which has lasted, or is expected to last, for six months or more. Includes Type 1 and Type 2 diabetes, type unknown, and persons who reported they had diabetes but that it was not current at the time of interview.

(o) Self-reported data consisting of persons reporting kidney disease which has lasted or is expected to last, for six months or more.

(p) Reference category for statistical testing: 'No disability or long-term health condition'.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.14.8: Disability status[a] by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/moderate core activity limitation	Has a schooling/ employment restriction only[b]	Has unspecified limitation or restriction[c]	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
	Percent[d]					Percent[d]	Number	Percent[e]
Equivalised gross household income[f]								
1st quintile (lowest)	14.8	12.7	22.9	50.3	49.7	100.0	140,304	42.7
4th/5th quintile (highest)	10.0	6.5	21.3	37.9	62.1	100.0	55,728	17.0
Ratio lowest/highest	1.5*	2.0*	1.1*	1.3*	0.8*	1.0	2.5	2.5
Total number	*42,852*	*34,527*	*70,091*	*147,470*	*181,220*	*100.0*	*328,690*	*328,690*
Financial stress—whether household could raise $2,000 in an emergency								
Yes	9.9	8.6	20.4	39	61.0	100.0	177,097	46.2
No	14.4	12.7	22.8	49.9	50.1	100.0	206,614	53.8
Ratio No/Yes	0.7*	0.7*	0.9*	0.8*	1.2*	1.0	0.9	0.9
Total number	*47,396*	*41,377*	*83,285*	*172,058*	*211,653*	*100.0*	*383,711*	*383,711*
Household had day/s without money for basic living expenses in last 12 months								
Yes	17.0	13.8	22.9	53.7	46.3	100.0	164,764	40.5
No	9.4	8.9	20.8	39.1	60.9	100.0	241,932	59.5
Ratio Yes/No	1.8*	1.6*	1.1*	1.4*	0.8*	1.0	0.7	0.7
Total number	*50,764*	*44,144*	*88,038*	*182,946*	*223,749*	*100.0*	*406,696*	*406,696*
Government pension/allowance main source of personal cash income								
Yes	18.3	13.9	24.0	56.2	43.8	100.0	182,663	46.6
No	7.3	7.9	19.3	34.5	65.5	100.0	209,150	53.4
Ratio Yes/No	2.5*	1.8*	1.2*	1.6*	0.7*	1.0	0.9	0.9
Total number	*48,682*	*42,004*	*84,184*	*174,870*	*216,943*	*100.0*	*391,813*	*391,813*

(continued)

Table 1.14.8 (continued): Disability status[(a)] by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/moderate core activity limitation	Has a schooling/ employment restriction only[(b)]	Has unspecified limitation or restriction[(c)]	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
	Percent[(d)]					Percent[(d)]	Number	Percent[(e)]
Housing tenure type[(g)]								
Owner	12.6	10.5	20.7	43.8	56.2	100.0	124,490	30.6
Renter	12.3	11.0	22.0	45.4	54.6	100.0	281,001	69.0
Ratio renter/owner	1.0*	1.0*	1.1*	1.0*	1.0*	1.0	2.3	2.3
Total number	*50,764*	*44,144*	*88,038*	*182,946*	*224,064*	*100.0*	*407,011*	*407,011*
Lives in overcrowded household[(h)]								
Yes	10.5	11.3	20.5	42.4	57.6	100.0	81,548	20.1
No	13.0	10.7	21.9	45.6	54.4	100.0	325,148	79.9
Ratio yes/no	0.8*	1.1*	0.9*	0.9*	1.1*	1.0	0.3	0.3
Total number	*50,764*	*44,144*	*88,038*	*182,946*	*223,749*	*100.0*	*406,696*	*406,696*
Alcohol consumption								
Abstained from alcohol in last 12 months[(i)]	15.9	10.1	21.3	47.3	52.7	100.0	108,024	26.4
Short-term/single occasion risk[(j)]								
Yes	9.0	10.9	22.5	42.3	57.7	100.0	219,176	53.6
No	17.0	12.3	19.3	48.6	51.4	100.0	74,582	18.2
Ratio yes/no	0.5*	0.9*	1.2*	0.9*	1.1*	1.0	2.9	2.9

(continued)

Table 1.14.8 (continued): Disability status[(a)] by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/moderate core activity limitation	Has a schooling/ employment restriction only[(b)]	Has unspecified limitation or restriction[(c)]	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
	Percent[(d)]					Percent[(d)]	Number	Percent[(e)]
Physical activity[(k)(l)]								
Met guidelines	11.6	10.6	21.0	43.3	56.7	100.0	117,125	41.4
Did not meet guidelines[(m)]	15.9	11.8	22.5	50.2	49.8	100.0	165,910	58.6
Ratio did not meet/met guidelines	1.4*	1.1*	1.1*	1.2*	0.9*	1.0	1.4	1.4
Total number	*39,885*	*32,003*	*62,055*	*133,943*	*149,092*	. .	*283,035*	*283,035*
Psychological distress (Kessler 5)[(n)]								
Low/moderate	8.9	8.0	21.4	38.7	61.3	100.0	252,230	69.8
High/very high	22.0	16.8	25.4	64.2	35.8	100.0	109,134	30.2
Ratio high, very high/low, moderate	2.5*	2.0*	1.2*	1.7*	0.6*	1.0	0.4	0.4
Total number	*46,448*	*39,639*	*81,582*	*167,669*	*193,694*	. .	*361,364*	*361,364*
Stressors experienced in last 12 months[(o)]								
No stressors	6.3	7.1	18.4	31.8	68.2	100.0	107,171	26.3
Experienced one or more stressor	14.7	12.3	22.7	49.7	50.3	100.0	300,159	73.5
Ratio one or more/no stressors	2.3*	1.7*	1.2*	1.6*	0.7*	1.0	2.8	2.8
Total number	*50,914*	*44,524*	*88,188*	*183,626*	*224,593*	. .	*408,220*	*408,220*

(continued)

Table 1.14.8 (continued): Disability status[(a)] by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/moderate core activity limitation	Has a schooling/ employment restriction only[(b)]	Has unspecified limitation or restriction[(c)]	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
	Percent[(d)]					Percent[(d)]	Number	Percent[(e)]
Long term health conditions[(p)]								
No current long term health condition	2.4†	3.2†	6.1	11.8	88.2*	100.0	79,908	19.5
One	4.1	4.8	16.8	25.7	74.3*	100.0	76,185	18.6
Two	6.8	11.6	22.6	41	59.0*	100.0	63,404	15.5
Three or more	22.0	16.3	29.7	68.0	32.0	100.0	189,444	46.3
Ratio three or more/no conditions	9.2*	5.1*	4.9*	5.8*	0.4*	1.0	2.4	2.4
Respiratory disease[(q)]								
Yes	17.8	13.5	24.3	55.6	44.4	100.0	149,805	36.6
No	9.4	9.4	20.0	38.8	61.2	100.0	259,136	63.4
Ratio yes/no	1.9*	1.4*	1.2*	1.4*	0.7*	1.0	0.6	0.6
Cancer[(r)]								
Yes	32.5†	13.7†	27.7†	73.9	26.1†	100.0	5,550	1.4
No	12.2	10.9	21.5	44.6	55.4	100.0	403,391	98.6
Ratio yes/no	2.7*	1.3*	1.3*	1.7*	0.5*	1.0	0.0	0.0
Total[(s)]	**12.5***	**10.9***	**21.6***	**45***	**55.0**	**100.0**	**408,941**	**100.0**
Total number of persons	**51,009**	**44,580**	**88,239**	**183,828**	**225,113**	**408,941**	**408,941**	**408,941**

(continued)

Table 1.14.8 (continued): Disability status by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Overall population distribution columns not tested.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person's overall level of core activity limitation is determined by their highest level of limitation in any of these activities.

(b) Only current difficulties with education and/or employment were collected. Respondents aged 65 and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned 'schooling/employment restriction only' had they been asked the question.

(c) Includes 'has mild core activity limitation' and 'has no limitation or specific restriction' categories—which were asked of non-remote population only.

(d) Proportions add within rows.

(e) Distribution of total Indigenous population.

(f) Excludes 'not stated' and 'not known'.

(g) Total includes 'other' and 'life tenure scheme'.

(h) Overcrowding is based on Canadian National Occupancy Standard for Housing Appropriateness.

(i) Abstainer includes those who have never consumed alcohol.

(j) Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(k) Physical activity data collected from persons 18 and over; and non-remote areas only.

(l) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(m) Includes 'Don't know'.

(n) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5-11. High/very high is a score of 12–25 Persons aged 18 and over.

(o) Stressors experienced by self, family or friends.

(p) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(q) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitis, and other diseases of the respiratory system.

(r) Self-reported data consisting of persons ever told has condition, still current and in remission.

(s) Reference category for statistical testing: 'No limitation or restrictive long-term health condition'.

Notes

1. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.
2. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.14.9: Disability status(a) by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/moderate core activity limitation	Has a schooling/ employment restriction only(b)	Has unspecified limitation or restriction(c)	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
			Per cent(d)			Per cent(d)	Number	Per cent(e)
Equivalised gross household income(f)								
1st quintile (lowest)	48.5	51.6	45.8	47.9*	38.5	100.0	140,304	42.7
4th/5th quintile (highest)	13.0	10.5	16.9	14.3*	19.1	100.0	55,728	17.0
Ratio lowest/highest	3.7	4.9	2.7	3.3	2.0	1.0	2.5	2.5
Total number	**42,852**	**34,527**	**70,091**	**147,470**	**181,220**	**. .**	**328,690**	**328,690**
Financial stress—whether household could raise $2,000 in an emergency								
Yes	36.8	37.7	43.0	40.0*	50.8	100.0	173,055	46.0
No	63.2	62.3	57.0	60.0*	49.2	100.0	203,441	54.0
Ratio no/yes	1.7	1.7	1.3	1.5	1.0	1.0	1.2	1.2
Total number	**47,105**	**39,564**	**82,370**	**169,039**	**207,457**	**. .**	**376,496**	**376,496**
Household had day/s without money for basic living expenses in last 12 months								
Yes	55.2	51.4	42.9	48.3*	34.1	100.0	164,764	40.5
No	44.8	48.6	57.1	51.7*	65.9	100.0	241,932	59.5
Ratio yes/no	1.2	1.1	0.7	0.9	0.5	1.0	0.7	0.7
Total number	**50,764**	**44,144**	**88,038**	**182,946**	**223,749**	**. .**	**406,696**	**406,696**
Government pension/allowance main source of personal cash income								
Yes	68.6	60.6	52.1	58.7*	36.9	100.0	182,663	46.6
No	31.4	39.4	47.9	41.3*	63.1	100.0	209,150	53.4
Ratio yes/no	2.2	1.5	1.1	1.4	0.6	1.0	0.9	0.9
Total number	**48,682**	**42,004**	**84,184**	**174,870**	**216,943**	**. .**	**391,813**	**391,813**

(continued)

Table 1.14.9 (continued): Disability status(a) by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/moderate core activity limitation(a)	Has a schooling/ employment restriction only(b)	Has unspecified limitation or restriction(c)	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
	Per cent(d)					Per cent(d)	Number	Per cent(e)
Housing tenure type(g)								
Owner	30.9	29.6	29.3	29.8*	31.2	100.0	124,490	30.6
Renter	68.1	70.0	70.2	69.7*	68.5	100.0	281,001	69.0
Ratio renter/owner	2.2	2.4	2.4	2.3	2.2	1.0	2.3	2.3
Total number	**50,764**	**44,144**	**88,038**	**182,946**	**224,064**	**. .**	**407,011**	**407,011**
Lives in overcrowded household(h)								
Yes	16.8	20.9	19.0	18.9*	21.0	100.0	81,548	20.1
No	83.2	79.1	81.0	81.1*	79.0	100.0	325,148	79.9
Ratio yes/no	0.2	0.3	0.2	0.2	0.3	1.0	0.3	0.3
Total number	**50,764**	**44,144**	**88,038**	**182,946**	**223,749**	**. .**	**406,696**	**406,696**
Alcohol consumption								
Abstained from alcohol in last 12 months(i)	33.7	24.5	26.1	27.8*	25.3	100.0	108,024	26.4
Short-term/single occasion risk(j)								
Yes	38.7	53.6	55.9	50.4*	56.2	100.0	219,176	53.6
No	24.9	20.6	16.3	19.7	17.0	100.0	74,582	18.2
Ratio yes/no	1.6	2.6	3.4	2.6*	3.3	1.0	2.9	2.9
Physical activity(k)(l)								
Met guidelines	34.0	38.8	39.7	37.8*	44.6	100.0	117,125	41.4
Did not meet guidelines(m)	66.0	61.2	60.3	62.2*	55.4	100.0	165,910	58.6
Ratio did not meet/met guidelines	1.9	1.6	1.5	1.6	1.2	1.0	1.4	1.4
Total number	**39,885**	**32,003**	**62,055**	**133,943**	**149,092**	**. .**	**283,035**	**283,035**

(continued)

Table 1.14.9 (continued): Disability status[(a)] by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/moderate core activity limitation(a)	Has a schooling/ employment restriction only(b)	Has unspecified limitation or restriction(c)	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
			Per cent(d)			Per cent(d)	Number	Per cent(e)
Psychological distress (Kessler 5)(n)								
Low/moderate	48.3	53.6	66.1	58.2*	79.8	100.0	252,230	69.8
High/very high	51.7	46.4	33.9	41.8*	20.2	100.0	109,134	30.2
Ratio high, very high/low, moderate	1.1	0.9	0.5	0.7	0.3	1.0	0.4	0.4
Total number	**46,448**	**39,639**	**81,582**	**167,669**	**193,694**	**. .**	**361,364**	**361,364**
Stressors experienced in last 12 months(o)								
No stressors	13.3	17.1	22.4	18.6*	32.5	100.0	107,171	26.3
Experienced one or more stressor	86.7	82.9	77.3	81.2*	67.2	100.0	300,159	73.5
Ratio one or more/no stressors	6.5	4.9	3.5	4.4	2.1	1.0	2.8	2.8
Total number	**50,914**	**44,524**	**88,188**	**183,626**	**224,593**	**. .**	**408,220**	**408,220**
Long term health conditions(p)								
No current long term health condition	3.8†	5.8†	5.5	5.1*	31.3	100.0	79,908	19.5
One	6.1	8.2	14.5	10.7*	25.1	100.0	76,185	18.6
Two	8.4	16.5	16.2	14.1*	16.6	100.0	63,404	15.5
Three or more	81.7	69.5	63.7	70.1*	26.9	100.0	189,444	46.3
Ratio three or more/no conditions	21.7	12.1	11.5	13.7	0.9	1.0	2.4	2.4
Respiratory disease(q)								
Yes	52.3	45.4	41.3	45.3*	29.5	100.0	149,805	36.6
No	47.7	54.6	58.7	54.7*	70.5	100.0	259,136	63.4
Ratio yes/no	1.1	0.8	0.7	0.8	0.4	1.0	0.6	0.6

(continued)

Table 1.14.9 (continued): Disability status(a) by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

	Has profound/ severe/moderate core activity limitation(a)	Has a schooling/ employment restriction only(b)	Has unspecified limitation or restriction(c)	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
			Per cent(d)			Per cent(d)	Number	Per cent(e)
Cancer(r)								
Yes	3.5†	1.7†	1.7†	2.2*	0.6†	100.0	5,550	1.4
No	96.5	98.3	98.3	97.8*	99.4	100.0	403,391	98.6
Ratio yes/no	—	—	—	—	—	1.0	—	—
Total number of persons	**51,009**	**44,580**	**88,239**	**183,828**	**225,113**	**. .**	**408,941**	**408,941**

(continued)

Table 1.14.9 (continued): Disability status[(a)] by selected household and health risk factors, Indigenous persons (15 years and over), 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Percentages in ‘Total with a limitation or restrictive long-term health condition’ column were tested against those in the ‘No limitation or restrictive long-term health condition’ column, using ‘No limitation or restrictive long-term health condition’ as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities.

(b) Only current difficulties with education and/or employment were collected. Respondents aged 65 and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(c) Includes ‘has mild core activity limitation’ and ‘has no limitation or specific restriction’ categories—which were asked of non-remote population only.

(d) Percentages add within columns.

(e) Distribution of total Indigenous population.

(f) Excludes ‘not stated’ and ‘not known’.

(g) Total includes ‘other’ and ‘life tenure scheme’.

(h) Overcrowding is based on Canadian National Occupancy Standard for Housing Appropriateness.

(i) Abstainer includes those who have never consumed alcohol.

(j) Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(k) Physical activity data collected from persons 18 and over; and non-remote areas only.

(l) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(m) Includes ‘Don’t know’.

(n) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25 Persons aged 18 and over.

(o) Stressors experienced by self, family or friends.

(p) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(q) Self-reported data consisting of persons reporting they have a current respiratory condition which has lasted, or is expected to last, for 6 months or more. Includes chronic obstructive pulmonary disease, asthma, chronic sinusitis, and other diseases of the respiratory system.

(r) Self-reported data consisting of persons ever told has condition, still current and in remission.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals. Excludes data with not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.14.10: Family and culture characteristics by disability status[a], Indigenous persons (18 years and over), 2012–13

	Has profound/ severe/ moderate core activity limitation	Has a schooling/ employment restriction only[b]	Has unspecified limitation or restriction	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
	Per cent[c]						Number	Per cent[d]
Removal from natural family								
Individual removed from family (with or without relative(s))	17.7	13.2	28.0	58.9	41.1	100.0	44,223	14.1
Relative(s) only removed from family	13.9	10.6	22.6	47.1	52.9	100.0	124,234	39.7
Neither individual nor relative(s) removed from family	9.9	9.8	20.6	40.3	59.7	100.0	144,433	46.2
Total	*12.6*	*10.6*	*22.4*	*45.6*	*54.4*	*100.0*	*312,889*	*100.0*
Total number	*39,356*	*33,055*	*70,237*	*142,648*	*170,241*	*. .*	*312,889*	*. .*
Identifies with tribal/language group or clan[e]								
Yes	13.2	11.1	22.7	46.9	53.1	100.0	226,368	62.8
No	12.0	10.7	22.3	45.1	54.9	100.0	133,512	37.1
Total	*12.7*	*11.0*	*22.6*	*46.3*	*53.7*	*100.0*	*360,202*	*100.0*
Recognises an areas as homelands/traditional country								
Yes	12.4	10.7	23.2	46.3	53.7	100.0	262,404	72.9
No	13.6	11.9	20.9	46.4	53.6	100.0	97,779	27.1
Total	*12.7*	*11.0*	*22.6*	*46.3*	*53.7*	*100.0*	*360,183*	*100.0*

(continued)

Table 1.14.10 (continued): Family and culture characteristics by disability status[(a)], Indigenous persons (18 years and over), 2012–13

	Has profound/ severe/ moderate core activity limitation	Has a schooling/ employment restriction only[(b)]	Has unspecified limitation or restriction	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
	Per cent[(c)]						Number	Per cent[(d)]
Satisfaction level with own knowledge of culture								
Very satisfied/satisfied	11.1	9.9	22.7	43.7	56.3	100.0	215,801	59.8
Neutral	13.1	10.1	18.6	41.8	58.2	100.0	63,975	17.7
Not very satisfied/not at all satisfied	16.7	14.5	25.4	56.6	43.4	100.0	81,004	22.5
Total	*12.7*	*11.0*	*22.6*	*46.3*	*53.7*	*100.0*	*360,781*	*100.0*
Whether proud of culture/being Aboriginal and/or Torres Strait Islander[(f)]								
Yes	12.6	10.7	22.8	46.1	53.9	100.0	349,512	96.9
No	14.6†	19.9†	16.6†	51.2	48.8	100.0	11,269	3.1
Total	*12.7*	*11.0*	*22.6*	*46.3*	*53.7*	*100.0*	*360,781*	*100.0*
Total number	*45,855*	*39,606*	*81,434*	*166,895*	*193,886*	*. .*	*360,781*	*. .*
Whether people you mix with know you are Aboriginal and/or Torres Strait Islander[(g)]								
No, hardly anybody/not many people	16.5	16.8	15.7	49.0	51.0	100.0	20,327	7.3
Some people	18.3	12.3	19.2	49.8	50.2	100.0	33,571	12.0
Yes, most people/everyone	12.5	10.8	22.8	46.1	53.9	100.0	224,066	80.0
Total	*13.4*	*11.4*	*22.0*	*46.8*	*53.2*	*100.0*	*279,930*	*100.0*

(continued)

Table 1.14.10 (continued): Family and culture characteristics by disability status[(a)], Indigenous persons (18 years and over), 2012–13

	Has profound/ severe/ moderate core activity limitation	Has a schooling/ employment restriction only[(b)]	Has unspecified limitation or restriction	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
	Per cent[(c)]						Number	Per cent[(d)]
Whether people you meet for first time know you are Aboriginal and/or Torres Strait Islander[(g)]								
No, hardly anybody/not many people	14.4	12.8	19.3	46.5	53.5	100.0	139,450	49.8
Some people	15.1	9.2	26.4	50.7	49.3	100.0	40,174	14.4
Yes, most people/everyone	11.4	10.6	22.6	44.6	55.4	100.0	93,739	33.5
Total	*13.4*	*11.4*	*22.0*	*46.8*	*53.2*	*100.0*	*279,930*	*100.0*
Whether feels accepted by other Aboriginal and/or Torres Strait Islander people[(g)]								
Yes	12.4	10.5	21.8	44.8	55.2	100.0	241,609	86.3
No	20.1	16.6	22.6	59.3	40.7	100.0	38,322	13.7
Total	*13.4*	*11.4*	*22.0*	*46.8*	*53.2*	*100.0*	*279,930*	*100.0*
Total number	*37,629*	*31,814*	*61,447*	*130,891*	*149,039*	. .	*279,930*	. .

(continued)

Table 1.14.10 (continued): Family and culture characteristics by disability status[(a)], Indigenous persons (18 years and over), 2012–13

	Has profound/ severe/ moderate core activity limitation	Has a schooling/ employment restriction only[(b)]	Has unspecified limitation or restriction	Total with a limitation or restrictive long-term health condition	No limitation or restrictive long-term health condition	Total		Overall population distribution
	Per cent[(c)]						Number	Per cent[(d)]
Whether felt treated badly because Aboriginal or Torres Strait Islander in last 12 months								
Yes	20.2	14.8	23.3	58.3	41.7	100.0	58,828	16.2
No	11.6	10.2	22.4	44.2	55.8	100.0	303,666	83.8
Total	*13.0*	*11.0*	*22.6*	*46.5*	*53.5*	*100.0*	*362,494*	*100.0*
Total number	*46,946*	*39,801*	*81,754*	*168,502*	*193,992*	*. .*	*362,494*	*. .*
Total	**13.4**	**10.9**	**22.5**	**46.8**	**53.2**	**100.0**	**. .**	**100.0**
Total number	**48,886**	**40,050**	**82,325**	**171,261**	**194,607**	**. .**	**365,868**	**. .**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Self-reported data consisting of persons who reported having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person's overall level of core activity limitation is determined by their highest level of limitation in any of these activities.

(b) Only current difficulties with education and/or employment were collected. Respondents aged 65 and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned 'schooling/employment restriction only' had they been asked the question.

(c) Percentages add within rows.

(d) Distribution of total population.

(e) Includes respondents who identified with tribal group, language group, a clan, a mission, or an Aboriginal/Torres Strait Islander regional group.

(f) Question asked differently between remote and non-remote areas.

(g) Non-remote only.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey

Table 1.14.11: Persons with core activity need for assistance, by Indigenous status, sex and age group, 2011[(a)]

Age group (years)	Indigenous						Non-Indigenous											
	Males		Females		Persons		Males		Females		Persons		Rate ratio			Rate difference		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	Males	Females	Persons	Males	Females	Persons
0–4	597	1.9	354	1.2	951	1.5	8,292	1.3	4,766	0.8	13,058	1.0	1.4	1.5	1.5	0.6	0.4	0.5
5–9	1,634	5.2	802	2.7	2,436	3.9	21,995	3.6	9,884	1.7	31,879	2.7	1.5	1.6	1.5	1.6	1.0	1.3
10–14	1,561	5.0	817	2.7	2,378	3.8	21,520	3.4	10,303	1.7	31,823	2.6	1.4	1.5	1.5	1.5	0.9	1.2
15–19	1,156	4.0	740	2.7	1,896	3.4	15,572	2.4	9,107	1.5	24,679	2.0	1.7	1.8	1.7	1.6	1.2	1.4
20–24	794	3.8	487	2.2	1,281	3.0	10,856	1.6	7,641	1.2	18,497	1.4	2.3	1.9	2.1	2.2	1.0	1.6
25–29	586	3.5	492	2.6	1,078	3.0	9,676	1.4	7,996	1.2	17,672	1.3	2.4	2.2	2.3	2.1	1.4	1.7
30–34	579	4.1	503	3.1	1,082	3.6	9,977	1.5	8,928	1.3	18,905	1.4	2.7	2.3	2.5	2.6	1.8	2.1
35–39	701	4.8	652	3.8	1,353	4.3	12,271	1.8	11,930	1.7	24,201	1.7	2.7	2.3	2.5	3.0	2.2	2.6
40–44	964	6.8	1,074	6.2	2,038	6.5	15,832	2.3	16,218	2.2	32,050	2.3	3.0	2.8	2.9	4.5	4.0	4.2
45–49	1,051	8.3	1,152	7.9	2,203	8.1	19,184	2.8	20,407	2.9	39,591	2.9	3.0	2.7	2.8	5.5	5.0	5.2
50–54	1,170	10.7	1,308	10.7	2,478	10.7	23,145	3.5	25,598	3.7	48,743	3.6	3.0	2.9	2.9	7.2	6.9	7.1
55–59	1,142	13.6	1,269	13.6	2,411	13.6	27,226	4.6	28,960	4.7	56,186	4.7	2.9	2.9	2.9	8.9	8.9	8.9
60–64	1,112	18.5	1,175	17.1	2,287	17.7	38,974	7.0	33,991	6.0	72,965	6.5	2.6	2.9	2.7	11.4	11.1	11.2
65–69	800	20.9	919	21.0	1,719	20.9	35,272	8.3	30,255	7.0	65,527	7.7	2.5	3.0	2.7	12.5	14.0	13.3
70–74	587	25.9	800	27.7	1,387	26.9	32,824	10.4	37,073	11.0	69,897	10.7	2.5	2.5	2.5	15.5	16.7	16.2
75 and over	890	37.1	1,692	46.5	2,582	42.7	130,611	24.9	252,004	35.0	382,615	30.7	1.5	1.3	1.4	12.2	11.5	12.0
Total (crude)	15,324	6.1	14,236	5.4	29,560	5.7	433,227	4.5	515,061	5.2	948,288	4.9	1.4	1.0	1.2	1.6	0.2	0.9
Total—age-standardised[(b)]	**. .**	**9.3**	**. .**	**9.0**	**. .**	**9.2**	**. .**	**4.4**	**. .**	**4.5**	**. .**	**4.5**	**2.1**	**2.0**	**2.0**	**4.9**	**4.5**	**4.7**

(continued)

Table 1.14.11 (continued): Persons with core activity need for assistance, by Indigenous status, sex and age group, 2011(a)

(a) Cells in this table have been randomly adjusted to avoid the release of confidential data.

(b) Age-standardised to the 2001 Australian standard population.

Note: Denominator for proportions excludes need for assistance not stated.

Source: ABS & AIHW analysis of 2011 Census data.

Table 1.14.12: Persons with core-activity need for assistance, by Indigenous status and remoteness, 2011

	Indigenous			Non-Indigenous				
	Number	Per cent	Age-standardised proportion[(a)]	Number	Per cent	Age-standardised proportion[(a)]	Age-standardised rate ratio	Age-standardised rate difference
Major cities	11,073	6.2	9.3	641,414	4.6	4.5	2.1	4.8
Inner regional	7,486	6.6	9.8	203,966	5.6	4.8	2.0	5.0
Outer regional	6,236	5.6	9.0	90,441	5.3	4.7	1.9	4.3
Remote	1,757	4.8	8.8	7,994	3.5	3.6	2.4	5.2
Very remote	2,869	3.9	8.4	2,445	2.6	3.2	2.6	5.2
Australia[(b)]	**29,560**	**5.7**	**9.2**	**948,288**	**4.9**	**4.5**	**2.0**	**4.7**

(a) Age-standardised to the 2001 Australian standard population.

(b) Australia total includes No Usual Address and offshore and migratory areas.

Note: Denominator for proportions excludes need for assistance not stated.

Source: ABS & AIHW analysis of 2011 Census data.

Table 1.14.13: Persons with core-activity need for assistance, by Indigenous status and state/territory, 2011

	Indigenous			Non-Indigenous				
	Number	Per cent	Age-standardised proportion[(a)]	Number	Per cent	Age-standardised proportion[(a)]	Age-standardised rate ratio	Age-standardised rate difference
NSW	10,770	6.6	9.6	320,686	5.1	4.6	2.1	5.0
Vic	2,453	6.9	9.4	247,705	5.0	4.6	2.0	4.8
Qld	7,507	5.1	8.7	180,312	4.6	4.5	1.9	4.2
WA	3,048	4.8	9.3	74,490	3.7	3.7	2.5	5.5
SA	1,884	6.7	9.9	83,393	5.6	4.9	2.0	5.0
Tas	1,295	6.8	9.4	26,750	6.0	5.1	1.8	4.3
ACT	252	5.1	9.5	11,546	3.5	3.8	2.5	5.7
NT	2,336	4.5	9.3	3,357	2.5	3.9	2.4	5.4
Australia[(b)]	**29,559**	**5.7**	**9.2**	**948,289**	**4.9**	**4.5**	**2.0**	**4.7**

(a) Age-standardised to the 2001 Australian standard population.

(b) Australia total includes No Usual Address and offshore and migratory areas.

Note: Denominator for proportions excludes need for assistance not stated.

Source: ABS & AIHW analysis of 2011 Census data.

Table 1.14.14: Persons aged 15–64, by whether has core activity need for assistance, Indigenous status and labour force status, 2011

	Needs assistance with core activities					
	Indigenous		**Non-Indigenous**			
	Per cent	**No.**	**Per cent**	**No.**	**Rate ratio**	**Rate difference**
Employed	11.2	2,029	16.3	57,622	0.7	–5.1
Unemployed	3.2	582	2.7	9,466	1.2	0.5
In the labour force	*14.4*	*2,611*	*19.0*	*67,088*	*0.8*	*–4.6*
Not in the labour force	82.5	14,929	79.3	280,416	1.0	3.1
Total(a)	**100.0**	**18,104**	**100.0**	**353,490**	**. .**	**. .**
Unemployment rate(b)	22.3	. .	14.1	. .	1.6	8.2
	Does not need assistance with core activities					
	Indigenous		**Non-Indigenous**			
	Per cent	**No.**	**Per cent**	**No.**	**Rate ratio**	**Rate difference**
Employed	48.7	141,825	73.5	9,384,988	0.7	–24.7
Unemployed	10.0	29,196	4.2	541,720	2.4	5.8
In the labour force	*58.8*	*171,021*	*77.7*	*9,926,708*	*0.8*	*–18.9*
Not in the labour force	38.8	113,015	21.7	2,772,880	1.8	17.1
Total(a)	**100.0**	**291,030**	**100.0**	**12,777,139**	**. .**	**. .**
Unemployment rate(b)	17.1	. .	5.5	. .	3.1	11.6

(a) Includes persons for whom labour force status was not known.

(b) Unemployed persons as a proportion of those in the labour force.

Source: ABS & AIHW analysis of 2011 Census data.

Table 1.14.15: Persons with core-activity need for assistance, by Indigenous status and living arrangements, 2011

	Indigenous		Non-Indigenous	
	No.	**Per cent**	**No.**	**Per cent**
Private dwellings	26,953	91.2	782,608	82.5
Non-private dwellings				
Hospital	484	1.6	16,631	1.8
Nursing home or accommodation for the retired or aged (not self-contained)	1,375	4.7	133,240	14.1
Hostel for the disabled	224	0.8	7,455	0.8
Other non-private dwelling	519	1.8	8,127	0.9
Total non-private dwellings	2,602	8.8	165,453	17.5
Total	**29,555**	**100.0**	**948,061**	**100.0**

Source: ABS & AIHW analysis of 2011 Census data.

Table 1.14.16: Carers[(a)] by Indigenous status and age, 2011

Age group (years)	Indigenous	Non–Indigenous	Rate ratio
	Per cent		
15–24	9.4	5.1	1.8
25–34	14.5	7.8	1.9
35–44	18.1	11.9	1.5
45–54	18.5	16.1	1.2
55–64	18.0	18.4	1.0
65 and over	13.1	12.3	1.1
Total(b)	**14.6**	**11.9**	**1.2**
Total—age-standardised(c)	**15.1**	**11.5**	**1.3**
Total carers(a)	**45,329**	**1,834,200**	. .

(a) Persons aged 15 and over who in the two weeks prior to Census Night spent time providing unpaid care, help or assistance to family members or others because of a disability, a long term illness or problems related to old age. This includes people who are in receipt of a Carer Allowance or Carer Payment. It does not include work done through a voluntary organisation or group.

(b) Rates are age-specific so will not add to 100%.

(c) Age-standardised to the 2001 Australian standard population.

Note: Denominator for proportions excludes carer status not stated.

Source: ABS & AIHW analysis of 2011 Census data.

Table 1.14.17: Users of disability support services, by Indigenous status, state territory and sex, persons aged under 65 years, 2012–13(a)

	Indigenous					Non-Indigenous					Total		
	Number	Crude no. per 1,000	Age std.(b) no. per 1,000	ASR LCL 95%(c)(d)	ASR UCL 95%(c)(e)	Number	Crude no. per 1,000	Age std.(b) no. per 1,000	ASR LCL 95%(c)(d)	ASR UCL 95%(c)(e)	Number	ASR Rate ratio(f)	ASR Rate difference(g)
NSW													
Males	4,043	39.2	38.2	36.9	39.5	50,141	16.7	16.9	16.8	17.1	54,184	2.3*	21.3*
Females	2,318	22.6	22.7	21.8	23.7	31,651	10.4	10.3	10.2	10.5	33,969	2.2*	12.4*
Persons	6,361	30.9	30.5	29.7	31.3	81,792	13.5	13.6	13.5	13.7	88,153	2.2*	16.9*
Vic													
Males	1,099	46.3	52.9	49.5	56.3	46,701	19.5	19.5	19.4	19.7	47,800	2.7*	33.4*
Females	847	36.0	43.7	40.5	46.8	34,023	14.1	13.9	13.8	14.1	34,870	3.1*	29.7*
Persons	1,946	41.2	48.3	46.0	50.6	80,724	16.8	16.7	16.6	16.8	82,670	2.9*	31.6*
Qld													
Males	2,113	22.3	26.1	24.9	27.3	27,305	14.5	14.4	14.3	14.6	29,418	1.8*	11.7*
Females	1,395	14.7	17.6	16.6	18.5	18,272	9.5	9.5	9.4	9.6	19,667	1.8*	8.1*
Persons	3,508	18.5	21.8	21.0	22.6	45,577	12.0	11.9	11.8	12.1	49,085	1.8*	9.8*
WA													
Males	1,076	24.5	25.6	23.9	27.2	13,339	13.1	13.5	13.3	13.7	14,415	1.9*	12.1*
Females	723	16.4	18.1	16.7	19.5	8,153	7.7	7.7	7.6	7.9	8,876	2.3*	10.4*
Persons	1,799	20.4	21.8	20.8	22.9	21,492	10.3	10.5	10.4	10.7	23,291	2.1*	11.3*
SA													
Males	717	38.8	42.0	38.7	45.3	14,745	22.0	22.2	21.8	22.5	15,462	1.9*	19.8*
Females	480	25.8	29.1	26.3	31.9	9,903	14.5	14.3	14.0	14.6	10,383	2.0*	14.8*
Persons	1,197	32.3	35.4	33.3	37.6	24,648	18.2	18.2	17.9	18.4	25,845	2.0*	17.3*

(continued)

Table 1.14.17 (continued): Users of disability support services, by Indigenous status, state territory and sex, persons aged under 65, 2012–13[(a)]

	Indigenous					Non-Indigenous					Total		
	Number	Crude no. per 1,000	Age std.[(b)] no. per 1,000	ASR LCL 95%[(c)(d)]	ASR UCL 95%[(c)(e)]	Number	Crude no. per 1,000	Age std.[(b)] no. per 1,000	ASR LCL 95%[(c)(d)]	ASR UCL 95%[(c)(e)]	Number	ASR Rate ratio[(f)]	ASR Rate difference[(g)]
Tas													
Males	243	20.3	21.7	18.8	24.7	5,128	25.8	27.0	26.2	27.7	5,371	0.8*	–5.3*
Females	132	11.0	11.6	9.5	13.7	3,217	15.9	16.0	15.4	16.5	3,349	0.7*	–4.4*
Persons	375	15.7	16.5	14.7	18.3	8,345	20.8	21.3	20.9	21.8	8,720	0.8*	–4.8*
ACT													
Males	188	57.5	52.8	44.5	61.1	3,605	21.9	23.6	22.8	24.4	3,793	2.2*	29.2*
Females	79	26.1	23.8	18.2	29.5	2,086	12.5	12.9	12.4	13.5	2,165	1.8*	10.9*
Persons	267	42.4	38.3	33.3	43.3	5,691	17.2	18.1	17.7	18.6	5,958	2.1*	20.2*
NT													
Males	800	23.3	27.1	25.1	29.2	635	8.8	9.0	8.3	9.7	1,435	3.0*	18.1*
Females	669	19.8	24.5	22.5	26.4	422	5.1	5.2	4.7	5.7	1,091	4.7*	19.3*
Persons	1,469	21.5	25.8	24.4	27.3	1,057	6.8	6.9	6.5	7.4	2,526	3.7*	18.9*
Australia[(h)]													
Males	**10,184**	**30.5**	**32.1**	**31.5**	**32.8**	**160,406**	**17.0**	**17.2**	**17.1**	**17.3**	**170,590**	**1.9***	**15.0***
Females	**6,556**	**19.7**	**21.8**	**21.2**	**22.3**	**107,110**	**11.2**	**11.1**	**11.0**	**11.2**	**113,666**	**2.0***	**10.7***
Persons	**16,740**	**25.1**	**26.9**	**26.5**	**27.4**	**267,516**	**14.1**	**14.1**	**14.0**	**14.2**	**284,256**	**1.9***	**12.8***

(continued)

Table 1.14.17 (continued): Users of disability support services, by Indigenous status, state territory and sex, persons aged under 65, 2012–13(a)

* Represents statistically significant differences at the $p < 0.05$ level.

(a) Not stated responses are excluded from this analysis.

(b) Directly age-standardised to the 2001 Australian Standard Population, by five-year age group.

(c) ASR = Age-standardised rate.

(d) LCL = Lower confidence limit.

(e) UCL = Upper confidence limit.

(f) Rate ratio is the rate for Indigenous Australians divided by the rate for non-Indigenous Australians.

(g) Rate difference is the rate for Indigenous Australians minus the rate for non-Indigenous Australians.

(h) Australia totals may not be the sum of components because individuals may have used services in more than one state or territory during the 12-month period.

Source: Unpublished data from the 2012–13 Disability Services National Minimum Data Set.

Table 1.14.18: Users of disability support services, by Indigenous status and remoteness, persons aged under 65, 2012–13[(a)]

	Indigenous					Non-Indigenous					
	Number	**Crude no. per 1,000**	**Age std.[(b)] no. per 1,000**	**ASR LCL 95%[(c)(d)]**	**ASR UCL 95%[(e)]**	**Number**	**Age std.[(b)] no. per 1,000**	**ASR LCL 95%[(c)(d)]**	**ASR UCL 95%[(e)]**	**ASR Rate ratio[(f)]**	**ASR Rate difference[(g)]**
Major cities	6,427	27.5	28.4	27.6	29.1	180,001	13.2	13.1	13.2	2.2*	15.2*
Inner regional	4,283	29.0	29.2	28.2	30.2	59,755	18.2	18.1	18.4	1.6*	11.0*
Outer regional	3,291	22.6	24.0	23.2	24.9	23,574	15.0	14.8	15.2	1.6*	9.0*
Total non-remote	*14,001*	*26.6*	*27.4*	*26.9*	*27.9*	*263,330*	*14.1*	*14.1*	*14.2*	*1.9**	*13.3**
Remote	1,035	20.7	*22.3*	*20.9*	*23.7*	2,095	9.2	8.8	9.6	2.4*	13.1*
Very remote	1,206	13.5	16.0	15.1	17.0	542	6.2	5.6	6.8	2.6*	9.8*
Total remote	*2,241*	*16.1*	*18.2*	*17.4*	*19.0*	*2,637*	*8.3*	*7.9*	*8.6*	*2.2**	*10.0**
Total	**16,242**	**24.4**	**25.4**	**25.0**	**25.9**	**265,967**	**14.0**	**14.0**	**14.1**	**1.8***	**11.4***

* Represents statistically significant differences at the $p < 0.05$ level.

(a) Not stated responses are excluded from this analysis.

(b) Directly age-standardised to the 2001 Australian Standard Population, by five-year age group.

(c) ASR = Age-standardised rate.

(d) LCL = Lower confidence limit.

(e) UCL = Upper confidence limit.

(f) Rate ratio is the rate for Indigenous Australians divided by the rate for non-Indigenous Australians.

(g) Rate difference is the rate for Indigenous Australians minus the rate for non-Indigenous Australians.

Source: Unpublished data from the 2012–13 Disability Services National Minimum Data Set.

Data quality issues

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Australian Health Survey

The Australian Health Survey (AHS) combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) together with 2 new elements: a National Nutrition and Physical Activity Survey (NNPAS) and a National Health Measures Survey (NHMS).

For more information see:

- National Health Survey <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4363.0.55.001Main+Features12011-13?OpenDocument>.
- National Aboriginal and Torres Strait Islander Health Survey <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4715.0/>.
- National Nutrition and Physical Activity Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.007~2011-12~Main%20Features~About%20the%20National%20Nutrition%20and%20Physical%20Activity%20Survey~731>.
- National Health Measures Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.005Chapter1102011-12>.

Census of Population and Housing

The Census uses the standard Indigenous status question and it is asked for each household member. There are 4 principal sources of error in Census data: respondent error, processing error, partial response and undercount. Quality management of the Census program aims to reduce error as much as possible, and to provide a measure of the remaining error to data users, to allow them to use the data in an informed way.

The Census form may be completed by 1 household member on behalf of others. Incorrect answers can be introduced to the Census form if the respondent does not understand the question or does not know the correct information about other household members. Many of these errors remain in the final data.

The processing of information from Census forms is now mostly automated. Quality assurance procedures are used during Census processing to ensure processing errors are minimised. Sample checking is undertaken during coding operations, and corrections are made where necessary.

When completing their Census form, some people do not answer all the questions that apply to them. In these instances, a 'not stated' code is allocated during processing, with the exception of non-response to age, sex, marital status and place of usual residence. These variables are needed for population estimates, so they are imputed using other information on the Census form, as well as information from the previous Census.

Other Census data issues relate to the accuracy of the Census count itself, for example, whether people are counted more than once, or not at all.

The significant volatility in Indigenous Census counts and the variable quality of data on births, deaths and migration of Indigenous Australians do not support the use of the standard approach to population estimation. Due to the inherent uncertainties in estimating the Indigenous population, data that use these estimates should be interpreted with caution (for example, life-expectancy estimates and mortality rates). Given these uncertainties, changes in health outcomes such as mortality rates are difficult to assess.

Following each Census, assumptions are made about past levels of mortality to produce back cast population estimates.

In the 2011 Census, the ABS implemented improvements to the 2011 Census Indigenous enumeration procedures and enhanced the Census Post-Enumeration Survey. There was a 30% increase in the estimate of the Indigenous population between the 2006 and 2011 Censuses (ABS 2014). Population rates used in this edition of the Health Performance Framework were based on the updated population estimates.

Disability Services National Minimum Data Set

All states and territories and the Australian Government Department of Social Services (DSS) collect data on the disability services provided under the National Disability Agreement (NDA). The scope of services included in the DS NMDS can vary in terms of the programs that are provided under the NDA across jurisdictions as well as in what programs are included in the data collection.

The counts of service users depend on the accuracy of the statistical linkage key. This varies by jurisdiction and year. A statistical linkage key is a derived variable used to link data for statistical and research purposes that is generated from elements of an individual's personal demographic data and attached to de-identified data relating to the services received by that individual. For more information about the statistical linkage key, refer to the publication *Disability support services: appendix 2012–13* (AIHW 2014a).

During the 2012–13 collection year, data included in the DS NMDS differed in some key respects from that in past years. The changes included:

- changes in the information about service type outlets including a reclassification of service type outlets in Victoria and changes resulting from a major tender for open employment services
- some changes to service user numbers resulting from continuous data quality initiatives, audits and reviews in Victoria and South Australia
- the inclusion in the DS NMDS by the Northern Territory of people using Basic Community Care (BCC) services in line with the health reform related changes to the NDA
- percentages presented are calculated excluding 'not applicable/stated/collected' responses. This means that percentages may be different from those presented in previous HPF publications (AIHW 2014b).

In 2012–13, the proportion of 'not stated/not collected' Indigenous status in the DS NMDS was 3.8% nationally, down from 5.1% in the 2009–10 collection. Some of the data for which Indigenous status continues to be missing in the DS NMDS relate to service type 3.02 (recreational/holiday), for which Indigenous status of clients is not required to be collected (AIHW 2014a).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/518043>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 15 of 68
Detailed analyses

1.15 Ear health

This measure includes a number of indicators of hearing health in children and adults, including prevalence rates and hospitalisation rates for diseases of the ear and mastoid process, and rates of ear and hearing problems managed at consultations with general practitioners

Introduction

This is no. 15 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- National Aboriginal and Torres Strait Islander Social Survey
- Stronger Futures in the Northern Territory hearing health data collection (previously Northern Territory Emergency Response Child Health Check Initiative—hearing health data collection)
- Australian Aboriginal and Torres Strait Islander Health Survey
- National Hospital Morbidity Database
- Deadly Ears program
- Bettering the Evaluation and Care of Health survey.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

National survey data that rely on self-reporting may underestimate conditions that are undiagnosed. For example, although the 2008 Social Survey showed 12% of Indigenous children in the NT had ear or hearing problems, ear disease was found in 30% of the 10,605 Indigenous children tested in prescribed areas (remote areas and town camps) between July 2007 and 30 June 2009 as part of the Northern Territory Emergency Response (AIHW & DoHA 2009).

Data collected from health services relate only to people accessing those services, and should not be assumed to indicate the prevalence of a condition in the population.

Hospitalisation rates indicate 2 main issues: the occurrence in a population of serious acute illnesses and conditions requiring admitted patient hospital treatment; and the access to and use of hospital admitted patient treatment by people with such conditions. Hospitalisation rates for a particular disease do not directly indicate the level of occurrence of that disease in the population.

Hospitalisation rates are based on the number of hospitalisations rather than on the number of individual people who are hospitalised. A person who has frequent admissions for the same disease is counted multiple times in the hospitalisation rate for that disease.

Data on the rate of hospitalisations for Indigenous Australians is available for the current period for all jurisdictions while time series for the period July 1998 to June 2013 is limited to 4 jurisdictions that have been determined to have adequate levels of Indigenous identification for reporting purposes: Queensland, Western Australia, South Australia and the Northern Territory. For the period July 2004 to June 2013, data for New South Wales and Victoria were also available for reporting by Indigenous status. Time series analyses may be affected by changes in the quality of Indigenous identification over time.

For more information related to ear health see 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Prevalence of ear or hearing problems, see tables 1.15.1–9
- Hospitalisations for diseases of the ear and mastoid process, see tables 1.15.10–18

- Ear and hearing problems in Indigenous children accessing the Queensland Deadly Ears program, see tables 1.15.18–19
- Ear and hearing problems managed by general practitioners, see Table 1.15.20.

Prevalence of ear/hearing problems

Current period

Among almost 7,000 Indigenous children in the Northern Territory who received government-funded audiology or ear, nose and throat services between August 2007 and June 2014:

- Two-thirds (66%) had at least one middle ear condition, with the most common condition being otitis media with effusion (Table 1.15.2).

In 2012–13:

- Among Indigenous children aged 0–14, 7% reported ear/hearing problems, with just over 3% having total or partial hearing loss and almost 3% having otitis media.
  - For both of these problems the prevalence was higher in *Remote* areas and more than twice as high in Indigenous children compared with non-Indigenous children (Table 1.15.3).
- 12% of the total Indigenous population reported having an ear or hearing problem.
  - After adjusting for age differences, Indigenous Australians reported ear/hearing problems at 1.3 times the rate of non-Indigenous Australians (Table 1.15.5). The gap was 4 percentage points.

Among Indigenous children accessing the Queensland Deadly Ears program over the 3 years 2011–2013:

- 30% of those aged 5–14 and 23% of those aged under 5 had hearing loss in both ears. Hearing loss in 1 ear was present in 14% of those aged 5–14 and 5% of those aged under 5 (Table 1.15.18).

Trend

- The prevalence of self-reported ear/hearing problems in Indigenous children decreased significantly between 2001 and 2012–13, from 11% to 7% (Table 1.15.3).

Hospitalisations

Current period

During the 2 years 2011–12 and 2012–13:

- There were more than 5,300 hospitalisations of Indigenous Australians for diseases of the ear and mastoid process (3.9 per 1,000 population).
  - After adjusting for age, the hospitalisation rate for Indigenous Australians was 1.2 times as high as for non-Indigenous Australians. The difference in rates was 0.4 per 1,000 (Table 1.15.10).

  - The majority (75%) of Indigenous hospitalisations were for children aged under 15, whereas for the non-Indigenous population, children aged under 15 accounted for half (52%) of the total hospitalisations (Table 1.15.13).
- Among Indigenous children aged under 15, hospitalisations for diseases of the ear and mastoid process were more common in *Remote* and *very remote* areas compared with other areas (around 17 per 1,000 compared with 6 per 1,000). Among non-Indigenous children aged under 15 the rates were similar across remoteness areas (6–8 per 1,000) (Table 1.15.14).
- In 2012–13, the rate of myringotomy procedures (incision in the eardrum to relieve pressure caused by excessive fluid build-up) in hospital was 1.8 per 1,000 in the population for both Indigenous Australians and other Australians (AIHW 2014a). However, in 2013–14 the elective surgery median wait time for myringotomy procedures was 58 days for Indigenous patients compared with 54 days for other Australian patients (public hospital waiting lists) (AIHW 2014b).
- Tympanoplasty is surgery to repair or reconstruct a perforated eardrum (tympanic membrane). In the 2-year period July 2011 to June 2013, 670 tympanoplasty procedures were performed for Indigenous children aged 0–14 in hospitalisations with a principal diagnosis of otitis media or non-traumatic rupture of the eardrum. Tympanoplasty procedure rates were 5.5 times as high for Indigenous compared with non-Indigenous children of this age (1.4 compared with 0.3 per 1,000 population). The rate difference was 1.2 per 1,000 (Table 1.15.17).

Trend

Between 1998–99 and 2012–13 in Queensland, Western Australia, South Australia and the Northern Territory combined:

- Hospitalisation rates for Indigenous children under 15 increased from 8.8 per 1,000 in 1998–99 to 10.0 per 1,000 in 2012–13.
- Hospitalisation rates for Indigenous people 15 and over increased from 1.7 per 1,000 in 1998–99 to 2.2 per 1,000 in 2012–13 (Table 1.15.15).

Between 2004–05 and 2012–13 in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined:

- Hospitalisation rates for Indigenous children aged under 15 increased by 56% (from 6 per 1,000 in 2004–05 to 9 per 1,000 in 2012–13) whereas rates for non-Indigenous children were stable.
- Hospitalisation rates for Indigenous Australians aged 15 and over increased by 33% from 1.4 per 1,000 in 2004–05 to 1.8 per 1,000 in 2012–13, whereas rates for non-Indigenous Australians were relatively stable (Table 1.15.16).

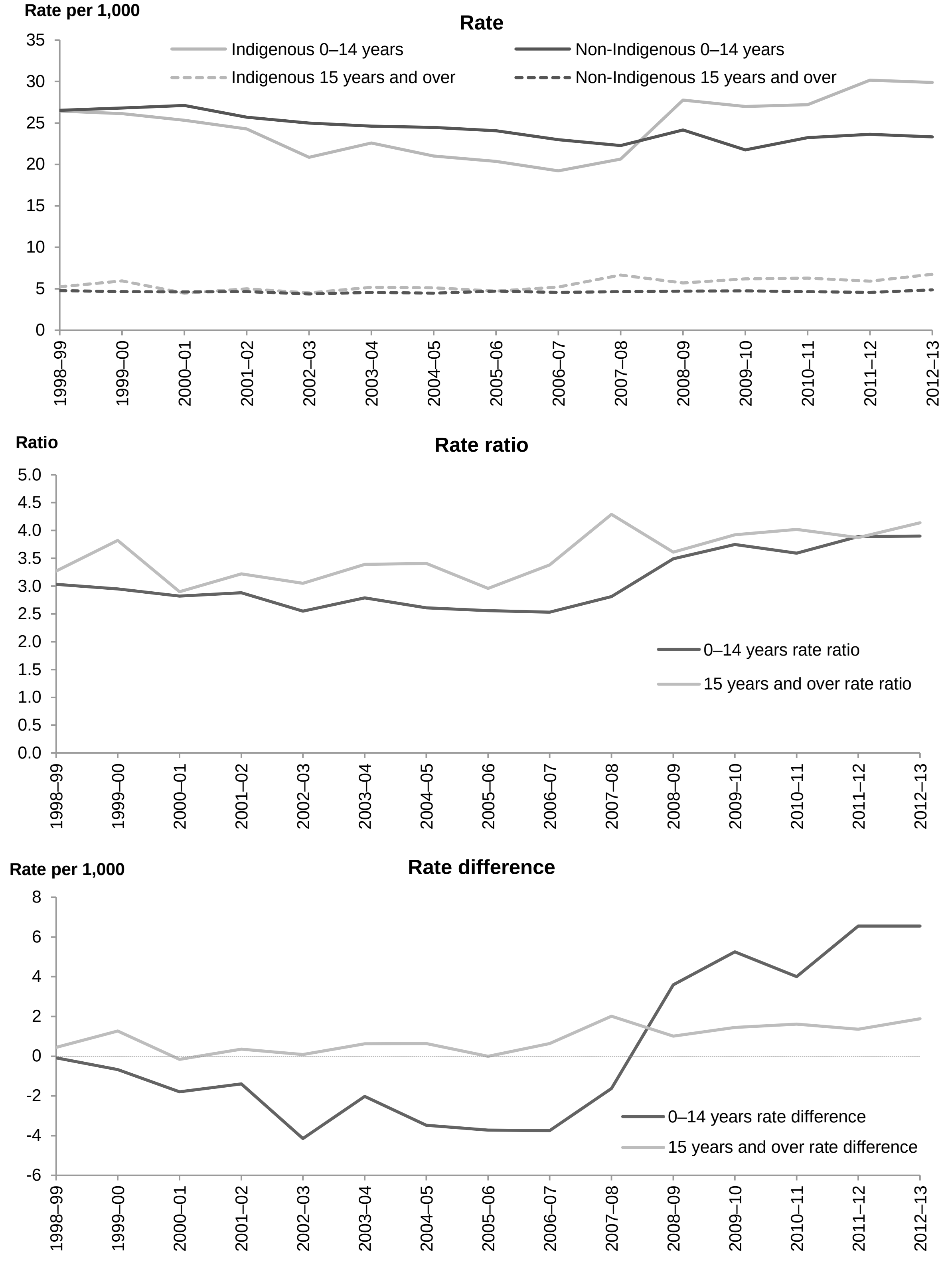
Note that changes in the level of accuracy of Indigenous identification in hospital records will result in changes in the level of reported hospitalisations for Indigenous Australians, as will changes in access, hospital policies and practices over time. Caution should be used in interpreting changes over time, as it is not possible to ascertain whether a change in reported hospitalisation is due to changes in the accuracy of Indigenous identification or real changes in the rates at which Indigenous people are hospitalised. An increase in hospitalisation rates may also reflect increased use of admitted patient hospital services rather than a worsening of health.

General practitioner encounters

Current period

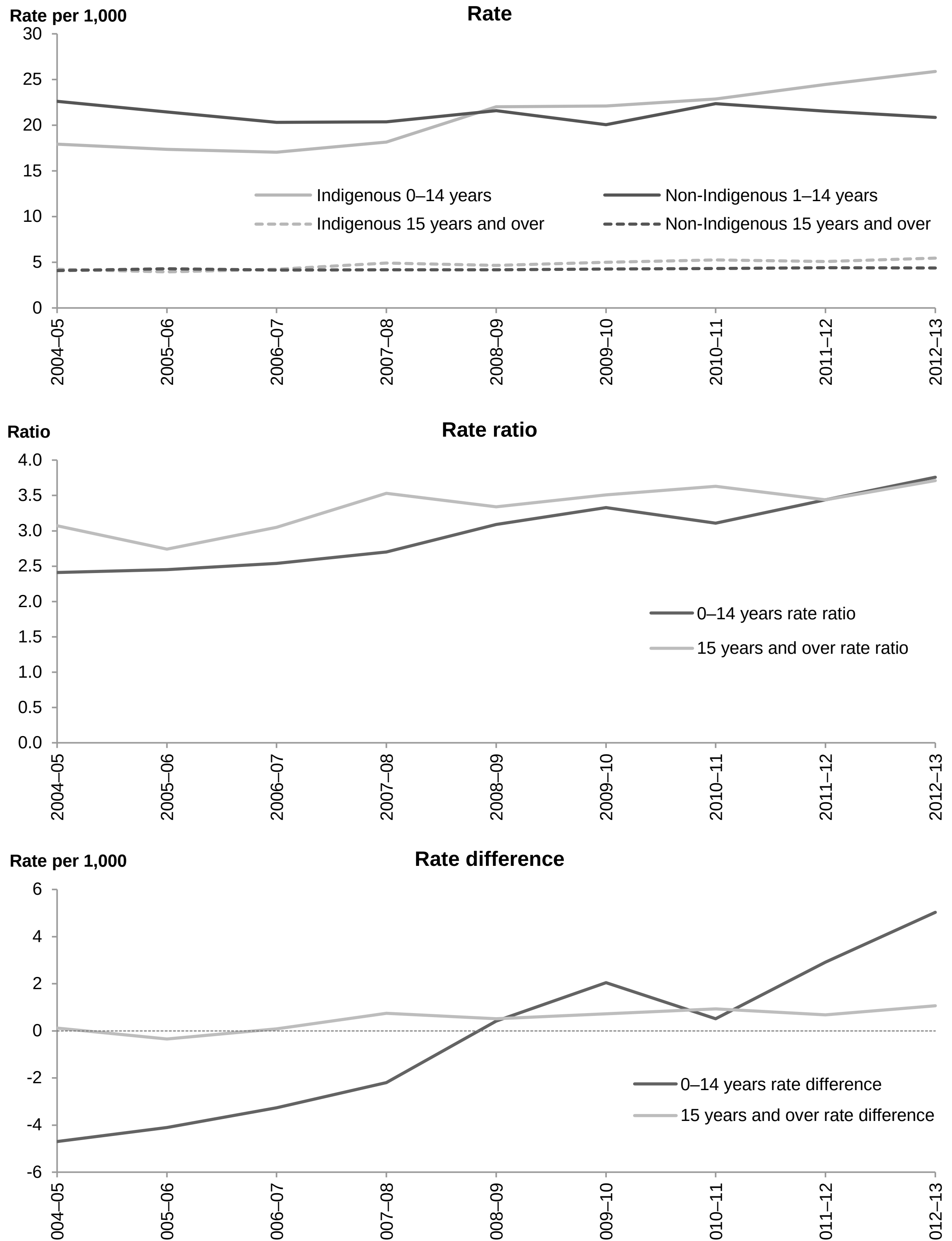
During the period April 2008–March 2009 to April 2012–March 2013:

- Otitis media was managed by GPs at a similar rate for Indigenous children aged 0–14 (70 per 1,000 encounters) as for other Australian children (67 per 1,000 encounters).
- Total diseases of the ear were managed by GPs at a similar rate for Indigenous children aged 0–14 (107 per 1,000 encounters) as for other Australian children (101 per 1,000 encounters) (Table 1.15.20).



Source: Table 1.15.15.

Figure 1.15.1: Age-standardised hospitalisation rates, rate ratios and rate differences from diseases of the ear and mastoid process, by age group, Qld, WA, SA and NT, 1998–99 to 2012–13



Source: Table 1.15.16.

Figure 1.15.2: Age-standardised hospitalisation rates, rate ratios and rate differences from diseases of the ear and mastoid process, by age group, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13

Table 1.15.1: Proportion of Indigenous children reporting ear/hearing problems, by state/territory, 2008

	NSW	Vic	Qld	WA	SA	Tas/ACT	NT	Aust.
				Per cent				
Type of ear/hearing problem								
Total has ear/hearing problems[(a)]	*9.6*	*5.6*	*6.9*	*9.0*	*7.8*	*7.8*	*12.1*	*8.6*
Total or partial hearing loss	2.6	1.2[(a)]	3.0[(a)]	2.3[(a)]	2.7[(a)]	2.8[(a)]	3.9	2.8
Runny ears or glue ear (otitis media)	4.2	1.7[(a)]	1.9[(a)]	4.7	2.0[(a)]	2.4[(a)]	2.7[(a)]	3.1
Other	2.7	2.6[(a)]	2.3[(a)]	1.6[(a)]	2.8[(a)]	2.6[(a)]	4.5	2.7
Does not have ear/hearing problems	90.4	94.4	93.1	91.0	92.2	92.2	87.9	91.4
Total[(c)]	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Total number	**57,708**	**12,186**	**55,688**	**25,395**	**10,246**	**8,343**	**21,977**	**191,543**
Not known	1.0[(a)]	1.3[(a)]	1.0[(a)]	0.7[(a)]	0.5[(b)]	0.1[(b)]	0.5[(b)]	0.9

(a) Estimate has a relative standard error of between 25% and 50% and should be used with caution.

(b) Estimate has a relative standard error of greater than 50% and is considered too unreliable for general use.

(c) Excludes not known responses.

Source: AIHW analyses of 2008 NATSISS.

Table 1.15.2: Type of middle ear condition[(a)], Indigenous children who received an audiology or ENT service, 1 August 2007–30 June 2014

Type of middle ear condition	Number	Per cent
At least one type of middle ear condition[(b)]	*4,577*	*66.4*
Otitis media with effusion (OME)	1,813	26.3
Dry perforation	914	13.3
Chronic suppurative otitis media (CSOM)	812	11.8
Eustachian tube dysfunction (ETD)	1,015	14.7
Acute otitis media (AOM)	468	6.8
Foreign body	73	1.1
Other	857	12.4
No middle ear condition[(c)]	2,156	31.3
Missing[(d)]	161	2.3
Total children who received an audiology or ENT service	**6,894**	**100.0**

(a) Middle ear condition at most recent ENT service or, if only received audiology service, most recent audiology service.

(b) Because one child can have more than one middle ear condition, the column does not add up to sub-total.

(c) Where no middle ear condition reported for both ears.

(d) Includes cases where there is a missing value for one ear, and no middle ear condition in the other ear. Missing includes not stated, unsure, invalid and not tested responses.

Notes

1. Data are only provided for occasions of service where children's families have provided consent to share information with the AIHW. These accounted for 96% of all occasions of service.
2. Data include services provided through the CHCI (CtG) Program in prescribed areas of the Northern Territory from 1 August 2007 to 30 June 2012, and through the Stronger Futures in the Northern Territory Program in the whole Northern Territory from 1 July 2012 on.
3. Data include audiology services provided on or before 30 June 2014 and ENT services provided on or before 30 June 2014.
4. Data relate to occasions of service to children aged 0–15 years.

Source: AIHW analysis of Child Health Check Initiative/Stronger Futures dataset.

Table 1.15.3: Children aged 0–14 years with a long-term hearing problem: type of ear/hearing problem, by remoteness, 2001, 2004–05, 2008 and 2012–13

	Indigenous						Non-Indigenous		
	Non-remote[(a)]		Remote[(b)]		Australia		Australia		
	Rate	95% CIs (±)	Rate	95% CIs (±)	Rate	95% CIs (±)	Rate	95% CIs (±)	Rate ratio[(c)]
2012–13									
Deafness	3.2	1.2	4.1	1.8	3.4	1.0	1.6	0.5	2.1
Otitis media	2.6	0.9	3.7	1.8	2.8	0.8	1.2	0.5	2.3
Other[(d)]	0.9	0.4	2.1†	1.4	1.2	0.4	0.9†	0.5	1.3
Total with a hearing condition[(e)]	**6.6**	**1.6**	**9.1**	**2.5**	**7.1**	**1.4**	**3.6**	**0.9**	**2.0**
2008									
Deafness	2.4	0.8	3.9	1.2	2.7	0.7	1.4	0.5	2.0
Otitis media	3.2	1.0	2.5	0.9	3.0	0.8	1.3	0.5	2.4
Other[(d)]	2.7	0.9	4.0	1.2	2.6	0.6	1.7	0.5	1.5
Total with a hearing condition[(e)]	**8.0**	**1.5**	**10.3**	**1.9**	**8.5**	**1.2**	**3.0**	**0.7**	**2.8**
2004–05									
Deafness	4.2	1.1	5.6	1.8	4.5	1.0	1.2	0.4	3.8
Otitis media	3.4	1.3	7.1	2.1	4.4	1.1	1.5	0.5	2.8
Other[(f)]	1.3†	0.9	0.9†	0.5	1.2†	0.7	0.4	0.2	3.1
Total with a hearing condition[(e)]	**8.5**	**1.7**	**12.6**	**2.8**	**9.5**	**1.5**	**3.0**	**0.6**	**3.1**
2001									
Deafness	5.9	2.7	7.8	3.2	6.5	1.9	1.9	0.3	3.5
Otitis media	1.9†	1.4	7.5	2.9	3.6	1.4	2.4	0.5	1.5
Other[(f)]	1.3†	0.9	5.0†	2.6	2.4	1.1	0.6	0.2	4.2
Total with a hearing condition[(e)]	**8.5**	**2.8**	**17.7**	**5.0**	**11.2**	**2.3**	**4.7**	**0.5**	**2.4**

CI confidence interval

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Non-remote comprises major cities and inner and outer regional areas.

(b) Remote comprises remote and very remote areas.

(c) The rate ratio is calculated by dividing the overall Australian rate for Indigenous children by the corresponding rate for non-Indigenous children.

(d) Includes tinnitus, meniere's disease/vertiginous syndrome and type of hearing problem not known.

(e) Components may add to more than total as people may have reported more than one type of ear/hearing problem.

(f) Includes tinnitus and meniere's disease/vertiginous syndrome.

Source: ABS and AIHW analysis of 2001 National Health Survey, 2004–05 National Aboriginal and Torres Strait Islander Health Survey, 2004–05 National Health Survey, 2008 National Aboriginal and Torres Strait Islander Social Survey, 2007–08 National Health Survey, 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.15.4: Indigenous persons reporting ear/hearing problems, by remoteness, by age, sex and state/territory, 2012–13[(a)]

	Remoteness						Overall population distribution
	Non-remote		Remote		Australia		
	Number	Rate[(b)]	Number	Rate[(b)]	Number	Rate[(b)]	Per cent[(c)]
Age							
0–14	12,201	6.6	4,113	9.1	16,314	7.1	35.9
15–24	8,113	8.0	2,439	9.5	10,552	8.3	20.0
25–34	7,618	11.6	1,691	8.1	9,310	10.7	13.6
35–44	10,251	17.1	2,538	14.2	12,789	16.4	12.2
45–54	10,960	23.5	2,393	17.8	13,353	22.3	9.4
55+	13,551	30.9	2,567	20.0	16,119	28.5	8.9
Sex							
Males	33,438	13.4	7,308	10.8	40,746	12.8	49.8
Females	29,256	11.6	8,434	12.4	37,690	11.8	50.2
State/territory							
NSW	23,741	12.4	1,410	15.6	25,151	12.5	31.5
Vic	6,316	13.8	. .	. .	6,316	13.8	7.2
Qld	16,136	11.0	4,031	11.8	20,167	11.2	28.3
SA	4,623	15.7	977‡	16.2‡	5,599	15.8	5.6
WA	6,446	13.2	4,519	13.8	10,964	13.4	12.8
Tas	3,082	13.5	102†	13.3†	3,184	13.4	3.7
NT	1,670	14.7	4,704	8.8	6,374	9.9	10.1
ACT	681	11.6	. .	. .	681	11.6	0.9
Total per cent	**. .**	**12.5**	**. .**	**11.6**	**. .**	**12.3**	**100.0**
Total number	**62,694**	**. .**	**15,742**	**. .**	**78,436**	**. .**	**638,324**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting any hearing problems or problems with their ears which had lasted, or were expected to last for six months or more.

(b) Indigenous persons reporting ear/hearing problems per 100 Indigenous persons.

(c) Distribution of total Indigenous population.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.15.5: Persons reporting ear/hearing problems, by Indigenous status, remoteness, age, sex and state/territory, 2012–13[a]

	Remoteness											Overall population distribution	
	Non-remote			Remote			Australia						
	Indig.	Non-Indig.	Rate ratio[b]	Indig.	Non-Indig.	Rate ratio[b]	Indig.	Non-Indig.	Rate ratio[b]	Indig.	Non-Indig.	Indig.	Non-Indig.
	Rate[c]									Number		Per cent[d]	
Age[e]													
0–14	6.6	3.6	1.8	9.1	1.2‡	7.6	7.1	3.6	2.0	16,314	143,325	35.9	18.6
15–24	8.0	3.4	2.4	9.5	8.8‡	1.1	8.3	3.5	2.4	10,552	102,412	20.0	13.6
25–34	11.6	5.8	2.0	8.1	13.0†	0.6	10.7	5.9	1.8	9,310	185,968	13.6	14.6
35–44	17.1	10.0	1.7	14.2	16.3†	0.9	16.4	10.1	1.6	12,789	310,460	12.2	14.2
45–54	23.5	14.1	1.7	17.8	6.2‡	2.9	22.3	14.0	1.6	13,353	417,080	9.4	13.7
55+	30.9	30.3	1.0	20.0	33.3	0.6	28.5	30.3	0.9	16,119	1,652,772	8.9	25.2
Sex													
Males	18.9	15.0	1.3	13.1	20.0	0.7	17.5	15.1	1.2	40,746	1,700,249	49.8	49.9
Females	14.9	9.5	1.6	13.7	7.9†	1.7	14.6	9.5	1.5	37,690	1,111,768	50.2	50.1
State/territory													
NSW	16.4	11.6	1.4	17.1	n.p.	n.p.	16.4	11.6	1.4	25,151	881,627	31.5	32.5
Vic	17.3	12.0	1.4	. .	. .	. .	17.3	12.0	1.4	6,316	701,099	7.2	25.5
Qld	15.6	12.8	1.2	13.9	n.p.	n.p.	15.2	12.9	1.2	20,167	576,459	28.3	19.8
SA	20.0	12.0	1.7	21.2‡	13.2†	1.6	20.2	12.1	1.7	5,599	217,190	5.6	7.3
WA	19.0	13.3	1.4	15.8	12.4†	1.3	17.4	13.2	1.3	10,964	305,509	12.8	10.3
Tas	18.0	12.9	1.4	n.p.	n.p.	n.p.	17.5	13.1	1.3	3,184	71,961	3.7	2.2
NT	17.2	11.4	1.5	9.4	15.0	0.6	11.4	12.1	0.9	6,374	17,137	10.1	0.7
ACT	14.7	11.6	1.3	. .	. .	. .	14.7	11.6	1.3	681	41,034	0.9	1.6
Total per cent	**16.8**	**12.2**	**1.4**	**13.4**	**14.0**	**1.0**	**16.0**	**12.2**	**1.3**	**. .**	**. .**	**100.0**	**100.0**
Total number	**62,694**	**2,773,346**	**. .**	**15,742**	**38,672**	**. .**	**78,436**	**2,812,017**	**. .**	**78,436**	**2,812,017**	**638,324**	**21,622,358**

(continued)

Table 1.15.5 (continued): Persons reporting ear/hearing problems, by Indigenous status, remoteness, age, sex and state/territory, 2012–13(a)

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting any hearing problems or problems with their ears which had lasted, or were expected to last for six months or more.

(b) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(c) Rate per 100. Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(d) Distribution of total population. Percentages add within columns.

(e) Data for specific age groups are not age-standardised, only the totals.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.15.6: Indigenous persons (15 years and over) reporting ear/hearing problems, by selected socioeconomic and health characteristics, 2012–13

	Has ear/hearing problem[(a)]	Does not have ear/hearing problem	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
SEIFA[(d)]					
1st quintile (most disadvantaged)	15.7	84.3	100.0	211,804	51.8
5th quintile (most advantaged)	12.8	87.2	100.0	15,072	3.7
Ratio most disadvantaged/most advantaged	*1.2*	*1.0*	*1.0*	*14.1*	*14.0*
Employment					
Employed	14.7	85.3	100.0	187,107	45.8
Unemployed	11.2	88.8	100.0	50,987	12.5
Not in the labour force	16.9	83.1	100.0	170,847	41.8
Ratio unemployed/employed	*0.8*	*1.0*	*1.0*	*0.3*	*0.3*
Has non-school qualification[(e)]					
Yes	16.2	83.8	100.0	163,249	39.9
No	14.5	85.5	100.0	245,692	60.1
Ratio no/yes	*0.9*	*1.0*	*1.0*	*1.5*	*1.5*
Highest year of school completed					
Year 12	12.7	87.3	100.0	100,362	24.5
Year 9 or below[(f)]	19.4	80.6	100.0	119,529	29.2
Ratio Year 9 or below/Year 12	*1.5*	*0.9*	*1.0*	*1.2*	*1.2*
Smoker status					
Current smoker[(g)]	15.3	84.7	100.0	175,768	43.0
Non-smoker[(h)]	15.1	84.9	100.0	233,173	57.0
Ratio smoker/non-smoker	*1.0*	*1.0*	*1.0*	*0.8*	*0.8*
Adequate daily vegetable intake[(i)]					
Yes	19.8	80.2	100.0	20,158	4.9
No	15.0	85.0	100.0	388,783	95.1
Ratio no/yes	*0.8*	*1.1*	*1.0*	*19.3*	*19.4*
Adequate daily fruit intake[(j)]					
Yes	13.4	86.6	100.0	175,227	42.8
No	16.5	83.5	100.0	233,714	57.2
Ratio no/yes	*1.2*	*1.0*	*1.0*	*1.3*	*1.3*
Obese[(k)]					
Yes	18.8	81.2	100.0	124,997	37.0
No	14.2	85.8	100.0	212,509	63.0
Ratio yes/no	*1.3*	*0.9*	*1.0*	*0.6*	*0.6*
Total number[(l)]	*53,727*	*283,779*	*. .*	*337,506*	*337,506*

(continued)

Table 1.15.6 (continued): Indigenous persons (15 years and over) reporting ear/hearing problems, by selected socioeconomic and health characteristics, 2012–13

	Has ear/hearing problem[(a)]	Does not have ear/hearing problem	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Self-assessed health status					
Excellent/very good/good	13.1	86.9	100.0	307,649	75.2
Fair/poor	21.5	78.5	100.0	101,292	24.8
Ratio fair, poor/excellent, very good, good	*1.6*	*0.9*	*1.0*	*0.3*	*0.3*
Total	**15.2**	**84.8**	**100.0**	**. .**	**100.0**
Total number of persons 15+	**62,122**	**346,819**	**. .**	**408,941**	**408,941**

(a) Self-reported data consisting of persons reporting any hearing problems or problems with their ears which had lasted, or were expected to last for six months or more.

(b) Percentages add within rows.

(c) Distribution of total population.

(d) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(e) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED)(includes for example Bachelor degree or higher, diploma, advanced diploma, certificate).

(f) Year 9 or below includes never attended school.

(g) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(h) Includes ex-smoker and those who have never smoked.

(i) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 years and over, with the exception of 18–49 year old males who eat 6 serves.

(j) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 years and over.

(k) Body Mass Index greater than 30.0 for people aged 18 years and over. For information on the calculation of BMI scores for people aged 15–17 years, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001).

(l) Total excludes measurement not taken.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.15.7: Indigenous persons (15 years and over) reporting ear/hearing problems, by selected household and health risk factors, 2012–13

	Has ear/hearing problem[(a)]	Does not have ear/hearing problem	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Equivalised gross household income[(d)]					
1st quintile (lowest)	15.1	84.9	100.0	140,304	42.7
4th/5th quintile (highest)	18.1	81.9	100.0	55,728	17.0
Ratio lowest/highest	*0.8*	*1.0*	*1.0*	*2.5*	*2.5*
Total number	*50,927*	*277,763*	*. .*	*328,690*	*328,690*
Financial stress—whether household could raise $2,000 in an emergency[(d)]					
Yes	15.9	84.1	100.0	177,097	46.2
No	14.4	85.6	100.0	206,614	53.8
Ratio No/Yes	*1.1*	*1.0*	*1.0*	*0.9*	*0.9*
Total number	*57,848*	*325,863*	*. .*	*383,711*	*383,711*
Household had day/s without money for basic living expenses in last 12 months					
Yes	15.9	84.1	100.0	164,764	40.5
No	14.7	85.3	100.0	241,932	59.5
Ratio Yes/No	*1.1*	*1.0*	*1.0*	*0.7*	*0.7*
Total number	*61,862*	*344,834*	*. .*	*406,696*	*406,696*
Housing tenure type[(e)]					
Owner	16.8	83.2	100.0	124,490	30.6
Renter	14.5	85.5	100.0	281,001	69.0
Ratio renter/owner	*0.9*	*1.0*	*1.0*	*2.3*	*2.3*
Total number	*61,862*	*345,149*	*. .*	*407,011*	*407,011*
Lives in overcrowded household[(f)]					
Yes	13.0	87.0	100.0	81,548	20.1
No	15.8	84.2	100.0	325,148	79.9
Ratio yes/no	*0.8*	*1.0*	*1.0*	*0.3*	*0.3*
Total number	*61,862*	*344,834*	*. .*	*406,696*	*406,696*
Lives in household with regular smoker					
Yes	14.6	85.4	100.0	240,281	58.8
No	16.1	83.9	100.0	168,660	41.2
Ratio yes/no	*0.9*	*1.0*	*1.0*	*1.4*	*1.4*
Alcohol consumption					
Abstained from alcohol in last 12 months[(g)]	13.4	86.6	100.0	108,024	26.4
Short-term/single occasion risk[(h)]					
Yes	14.8	85.2	100.0	219,176	53.6
No	18.7	81.3	100.0	74,582	18.2
Ratio yes/no	*0.8*	*1.0*	*1.0*	*2.9*	*2.9*

(continued)

Table 1.15.7 (continued): Indigenous persons (15 years and over) reporting ear/hearing problems, by selected household and health risk factors, 2012–13

	Has ear/hearing problem[(a)]	Does not have ear/hearing problem	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Physical activity[(i)]					
Met guidelines[(j)]	17.0	83.0	100.0	117,125	41.4
Did not meet guidelines[(k)]	17.3	82.7	100.0	165,910	58.6
Ratio did not meet/met guidelines	*1.0*	*1.0*	*1.0*	*1.4*	*1.4*
Total number	*48,611*	*234,423*	*. .*	*283,035*	*283,035*
Disability status[(l)]					
Has profound, severe or moderate core activity limitation	31.9	68.1	100.0	51,009	12.5
Has a schooling/employment restriction only	21.9	78.1	100.0	44,580	10.9
Has unspecified limitation or restriction	28.7	71.3	100.0	88,239	21.6
Total with disability/long-term health condition	*27.9*	*72.1*	*100.0*	*183,828*	*45.0*
No disability/long-term health condition	4.8	95.2	100.0	225,113	55.0
Ratio disability/no disability	*5.8*	*0.8*	*1.0*	*0.8*	*0.8*
Psychological distress (Kessler 5)[(m)(n)]					
Low/moderate	15.0	85.0	100.0	252,230	69.8
High/very high	19.5	80.5	100.0	109,134	30.2
Ratio high, very high/low, moderate	*1.3*	*0.9*	*1.0*	*0.4*	*0.4*
Total number[(o)]	*59,006*	*302,358*	*. .*	*361,364*	*361,364*
Stressors experienced in last 12 months[(p)]					
No stressors	11.5	88.5	100.0	107,171	26.3
Experienced one or more stressor	16.5	83.5	100.0	300,159	73.5
Ratio one or more/no stressors	*1.4*	*0.9*	*1.0*	*2.8*	*2.8*
Total number	*62,047*	*346,173*	*. .*	*408,220*	*408,220*
Long term health conditions[(q)]					
One	7.4	92.6	100.0	76,185	18.6
Two	9.7	90.3	100.0	63,404	15.5
Three or more	26.6	73.4	100.0	189,444	46.3
Ratio three or more/one condition	*3.6*	*0.8*	*1.0*	*2.5*	*2.5*
Time since last consulted a GP/specialist					
Last 2 weeks	21.7	78.3	100.0	103,507	25.3
>12 months ago	8.8	91.2	100.0	59,069	14.4
Ratio 2 weeks/>12 months	*2.5*	*0.9*	*1.0*	*1.8*	*1.8*
Total	**15.2**	**84.8**	**100.0**	**. .**	**. .**
Total number of persons 15+	**62,122**	**346,819**	**. .**	**408,941**	**100.0**

(continued)

Table 1.15.7 (continued): Indigenous persons (15 years and over) reporting ear/hearing problems, by selected household and health risk factors, 2012–13

(a) Self-reported data consisting of persons reporting any hearing problems or problems with their ears which had lasted, or were expected to last for six months or more.

(b) Percentages add within rows.

(c) Distribution of Indigenous population.

(d) Excludes 'not known'.

(e) Total includes 'other' and 'life tenure scheme'.

(f) Overcrowding is based on Canadian National Occupancy Standard for Housing Appropriateness.

(g) Abstainer includes those who have never consumed alcohol.

(h) Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(i) Physical activity data collected from persons 18 years and over; and non-remote areas only.

(j) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(k) Includes 'Don't know' responses.

(l) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person's overall level of core activity limitation is determined by their highest level of limitation in any of these activities. Only current difficulties with education and/or employment were collected. Respondents aged 65 years and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned 'schooling/employment restriction only' had they been asked the question.

(m) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25.

(n) Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(o) Total population is 18 years and over.

(p) Stressors experienced by self, family or friends.

(q) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

Notes

1. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.
2. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.15.8: Selected household characteristics by Indigenous children (4–14 years) reporting ear/hearing problems 2012–13

	Has ear/hearing problem[(a)]	Does not have ear/hearing problem	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
SEIFA[(d)]					
1st quintile (most disadvantaged)	9.6	90.4	100.0	80,473	48.3
5th quintile (least disadvantaged)	1.8‡	98.2	100.0	6,899	4.1
Ratio most/least disadvantaged	5.3*	0.9	1.0	11.7	11.8
Equivalised household income[(e)]					
1st quintile (lowest)	8.6	91.4	100.0	75,277	53.1
4th/5th quintile (highest)	7.7†	92.3	100.0	12,447	8.8
Ratio lowest/highest	1.1*	1.0	1.0	6.0	6.0
Total number	**11,284**	**130,425**	**. .**	**141,709**	**141,709**
Financial stress—whether household could raise $2,000 in an emergency[(e)]					
Yes	6.9	93.1	100.0	66,643	42.8
No	8.9	91.1	100.0	89,237	57.2
Ratio yes/no	0.8*	1.0	1.0	0.7	0.7
Total number	**12,490**	**143,390**	**. .**	**155,879**	**155,879**
Household had day/s without money for basic living expenses in last 12 months					
Yes	9.8	90.2	100.0	70,537	42.6
No	7.2	92.8	100.0	95,093	57.4
Ratio yes/no	1.4*	1.0	1.0	0.7	0.7
Total number	**13,760**	**151,870**	**. .**	**165,630**	**165,630**
Lives in overcrowded household[(f)]					
Yes	9.4	90.6	100.0	44,969	27.2
No	7.9	92.1	100.0	120,661	72.8
Ratio yes/no	1.2*	1.0	1.0	0.4	0.4
Total number	**13,760**	**151,870**	**. .**	**165,630**	**165,630**
Lives in household with regular smoker					
Yes	8.2	91.8	100.0	94,225	56.6
No	8.4	91.6	100.0	72,315	43.4
Ratio yes/no	1.0	1.0	1.0	1.3	1.3
Time since last consulted a GP/specialist[(e)]					
Last 2 weeks	18.4	81.6	100.0	20,459	12.5
>12 months ago	4.6†	95.4	100.0	33,053	20.2
Ratio 2 weeks/>12 months	4.0*	0.9	1.0	0.6	0.6
Total number	**13,489**	**150,526**	**. .**	**164,014**	**164,014**
Total	**8.3**	**91.7**	**100.0**	**166,540**	**100.0**
Total number of persons 4–14 years	**13,825**	**152,715**	**. .**	**166,540**	**100.0**

(continued)

Table 1.15.8 (continued): Selected household characteristics by Indigenous children (4–14 years) reporting ear/hearing problems 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios for ‘Has ear/hearing problem’ tested only.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting any hearing problems or problems with their ears which had lasted, or were expected to last for six months or more.

(b) Percentages add within rows.

(c) Distribution of total Indigenous population. Percentages add within columns.

(d) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(e) Total excludes ‘not stated’ and ‘not known’.

(f) Households requiring at least one additional bedroom, based on Canadian National Occupancy Standard for Housing Appropriateness.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.15.9: Sex, age, remoteness area and state/territory of Indigenous children (0–14 years) by hearing/ear problems, 2012–13

	Reported hearing or ear problem						
	Total or partial hearing loss[(a)]	Otitis Media	Other[(b)]	Total with hearing problem	No hearing or ear problem	Total[(c)]	Total number
				Per cent[(d)]			
Sex							
Males	3.2*	3.1*	1.0*†	7.0	93.0	100.0	116,931
Females	3.6	2.5	1.3†	7.2	92.8	100.0	112,452
Age							
0–3	1.0*†	2.5*†	0.6*†	4.0*	96.0*	100.0	62,843
4–14	4.3	3.0	1.4	8.3	91.7	100.0	166,540
Total 0–14	**3.4***	**2.8***	**1.2***	**7.1***	**92.9***	**100.0**	**229,383**
Remoteness area							
Major cities	3.0*†	2.8*†	1.3*†	6.9*	93.1*	100.0	79,187
Inner regional	3.4*	3.9†	0.6*‡	7.5*	92.5*	100.0	54,153
Outer regional	3.5*†	1.1*†	0.7*†	5.2*	94.8*	100.0	50,823
Total non-remote	**3.2***	**2.6***	**0.9***	**6.6***	**93.4***	**100.0**	**184,163**
Remote	2.9*†	2.5*†	3.2*†	8.5*†	91.5	100.0	15,993
Very remote	4.8*†	4.4*†	1.5*†	9.4	90.6	100.0	29,227
Total remote	**4.1**	**3.7**	**2.1†**	**9.1**	**90.9**	**100.0**	**45,220**
State/Territory							
NSW	2.9*†	3.1*†	0.7*‡	6.6*	93.4*	100.0	72,890
Vic.	5.9*†	2.5*†	0.8*‡	8.4*	91.6*	100.0	16,373
Qld	3.2†	1.5*†	0.8*†	5.4*	94.6*	100.0	67,631
WA	3.3†	4.9†	2.5†	10.6	89.4	100.0	28,534
SA	3.9*†	3.1*†	1.8*†	8.2*	91.8*	100.0	12,431
Tas/ACT	3.6	1.9*†	1.6*‡	6.8*	93.2*	100.0	10,391
NT	3.9*	3.9*†	2.1*†	8.3*	91.7*	100.0	21,133
Total	**3.4***	**2.8***	**1.2***	**7.1***	**92.9**	**100.0**	**. .**
Total number	**7,837**	**6,517**	**2,689**	**16,314**	**213,069**	**. .**	**229,383**

* Represents statistically significant differences at the $p < 0.05$ level. Differences between percentages were tested within each column, using females as the reference category for Sex, 4–14 as the reference category for Age, 'Total remote' as the reference category for remoteness, and WA as the reference category for State/territory. Differences between the overall percentages were also tested, using 'No hearing or ear problem' as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Includes complete deafness and partial deafness/hearing loss.

(b) All other diseases of the ear and mastoid.

(c) Self-reported data consisting of persons reporting any hearing problems or problems with their ears which had lasted, or were expected to last for six months or more.

(d) Percentages add within rows.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.15.10: Hospitalisations for diseases of the ear and mastoid process, for children aged 0–14 years, by Indigenous status and sex and jurisdiction, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
NSW								
Males	575	7.4	7.3	10,378	7.7	7.4	0.98	–0.1
Females	377	5.1	5.0	7,004	5.5	5.3	0.9	–0.3
Persons[(h)]	952	6.3	6.2	17,382	6.7	6.4	0.96	–0.2
Vic								
Males	91	5.3	5.1	8,254	7.9	7.6	0.7	–2.5
Females	89	5.3	5.1	5,973	6.0	5.9	0.9	–0.7
Persons[(h)]	180	5.3	5.1	14,228	7.0	6.8	0.8	–1.6
Qld								
Males	593	8.2	8.0	6,807	7.9	7.7	1.03	0.3
Females	513	7.3	7.2	4,487	5.5	5.4	1.3	1.8
Persons[(h)]	1,106	7.7	7.6	11,294	6.7	6.6	1.2	1.0
WA								
Males	500	16.1	16.0	4,279	9.6	9.2	1.7	6.8
Females	491	15.8	15.7	2,900	6.8	6.6	2.4	9.1
Persons[(h)]	991	16.0	15.9	7,179	8.2	7.9	2.0	7.9
SA								
Males	147	11.0	10.8	4,002	14.0	13.6	0.8	–2.9
Females	109	8.4	8.4	2,885	10.6	10.4	0.8	–2.0
Persons[(h)]	256	9.7	9.6	6,887	12.3	12.0	0.8	–2.4
Tas								
Males	n.p.	2.1	2.1	n.p.	6.1	6.0	0.3	–3.9
Females	n.p.	2.0	2.0	n.p.	4.5	4.5	0.5	–2.5
Persons[(h)]	n.p.	2.1	2.1	n.p.	5.3	5.3	0.4	–3.2
NT								
Males	n.p.	10.0	9.9	n.p.	6.1	5.8	1.7	4.1
Females	n.p.	9.8	9.8	n.p.	3.5	3.3	3.0	6.5
Persons[(h)]	n.p.	9.9	9.9	n.p.	4.8	4.6	2.2	5.3
ACT								
Males	n.p.	8.7	8.2	n.p.	7.6	7.2	1.1	1.0
Females	n.p.	3.1	3.2	n.p.	5.5	5.1	0.6	–2.0
Persons[(h)]	n.p.	6.0	5.8	n.p.	6.6	6.2	0.9	–0.4

(continued)

Table 1.15.10 (continued): Hospitalisations for diseases of the ear and mastoid process, for children aged 0–14 years, by Indigenous status and sex and jurisdiction, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
Australia								
Males	**2,180**	**8.8**	**8.7**	**35,014**	**8.4**	**8.1**	**1.1**	**0.6**
Females	**1,816**	**7.7**	**7.6**	**24,111**	**6.1**	**5.9**	**1.3**	**1.7**
Persons[(h)]	**3,996**	**8.3**	**8.2**	**59,126**	**7.3**	**7.0**	**1.2**	**1.1**

(a) Data include public and private hospital in all jurisdiction. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes H60-H95.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.11: Hospitalisations for diseases of the ear and mastoid process, for persons aged 15 years and over, by Indigenous status and sex and jurisdiction, Australia, 2011–2012 to 2012–2013[a][b][c][d]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Ratio[f]	Difference[g]
NSW								
Males	88	0.7	0.8	7,436	1.3	1.3	0.6	–0.5
Females	181	1.3	1.5	8,392	1.4	1.3	1.2	0.2
Persons[h]	269	1.0	1.2	15,828	1.4	1.3	0.9	–0.1
Vic								
Males	30	1.0	1.1	6,399	1.4	1.4	0.8	–0.3
Females	50	1.6	2.0	8,063	1.7	1.6	1.2	0.4
Persons[h]	80	1.3	1.6	14,462	1.6	1.5	1.04	0.1
Qld								
Males	105	0.9	1.2	5,565	1.6	1.6	0.7	–0.4
Females	232	1.9	2.1	6,186	1.7	1.7	1.3	0.5
Persons[h]	337	1.4	1.7	11,751	1.7	1.6	1.02	0
WA								
Males	97	1.7	2.3	2,865	1.5	1.5	1.5	0.7
Females	158	2.6	2.7	3,167	1.7	1.6	1.7	1.1
Persons[h]	255	2.2	2.5	6,032	1.6	1.6	1.6	0.9
SA								
Males	27	1.7	1.1	1,867	1.4	1.3	0.9	–0.2
Females	55	2.1	2.2	2,446	1.8	1.6	1.4	0.6
Persons[h]	82	1.6	1.7	4,313	1.6	1.5	1.2	0.2
Tas								
Males	n.p.	0.7	0.7	n.p.	1.2	1.1	0.6	–0.4
Females	n.p.	0.9	0.5	n.p.	1.4	1.2	0.4	–0.7
Persons[h]	n.p.	0.6	0.6	n.p.	1.3	1.2	0.5	–0.6
NT								
Males	n.p.	2.2	2.1	n.p.	0.9	1.0	2.2	1.2
Females	n.p.	4.2	4.0	n.p.	1.2	1.5	2.7	2.5
Persons[h]	n.p.	3.2	3.1	n.p.	1.0	1.2	2.6	1.9
ACT								
Males	n.p.	1.6	0.4	n.p.	0.9	1.0	0.3	–0.7
Females	n.p.	3.0	0.3	n.p.	1.2	1.2	0.2	–0.9
Persons[h]	n.p.	1.0	0.3	n.p.	1.1	1.1	0.3	–0.8

(continued)

Table 1.15.11 (continued): Hospitalisations for diseases of the ear and mastoid process, for persons aged 15 years and over, by Indigenous status and sex and jurisdiction, Australia, 2011–2012 to 2012–2013(a)(b)(c)(d)

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000(e)	Number	Crude rate per 1,000	ASR rate per 1,000(e)	Ratio(f)	Difference(g)
Australia								
Males	**462**	**1.1**	**1.2**	**25,118**	**1.4**	**1.4**	**0.9**	**–0.1**
Females	**888**	**2.0**	**2.2**	**29,426**	**1.6**	**1.5**	**1.4**	**0.6**
Persons(h)	**1,350**	**1.5**	**1.7**	**54,544**	**1.5**	**1.5**	**1.2**	**0.3**

(a) Data include public and private hospitals in all jurisdictions. Numbers of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes H60–H95.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.12: Hospitalisations for diseases of the ear and mastoid process, by Indigenous status and sex and jurisdiction, Australia, 2011–12 to 2012–13(a)(b)(c)(d)

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000(e)	Number	Crude rate per 1,000	ASR rate per 1,000(e)	Ratio(f)	Difference(g)
NSW								
Males	663	3.1	2.1	17,814	2.5	2.5	0.8	–0.4
Females	558	2.6	2.2	15,396	2.2	2.1	1.05	0.1
Persons(h)	1,221	2.9	2.2	33,210	2.3	2.3	0.9	–0.1
Vic								
Males	121	2.5	1.9	14,653	2.7	2.7	0.7	–0.8
Females	139	2.9	2.7	14,036	2.5	2.5	1.1	0.2
Persons(h)	260	2.7	2.3	28,690	2.6	2.6	0.9	–0.3
Qld								
Males	698	3.6	2.6	12,372	2.8	2.8	0.9	–0.3
Females	745	3.8	3.2	10,673	2.4	2.4	1.3	0.7
Persons(h)	1,443	3.7	2.9	23,045	2.6	2.6	1.1	0.2
WA								
Males	597	6.7	5.1	7,144	3.0	3.1	1.6	2.0
Females	649	7.2	5.4	6,067	2.6	2.6	2.0	2.8
Persons(h)	1,246	6.9	5.2	13,211	2.8	2.9	1.8	2.3
SA								
Males	174	4.6	3.1	5,869	3.7	3.9	0.8	–0.7
Females	164	4.3	3.5	5,331	3.3	3.4	1.02	0.1
Persons(h)	338	4.4	3.3	11,200	3.5	3.6	0.9	–0.3
Tas								
Males	n.p.	1.2	1.0	n.p.	2.1	2.1	0.5	–1.1
Females	n.p.	1.0	0.8	n.p.	1.9	1.9	0.4	–1.1
Persons(h)	n.p.	1.1	0.9	n.p.	2.0	2.0	0.4	–1.1
NT								
Males	n.p.	4.8	3.7	n.p.	1.8	2.0	1.9	1.8
Females	n.p.	5.9	5.2	n.p.	1.7	1.8	2.8	3.3
Persons(h)	n.p.	5.4	4.5	n.p.	1.7	1.9	2.4	2.6
ACT								
Males	n.p.	3.1	2.0	n.p.	2.2	2.3	0.9	–0.3
Females	n.p.	1.1	0.9	n.p.	1.9	2.0	0.4	–1.2
Persons(h)	n.p.	2.1	1.5	n.p.	2.1	2.2	0.7	–0.7

(continued)

Table 1.15.12 (continued): Hospitalisations for diseases of the ear and mastoid process, by Indigenous status and sex and jurisdiction, Australia, 2011–12 to 2012–13[a][b][c][d]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Ratio[f]	Difference[g]
Australia								
Males	**2,642**	**3.9**	**2.8**	**60,132**	**2.7**	**2.8**	**1.0**	**0.0**
Females	**2,704**	**3.9**	**3.3**	**53,537**	**2.4**	**2.4**	**1.3**	**0.8**
Persons[h]	**5,346**	**3.9**	**3.0**	**113,670**	**2.6**	**2.6**	**1.2**	**0.4**

(a) Data include public and private hospital in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes H60–H95.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.13: Hospitalisations for diseases of the ear and mastoid process, by Indigenous status, Australia, 2011–12 to 2012–13[a][b]

	Number		Per cent[c]		No. per 1,000[d]			
	Indig.	Non-Indig.	Indig.	Non-Indig.	Indigenous	Non-Indigenous	Rate ratio[e]	Rate difference[f]
Aged 0–4 years								
Diseases of middle ear and mastoid (H65–H75)	1,544	34,168	3.2	5.2	9.3	12.2	0.8	–2.9
Other disorders of ear (H90–H95)	103	1,807	0.2	0.3	0.6	0.6	1.0	0.0
Diseases of the external ear (H60–H62)	64	660	0.1	0.1	0.4	0.2	1.6	0.2
Diseases of inner ear (H80–H83)	2	64	0.0	0.0	0.0	0.0	0.5	0.0
Total	1,713	36,699	3.5	5.6	10.3	13.1	0.8	–2.7
Aged 5–14 years								
Diseases of middle ear and mastoid (H65–H75)	2,070	19,898	6.6	4.2	6.5	3.7	1.7	2.8
Other disorders of ear (H90–H95)	102	1,276	0.3	0.3	0.3	0.2	1.3	0.1
Diseases of the external ear (H60–H62)	104	1,163	0.3	0.3	0.3	0.2	1.5	0.1
Diseases of inner ear (H80–H83)	7	90	0.0	0.0	0.0	0.0	1.3	0.0
Total	**2,283**	**22,427**	**7.2**	**4.8**	**7.2**	**4.2**	**1.7**	**3.0**
Aged 0–14 years								
Diseases of middle ear and mastoid (H65–H75)	3,614	54,066	4.5	4.8	7.4	6.4	1.1	1.0
Other disorders of ear (H90–H95)	205	3,083	0.3	0.3	0.4	0.4	1.1	0.0
Diseases of the external ear (H60–H62)	168	1,823	0.2	0.2	0.3	0.2	1.5	0.1
Diseases of inner ear (H80–H83)	9	154	0.0	0.0	0.0	0.0	1.0	0.0
Total	**3,996**	**59,126**	**5.0**	**5.2**	**8.2**	**7.0**	**1.2**	**1.1**

(continued)

Table 1.15.13 (continued): Hospitalisations for diseases of the ear and mastoid process, by Indigenous status, Australia, 2011–12 to 2012–13[(a)(b)]

	Number		Per cent[(c)]		No. per 1,000[(d)]			
	Indig.	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indigenous**	**Non-Indigenous**	**Rate ratio[(e)]**	**Rate difference[(f)]**
Aged 15 years and over								
Diseases of middle ear and mastoid (H65–H75)	785	18,736	0.1	0.1	0.8	0.5	1.6	0.3
Other disorders of ear (H90–H95)	80	5,319	0.0	0.0	0.1	0.1	0.8	0.0
Diseases of the external ear (H60–H62)	278	9,700	0.0	0.1	0.4	0.3	1.4	0.1
Diseases of inner ear (H80–H83)	207	20,789	0.0	0.1	0.4	0.5	0.7	–-0.1
Total	**1,350**	**54,544**	**0.2**	**0.3**	**1.7**	**1.5**	**1.2**	**0.3**
All ages[(g)]								
Diseases of middle ear and mastoid (H65–H75)	4,399	72,802	0.6	0.4	2.2	1.7	1.3	0.4
Other disorders of ear (H90–H95)	285	8,402	0.0	0.1	0.2	0.2	1.0	0.0
Diseases of the external ear (H60–H62)	446	11,523	0.1	0.1	0.4	0.3	1.4	0.1
Diseases of inner ear (H80–H83)	216	20,943	0.0	0.1	0.3	0.4	0.7	–0.1
Total	**5,346**	**113,670**	**0.7**	**0.7**	**3.0**	**2.6**	**1.2**	**0.4**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes H60–95.

(c) Proportion of total hospitalisations for Indigenous and non-Indigenous people in that age group for the period 2011–12 to 2012–13.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(g) All age data includes age not stated.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.14: Hospitalisations for diseases of the ear and mastoid process, by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[a][b]

	Indigenous		Non-Indigenous			
	Number	No. per 1,000[c]	Number	No. per 1,000[c]	Ratio[d]	Difference[e]
			Persons aged 0–14 years			
Major cities	962	5.7	41,958	7.0	0.8	–1.3
Inner regional	670	5.8	11,433	7.5	0.8	–1.8
Outer regional[f]	693	6.2	4,572	6.3	0.99	–0.1
Remote[g]	602	17.7	807	7.4	2.4	10.4
Very remote	1,054	17.2	273	6.9	2.5	10.3
Total 0–14 years[h]	**3,996**	**8.2**	**59,126**	**7.0**	**1.2**	**1.1**
			Persons aged 15 years and over			
Major cities	324	1.4	37,607	1.4	0.96	–0.1
Inner regional	213	1.3	10,961	1.5	0.9	–0.2
Outer regional[f]	251	1.6	4,851	1.4	1.1	0.1
Remote[g]	207	2.9	689	1.6	1.8	1.3
Very remote	355	2.6	222	1.3	2.1	1.4
Total 15 years and over[h]	**1,350**	**1.7**	**54,544**	**1.5**	**1.2**	**0.3**
			All persons[i]			
Major cities	1,286	2.3	79,565	2.6	0.9	–0.3
Inner regional	883	2.2	22,394	2.8	0.8	–0.5
Outer regional[f]	944	2.5	9,423	2.4	1.04	0.1
Remote[g]	809	5.9	1,496	2.8	2.1	3.2
Very remote	1,409	5.6	495	2.4	2.3	3.2
Total all ages[h]	**5,346**	**3.0**	**113,670**	**2.6**	**1.2**	**0.4**

(continued)

Table 1.15.14 (continued): Hospitalisations for diseases of the ear and mastoid process, by Indigenous status and remoteness, Australia, 2011–12 to 2012–13(a)(b)

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes H60–95.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS' 2011 Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

(i) All persons data includes sex not stated and indeterminate.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.15a: Age-standardised hospitalisations from diseases of the ear and mastoid process, 0–14 years, Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Indigenous separations			Non-Indigenous separations		
	Males	**Females**	**Persons**[c]	**Males**	**Females**	**Persons**[c]
1998–99	556	466	1,022	7,258	4,911	12,169
1999–00	568	459	1,027	7,235	5,069	12,304
2000–01	574	446	1,020	7,348	5,085	12,433
2001–02	520	484	1,004	6,968	4,822	11,790
2002–03	469	411	880	6,907	4,576	11,483
2003–04	532	434	966	6,791	4,554	11,345
2004–05	490	417	907	6,842	4,513	11,355
2005–06	504	389	893	6,821	4,475	11,296
2006–07	472	384	856	6,534	4,461	10,995
2007–08	511	416	927	6,575	4,411	10,986
2008–09	688	564	1,252	7,387	4,889	12,276
2009–10	707	526	1,233	6,787	4,503	11,290
2010–11	646	610	1,256	7,379	4,874	12,253
2011–12	734	664	1,398	7,546	5,163	12,709
2012–13	736	660	1,396	7,684	5,188	12,872
Annual change[d]	14.1	14.2	28.3	17.8	2.8	20.5
Per cent change[e]	41.1	50.9	45.5	3.6	0.8	2.5

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
2. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.15b: Age-standardised hospitalisation rates from diseases of the ear and mastoid process, 0–14 years, Qld, WA, SA and NT, 1998–99 to 2012–13(a)(b)

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	**Females**	**Persons(c)**	**Males**	**Females**	**Persons(c)**
1998–99	9.2	8.4	8.8	10.3	7.3	8.9
1999–00	9.3	8.1	8.7	10.3	7.6	9.0
2000–01	9.2	7.7	8.5	10.4	7.6	9.1
2001–02	8.1	8.1	8.1	9.9	7.2	8.6
2002–03	7.2	6.7	7.0	9.8	6.8	8.4
2003–04	8.1	7.0	7.5	9.6	6.8	8.2
2004–05	7.4	6.6	7.0	9.6	6.7	8.2
2005–06	7.5	6.1	6.8	9.5	6.6	8.1
2006–07	6.9	5.9	6.4	8.9	6.4	7.7
2007–08	7.5	6.3	6.9	8.7	6.2	7.5
2008–09	9.9	8.6	9.3	9.5	6.6	8.1
2009–10	10.1	7.9	9.0	8.5	6.0	7.3
2010–11	9.1	9.0	9.1	9.1	6.4	7.8
2011–12	10.4	9.7	10.1	9.1	6.6	7.9
2012–13	10.3	9.6	10.0	9.1	6.5	7.8
Annual change(d)	0.1	0.1	0.1	–0.1	–0.1	–0.1
Per cent change(e)	17.7	19.7	18.5	–15.3	–17.3	–16.1

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.15c: Age-standardised hospitalisation rate ratios and rate differences from diseases of the ear and mastoid process, 0–14 years, Qld, WA, SA and NT, 1998–99 to 2012–13(a)(b)

	Rate ratio(c)			Rate difference(d)		
	Males	**Females**	**Persons(e)**	**Males**	**Females**	**Persons(e)**
1998–99	0.9	1.1	1.0	–1.1	1.0	0.0
1999–00	0.9	1.1	1.0	–1	0.5	–0.2
2000–01	0.9	1.0	0.9	–1.2	0.1	–0.6
2001–02	0.8	1.1	0.9	–1.8	0.9	–0.5
2002–03	0.7	1.0	0.8	–2.6	–0.1	–1.4
2003–04	0.8	1.0	0.9	–1.5	0.2	–0.7
2004–05	0.8	1.0	0.9	–2.2	–0.1	–1.2
2005–06	0.8	0.9	0.8	–2	–0.5	–1.3
2006–07	0.8	0.9	0.8	–2	–0.5	–1.3
2007–08	0.9	1.0	0.9	–1.2	0.1	–0.6
2008–09	1.1	1.3	1.1	0.5	1.9	1.2
2009–10	1.2	1.3	1.2	1.6	1.9	1.7
2010–11	1.0	1.4	1.2	0.0	2.6	1.3
2011–12	1.1	1.5	1.3	1.3	3.1	2.2
2012–13	1.1	1.5	1.3	1.2	3.2	2.2
Annual change(f)	n.a.	n.a.	n.a.	0.2	0.2	0.2
Per cent change(g)	n.a.	n.a.	n.a.	n.p.(h)	n.p.(h)	n.p.(h)

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(d) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(e) Persons data includes sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

(h) Per cent change is difficult to interpret as the regression line crosses zero.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
5. Principal diagnosis code used unless specified otherwise.
6. All age data includes age not stated.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.15d: Age-standardised hospitalisations from diseases of the ear and mastoid process, 15 years and over, Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Indigenous separations			Non-Indigenous separations		
	Males	**Females**	**Persons**[c]	**Males**	**Females**	**Persons**[c]
1998–99	103	185	288	4,012	4,295	8,307
1999–00	116	208	324	3,979	4,276	8,255
2000–01	94	170	264	4,043	4,282	8,325
2001–02	113	180	293	4,039	4,525	8,564
2002–03	94	185	279	3,929	4,357	8,286
2003–04	106	216	322	4,101	4,711	8,812
2004–05	109	205	314	4,147	4,689	8,836
2005–06	109	212	321	4,412	5,159	9,572
2006–07	118	241	359	4,342	5,140	9,482
2007–08	169	265	434	4,641	5,255	9,896
2008–09	155	284	439	4,688	5,550	10,238
2009–10	170	254	424	4,958	5,622	10,580
2010–11	170	315	485	4,996	5,648	10,644
2011–12	146	320	466	5,016	5,638	10,654
2012–13	184	327	511	5,388	6,302	11,690
Annual change[d]	6.0	11.1	17.1	99.5	137.7	237.2
Per cent change[e]	94.4	97.5	96.4	37.1	47.4	42.5

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
2. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.15e: Age-standardised hospitalisation rates from diseases of the ear and mastoid process, 15 years and over, Qld, WA, SA and NT, 1998–99 to 2012–13(a)(b)

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	**Females**	**Persons**(c)	**Males**	**Females**	**Persons**(c)
1998–99	1.2	2.3	1.7	1.6	1.6	1.6
1999–00	1.5	2.4	2.0	1.5	1.6	1.6
2000–01	1.1	1.8	1.5	1.5	1.5	1.5
2001–02	1.3	2.0	1.7	1.5	1.6	1.5
2002–03	1.0	2.0	1.5	1.4	1.5	1.5
2003–04	1.3	2.1	1.7	1.5	1.6	1.5
2004–05	1.2	2.2	1.7	1.4	1.5	1.5
2005–06	1.0	2.1	1.6	1.5	1.7	1.6
2006–07	1.1	2.3	1.8	1.4	1.6	1.5
2007–08	1.9	2.5	2.2	1.5	1.6	1.6
2008–09	1.3	2.4	1.9	1.5	1.7	1.6
2009–10	2.1	2.1	2.0	1.5	1.6	1.6
2010–11	1.6	2.6	2.1	1.5	1.6	1.6
2011–12	1.3	2.6	2.0	1.5	1.6	1.5
2012–13	1.9	2.6	2.2	1.5	1.7	1.6
Annual change(d)	—	—	—	—	—	—
Per cent change(e)	47.5	25.3	32.3	–2.5	6.3	2.1

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.15f: Age-standardised hospitalisation rate ratios and rate differences from diseases of the ear and mastoid process, 15 year and over, Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Rate ratio[c]			Rate difference[d]		
	Males	**Females**	**Persons[e]**	**Males**	**Females**	**Persons[e]**
1998–99	0.7	1.4	1.1	–0.4	0.7	0.2
1999–00	1.0	1.5	1.3	0.0	0.8	0.4
2000–01	0.7	1.2	1.0	–0.4	0.3	0.0
2001–02	0.9	1.3	1.1	–0.2	0.4	0.1
2002–03	0.7	1.3	1.0	–0.4	0.5	0.0
2003–04	0.9	1.3	1.1	–0.1	0.5	0.2
2004–05	0.8	1.4	1.2	–0.3	0.7	0.2
2005–06	0.7	1.3	1.0	–0.5	0.5	0.0
2006–07	0.8	1.4	1.2	–0.3	0.7	0.2
2007–08	1.3	1.5	1.4	0.5	0.9	0.7
2008–09	0.9	1.5	1.2	–0.1	0.8	0.4
2009–10	1.4	1.3	1.3	0.5	0.5	0.4
2010–11	1.1	1.6	1.4	0.1	1.0	0.5
2011–12	0.9	1.7	1.3	–0.2	1.1	0.5
2012–13	1.2	1.5	1.4	0.3	0.9	0.6
Annual change[f]	n.a.	n.a.	n.a.	—	—	—
Per cent change[g]	n.a.	n.a.	n.a.	n.p.[h]	87.8	791.1

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(d) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(e) Persons data includes sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

(h) Per cent change is difficult to interpret as the regression line crosses zero.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
5. Principal diagnosis code used unless specified otherwise.
6. All age data includes age not stated.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.15g: Age-standardised hospitalisations from diseases of the ear and mastoid process, all ages, Qld, WA, SA and NT, 1998–99 to 2012–13[(a)(b)]

	Indigenous separations			Non-Indigenous separations		
	Males	**Females**	**Persons[(c)]**	**Males**	**Females**	**Persons[(c)]**
1998–99	659	651	1,310	11,270	9,206	20,476
1999–00	684	667	1,351	11,214	9,345	20,559
2000–01	668	616	1,284	11,391	9,367	20,758
2001–02	633	664	1,297	11,007	9,347	20,354
2002–03	563	596	1,159	10,836	8,933	19,769
2003–04	638	650	1,288	10,892	9,265	20,157
2004–05	599	622	1,221	10,989	9,202	20,191
2005–06	613	601	1,214	11,233	9,634	20,868
2006–07	590	625	1,215	10,876	9,601	20,477
2007–08	680	681	1,361	11,216	9,666	20,882
2008–09	843	848	1,691	12,075	10,439	22,514
2009–10	877	780	1,657	11,745	10,125	21,870
2010–11	816	925	1,741	12,375	10,522	22,897
2011–12	880	984	1,864	12,562	10,801	23,363
2012–13	920	987	1,907	13,072	11,490	24,562
Annual change(d)	20.1	25.3	45.4	117.2	140.5	257.7
Per cent change(e)	49.4	64.5	56.8	15.3	22.3	18.5

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
2. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.15h: Age-standardised hospitalisation rates from diseases of the ear and mastoid process, all ages, Qld, WA, SA and NT, 1998–99 to 2012–13(a)(b)

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	**Females**	**Persons**(c)	**Males**	**Females**	**Persons**(c)
1998–99	2.8	3.5	3.2	3.4	2.8	3.1
1999–00	3.1	3.6	3.4	3.3	2.8	3.1
2000–01	2.8	3.0	2.9	3.4	2.8	3.1
2001–02	2.7	3.2	3.0	3.2	2.7	3.0
2002–03	2.3	2.9	2.6	3.1	2.6	2.9
2003–04	2.7	3.1	2.9	3.1	2.7	2.9
2004–05	2.5	3.1	2.8	3.1	2.6	2.9
2005–06	2.3	2.9	2.7	3.1	2.7	2.9
2006–07	2.3	3.0	2.7	3.0	2.6	2.8
2007–08	3.1	3.3	3.2	3.0	2.5	2.8
2008–09	3.1	3.7	3.4	3.1	2.7	2.9
2009–10	3.7	3.3	3.5	3.0	2.5	2.7
2010–11	3.1	3.9	3.5	3.1	2.6	2.8
2011–12	3.2	4.1	3.6	3.0	2.6	2.8
2012–13	3.6	4.1	3.8	3.1	2.7	2.9
Annual change(d)	0.1	0.1	0.1	—	—	—
Per cent change(e)	28.2	22.7	24.7	–10.6	–6.7	–8.8

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.15i: Age-standardised hospitalisation rate ratios and rate differences from diseases of the ear and mastoid process, all ages, Qld, WA, SA and NT, 1998–99 to 2012–13[a][b]

	Rate ratio[c]			Rate difference[d]		
	Males	**Females**	**Persons[e]**	**Males**	**Females**	**Persons[e]**
1998–99	0.8	1.3	1.0	–0.5	0.8	0.1
1999–00	0.9	1.3	1.1	–0.2	0.8	0.3
2000–01	0.8	1.1	0.9	–0.6	0.2	–0.2
2001–02	0.8	1.2	1.0	–0.5	0.5	0.0
2002–03	0.7	1.1	0.9	–0.9	0.4	–0.3
2003–04	0.9	1.2	1.0	–0.4	0.5	0.0
2004–05	0.8	1.2	1.0	–0.7	0.5	–0.1
2005–06	0.7	1.1	0.9	–0.8	0.3	–0.2
2006–07	0.8	1.2	1.0	–0.6	0.4	–0.1
2007–08	1.0	1.3	1.2	0.1	0.7	0.4
2008–09	1.0	1.4	1.2	0.0	1.0	0.5
2009–10	1.3	1.3	1.3	0.8	0.8	0.7
2010–11	1.0	1.5	1.2	0.1	1.3	0.7
2011–12	1.0	1.6	1.3	0.1	1.5	0.8
2012–13	1.2	1.5	1.3	0.5	1.4	0.9
Annual change[f]	n.a.	n.a.	n.a.	0.1	0.1	0.1
Per cent change[g]	n.a.	n.a.	n.a.	n.p.[h]	293.1	n.p.[h]

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(d) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(e) Persons data includes sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

(h) Per cent change is difficult to interpret as the regression line crosses zero.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
5. Principal diagnosis code used unless specified otherwise.
6. All age data includes age not stated.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.16: Age-standardised hospitalisation rates, rate ratios and rate differences from diseases of the ear and mastoid process, by age group, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)(b)]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(c)]	Per cent change[(d)]
						0–14 years					
Indigenous separations											
Males	720	722	718	768	922	969	938	1022	1114	52.0	62.1
Females	594	563	563	607	750	726	831	878	912	47.9	73.3
Persons[(e)]	1,314	1,285	1,281	1,375	1672	1695	1769	1900	2026	99.8	67.0
Non-Indigenous Australian separations											
Males	16,304	15,438	14,761	15,191	16,371	15,657	17,560	16,998	16,864	216.4	11.3
Females	10,683	10,284	9,932	10,121	11066	10323	11796	11749	11579	198.5	15.8
Persons[(e)]	26,987	25,722	24,693	25,312	27437	25983	29356	28747	28444	415.0	13.1
Indigenous rate (separations per 1,000)											
Males	6.4	6.3	6.2	6.6	7.9	8.2	7.9	8.6	9.3	0.4	52.4
Females	5.5	5.2	5.1	5.5	6.8	6.5	7.3	7.7	8.0	0.4	61.0
Persons[(e)]	6.0	5.8	5.7	6.1	7.3	7.4	7.6	8.2	8.6	0.4	56.2
Non-Indigenous Australian rate (separations per 1,000)											
Males	8.9	8.4	7.9	7.9	8.4	7.9	8.7	8.3	8.0	—	–3.7
Females	6.2	5.9	5.6	5.6	6.0	5.5	6.2	6.1	5.8	—	0.7
Persons[(e)]	7.6	7.2	6.8	6.8	7.2	6.7	7.5	7.2	7.0	—	–1.9
Rate ratio[(f)]											
Males	0.7	0.8	0.8	0.8	0.9	1.0	0.9	1.0	1.2	n.a.	n.a.
Females	0.9	0.9	0.9	1.0	1.1	1.2	1.2	1.3	1.4	n.a.	n.a.
Persons[(e)]	0.8	0.8	0.8	0.9	1.0	1.1	1.0	1.1	1.2	n.a.	n.a.

(continued)

Table 1.15.16 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences from diseases of the ear and mastoid process, by age group, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[(a)(b)]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change(c)	Per cent change(d)
						0–14 years					
Rate difference(g)											
Males	–2.5	–2.1	–1.7	–1.3	–0.5	0.4	–0.8	0.3	1.2	0.4	n.p.(i)
Females	–0.6	–0.7	–0.5	–0.1	0.8	1.0	1.1	1.6	2.1	0.4	n.p.(i)
Persons(e)	–1.6	–1.4	–1.1	–0.7	0.1	0.7	0.2	1.0	1.7	0.4	n.p.(i)
						15 years and over					
Indigenous separations											
Males	156	153	162	213	216	233	242	205	243	11.4	58.1
Females	288	277	320	331	380	353	422	433	445	22.0	64.6
Persons(e)	444	430	482	544	596	586	664	638	688	33.4	62.2
Non-Indigenous Australian separations											
Males	9,714	10,276	10,241	10,508	10,694	11,136	11,640	12,108	12,131	309.8	25.6
Females	11,294	12,134	11,873	12,207	12457	13092	13499	13980	14415	369.3	26.2
Persons(e)	21,008	22,411	22,114	22,715	23151	24228	25139	26088	26546	679.1	25.9
Indigenous rate (separations per 1,000)											
Males	1.0	0.9	1.0	1.4	1.1	1.5	1.4	1.1	1.4	0.1	39.9
Females	1.8	1.7	1.8	1.9	2.0	1.8	2.1	2.2	2.2	0.1	31.4
Persons(e)	1.4	1.3	1.4	1.6	1.6	1.7	1.8	1.7	1.8	0.1	33.4
Non-Indigenous Australian rate (separations per 1,000)											
Males	1.3	1.4	1.3	1.3	1.3	1.3	1.4	1.4	1.4	—	5.3
Females	1.4	1.5	1.4	1.4	1.4	1.5	1.5	1.5	1.5	—	6.6
Persons(e)	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	—	5.9

(continued)

Table 1.15.16 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences from diseases of the ear and mastoid process, by age group, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13(a)(b)

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[c]	Per cent change[d]
						15 years and over					
Rate ratio[f]											
Males	0.8	0.7	0.7	1.1	0.8	1.1	1.0	0.8	1.0	n.a.	n.a.
Females	1.2	1.1	1.3	1.3	1.4	1.2	1.4	1.5	1.4	n.a.	n.a.
Persons[e]	1.0	0.9	1.0	1.2	1.1	1.2	1.2	1.2	1.3	n.a.	n.a.
Rate difference[g]											
Males	–0.3	–0.4	–0.3	0.1	–0.2	0.2	0.0	–0.3	0.0	—	n.p.[i]
Females	0.3	0.2	0.4	0.4	0.5	0.3	0.6	0.7	0.7	0.1	170.8
Persons[e]	0.1	–0.1	0.0	0.3	0.2	0.2	0.3	0.2	0.4	—	n.p.[i]
						All ages[h]					
Indigenous separations											
Males	876	875	880	981	1138	1202	1180	1227	1357	63.4	61.3
Females	882	840	883	938	1130	1079	1253	1311	1357	69.9	70.3
Persons[e]	1,758	1,715	1,763	1,919	2268	2281	2433	2538	2714	133.3	65.7
Non-Indigenous Australian separations											
Males	26,018	25,714	25,002	25,699	27,065	26,793	29,200	29,106	28,995	526.2	16.9
Females	21,977	22,418	21,805	22,328	23523	23415	25295	25729	25994	567.8	21.3
Persons[e]	47,995	48,133	46,807	48,027	50588	50211	54495	54835	54990	1,094.1	18.9
Indigenous rate (separations per 1,000)											
Males	2.1	2.0	2.1	2.5	2.5	2.9	2.7	2.7	3.0	0.1	47.4
Females	2.5	2.4	2.5	2.6	3.0	2.8	3.2	3.4	3.4	0.1	44.1
Persons[e]	2.4	2.2	2.3	2.6	2.8	2.8	3.0	3.0	3.2	0.1	44.9

(continued)

Table 1.15.16 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences from diseases of the ear and mastoid process, by age group, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13(a)(b)

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change(c)	Per cent change(d)
						All ages(h)					
Non-Indigenous Australian rate (separations per 1,000)											
Males	2.9	2.8	2.7	2.7	2.8	2.7	2.9	2.8	2.7	—	–0.3
Females	2.4	2.4	2.3	2.3	2.4	2.3	2.5	2.5	2.4	—	3.6
Persons(e)	2.6	2.6	2.5	2.5	2.6	2.5	2.7	2.6	2.6	—	1.4
Rate ratio(f)											
Males	0.7	0.7	0.8	0.9	0.9	1.1	0.9	0.9	1.1	n.a.	n.a.
Females	1.1	1.0	1.1	1.1	1.2	1.2	1.3	1.4	1.4	n.a.	n.a.
Persons(e)	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.2	n.a.	n.a.
Rate difference(g)											
Males	–0.7	–0.8	–0.6	–0.2	–0.3	0.2	–0.2	–0.2	0.3	0.1	n.p.(i)
Females	0.2	0.0	0.2	0.3	0.6	0.5	0.7	0.9	1.0	0.1	n.p.(i)
Persons(e)	–0.3	–0.4	–0.2	0.1	0.2	0.3	0.3	0.4	0.6	0.1	n.p.(i)

(continued)

Table 1.15.16 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences from diseases of the ear and mastoid process, by age group, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13(a)(b)

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(e) Persons data includes sex not stated and indeterminate.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) All age data includes age not stated.

(i) Per cent change is difficult to interpret as the regression line crosses zero.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification of Health 2012) and previous editions: ICD-10-AM codes H60–95.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

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Table 1.15.17: Age-specific hospitalisation rates for tympanoplasty, by Indigenous status, children 0–14 years, Australia, July 2011 to June 2013[a][b][c]

	Indigenous Australians		Non-Indigenous Australians			
Age (years)	Number	Number per 1,000	Number	Number per 1,000	Rate ratio[d]	Rate difference[e]
0–14	670	1.4	2,052	0.3	5.5	1.2

(a) Tympanoplasty is defined by a principal diagnosis of H65, H66 or H72 and procedure code 41527–00, 41530–00, 41533–01, 41542–00, 41551–00, 41554–00, 41560–00, 41560–01, 41563–00, 41563–01, 41635–01, 41638–01 or 90114–00.

(b) Categories are based on the ICD-10-AM and the Australian Classification of Health Interventions (ACHI), seventh edition (National Centre for Classification in Health 2010).

(c) Data includes public and private hospitals in all jurisdictions.

(d) Rate ratio is the rate for Indigenous Australians divided by the rate for non-Indigenous Australians.

(e) Rate difference is the rate for Indigenous Australians minus the rate for non-Indigenous Australians.

Notes

1. Rates calculated using population estimates for 2011 and projections for 2012 and 2013 based on the 2011 Census.

2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.15.18: Proportion of Deadly Ears program clients[a] by hearing loss and age group, 2011–2013, per cent

	Hearing within normal limits	Unilateral hearing loss	Bilateral hearing loss	Other	Total	Clients[a]
			0–4 years			
2011	25.4	2.8	19.0	52.8	100.0	142
2012	13.6	6.0	26.4	54.0	100.0	352
2013	19.3	5.1	19.6	56.1	100.0	296
2011–2013	**17.8**	**5.1**	**22.5**	**54.6**	**100.0**	**790**
			5–14 years			
2011	46.8	8.1	28.2	16.9	100.0	344
2012	39.9	15.2	32.1	12.8	100.0	938
2013	38.4	16.1	29.1	16.4	100.0	803
2011–2013	**40.4**	**14.4**	**30.3**	**14.9**	**100.0**	**2085**

(a) Includes clients who received an audiology assessment.

Source: Deadly Ears Program data.

Table 1.15.19: Proportion of Deadly Ears program clients[(a)] with otitis media, by age group, 2007–2013, per cent

	Chronic suppurative otitis media	Otitis media	Other	Total	Clients[(a)]
			0–4 years		
2007	13.0	36.2	50.7	**100.0**	**69**
2008	21.3	42.0	36.7	**100.0**	**207**
2009	20.7	34.8	44.5	**100.0**	**256**
2010	20.1	35.5	44.4	**100.0**	**338**
2011	16.9	35.6	47.5	**100.0**	**396**
2012	9.9	34.0	56.0	**100.0**	**705**
2013	5.5	37.8	56.8	**100.0**	**641**
			5–14 years		
2007	13.5	31.7	54.8	**100.0**	**126**
2008	13.8	22.8	63.5	**100.0**	**378**
2009	18.1	21.9	60.0	**100.0**	**552**
2010	15.2	15.9	68.9	**100.0**	**572**
2011	8.2	21.8	70.0	**100.0**	**867**
2012	6.2	19.4	74.4	**100.0**	**1,397**
2013	5.9	23.5	70.6	**100.0**	**1,245**

(a) Includes clients who received an ENT assessment.

Source: Deadly Ears Program data.

Table 1.15.20: Ear and hearing problems[(a)] managed by general practitioners, by Indigenous status of patient, BEACH years April 2008–March 2009 to April 2012–March 2013[(b)(c)]

	Number		Per cent total problems[(d)]		Indigenous			Other[(e)]				
	Indig.	**Other[(e)]**	**Indig.**	**Other[(e)]**	**Rate per 1,000 encs[(f)]**	**95% LCL[(g)]**	**95% UCL[(h)]**	**Rate per 1,000 encs[(f)]**	**95% LCL[(g)]**	**95% UCL[(h)]**	**Rate ratio[(i)]**	**Rate difference[(j)]**
					0–4 years							
Acute otitis media/myringitis	76	2,513	7.8	6.9	97.4	73.4	121.5	81.7	77.8	85.5	1.2	15.8
Other infections of ear	16	340	1.6	0.9	20.5	7.7	33.3	11.1	9.8	12.3	1.9	9.5
Subtotal infections of ear	*92*	*2,853*	*9.5*	*7.8*	*117.9*	*90.0*	*145.9*	*92.7*	*88.7*	*96.7*	*1.3*	*25.2*
Hearing loss	0	16	0.0	0.0	0.0*	0.0*	0.0*	0.5*	0.3*	0.8*	0.0*	–0.5*
Other diseases of the ear	11	470	1.1	1.3	14.1	5.8	22.4	15.3	13.8	16.8	0.9	–1.2
Total diseases of the ear	**103**	**3,339**	**10.6**	**9.1**	**132.1**	**103.8**	**160.4**	**108.5**	**104.3**	**112.8**	**1.2**	**23.5**
					5–14 years							
Acute otitis media/myringitis	28	1,218	3.3	4.1	39.8	24.8	54.7	48.8	46.0	51.7	0.8	–9.0
Other infections of ear	15	592	1.8	2.0	21.3	8.1	34.5	23.7	21.5	25.9	0.9	–2.4
Subtotal infections of ear	*43*	*1,810*	*5.0*	*6.1*	*61.1*	*42.5*	*79.6*	*72.6*	*69.0*	*76.1*	*0.8*	*–11.5*
Hearing loss	1	16	0.1	0.1	1.4	0.0	4.2	0.6	0.3	1.0	2.2	0.8
Other diseases of the ear	12	457	1.4	1.5	17.0	6.2	27.9	18.3	16.6	20.1	0.9	–1.3
Total diseases of the ear	**56**	**2,283**	**6.5**	**7.7**	**79.5**	**57.4**	**101.7**	**91.5**	**87.6**	**95.5**	**0.9**	**–12.0**

(continued)

Table 1.15.20(continued): Ear and hearing problems[(a)] managed by general practitioners, by Indigenous status of patient, BEACH years April 2008–March 2009 to April 2012–March 2013[(b)(c)]

	Number		Per cent total problems[(d)]		Indigenous			Other[(e)]				
	Indig.	Other[(e)]	Indig.	Other[(e)]	Rate per 1,000 encounters[(f)]	95% LCL[(g)]	95% UCL[(h)]	Rate per 1,000 encounters[(f)]	95% LCL[(g)]	95% UCL[(h)]	Rate ratio[(i)]	Rate difference[(j)]
0–14 years												
Acute otitis media/myringitis	104	3,731	5.7	5.7	70.1	54.8	85.4	67.0	64.4	69.6	1.0	3.1
Other infections of ear	31	932	1.7	1.4	20.9	10.4	31.3	16.7	15.5	18.0	1.2	4.2
Subtotal infections of ear	*135*	*4,663*	*7.4*	*7.1*	*91.0*	*72.1*	*109.8*	*83.7*	*80.9*	*86.5*	*1.1*	*7.3*
Hearing loss	1	32	0.1	0.0	0.7	0.0	2.0	0.6	0.4	0.8	1.2	0.1
Other diseases of the ear	23	927	1.3	1.4	15.5	8.8	22.2	16.6	15.5	17.8	0.9	–1.1
Total diseases of the ear	**159**	**5,622**	**8.7**	**8.5**	**107.1**	**88.0**	**126.3**	**100.9**	**97.8**	**104.0**	**1.1**	**6.2**

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) ICPC–2 codes: H00–H99. Acute otitis media/myringitis = H71; other ear infections = H70, H72, H73, H74; hearing loss = H28, H84, H85, H86; other diseases of the ear = H01–H27, H29–H69, H75–H83, H87–H99.

(b) Data from five combined BEACH years April 2008–March 2009 to April 2012–March 2013 inclusive.

(c) Data for Indigenous and other Australians have not been weighted.

(d) Per cent of total problems within age group.

(e) ‘Other’ includes encounters with non-Indigenous patients and those with patients for whom Indigenous status was not stated.

(f) Age-specific rate (no. per 100 encounters). Figures do not add to 100 as more than one problem can be managed at each encounter.

(g) LCL = lower confidence interval.

(h) UCL = upper confidence interval.

(i) Rate ratio Indigenous:Other.

(j) Rate difference Indigenous rate minus Other (non-Indigenous) rate.

Source: Analyses conducted by the Family Medicine Research Centre, University of Sydney, of BEACH data collected by that Centre.

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Data quality issues

National Aboriginal and Torres Strait Islander Social Survey

The NATSISS is conducted in all states and territories and includes *Remote* and *Non-remote* areas. The 2008 survey was undertaken between August 2008 and April 2009, with a sample size of 13,300 persons (5,500 aged 0–14 and 7,800 aged 15 and over) in 6,900 households, and a response rate of 82% of households. Up to 3 randomly selected Indigenous Australians were chosen from selected households to participate in the survey. Trained ABS interviewers conducted the survey using face-to-face interviews. In *Non-remote* areas interviewers used a notebook computer to record responses, while in *Remote* areas a paper questionnaire was used. Interviewers obtained the consent of a parent or guardian before interviewing those aged 15–17. Indigenous persons usually resident in non-private dwellings, such as hotels, motels, hostels, hospitals, short-stay caravan parks, prisons and other correctional facilities were excluded.

The NATSISS uses the standard Indigenous status question. The NATSISS sample was specifically designed to select a representative sample of Indigenous Australians.

As with other surveys, the NATSISS is subject to sampling and non-sampling errors.

Care has been taken to ensure that the results of this survey are as accurate as possible. Trained ABS officers conducted all interviews. However, some factors may affect the reliability of the data.

Information recorded in this survey is 'as reported' by respondents, and therefore may differ from information available from other sources or collected using different methodologies.

Data on health-related indicators have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the states and territories and the Indigenous and non-Indigenous population.

Time series comparisons for the 2008 survey are available through the 1994 National Aboriginal and Torres Strait Islander Survey and the 2002 NATSISS. However not all data elements align across the 3 (1994, 2001 and 2008) NATSISS surveys, hence care is required when reviewing results across the 3 surveys.

There are no strictly comparable non-Indigenous results available for the 2008 NATSISS. Where possible, the ABS has provided recommendations for non-Indigenous data comparisons (such as the 2007–08 National Health Survey) and these have been adopted in this report.

The 2008 NATSISS had a relatively large level of under-coverage when compared with other ABS surveys. There was also an increase in under-coverage compared to previous ABS Indigenous surveys. For example, the estimated under-coverage in the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) was 42%. The overall under-coverage rate for the 2008 NATSISS was approximately 53% of the in-scope population at the national level. This rate varied across the states and territories (ABS 2010).

Further information on NATSISS data quality issues can be found in the *National Aboriginal and Torres Strait Islander Social Survey: User's guide, 2008* (ABS 2010).

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Australian Health Survey

The Australian Health Survey (AHS) combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) together with 2 new elements: a National Nutrition and Physical Activity Survey (NNPAS) and a National Health Measures Survey (NHMS).

For more information see:

- National Health Survey <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4363.0.55.001Main+Features12011-13?OpenDocument>.
- National Aboriginal and Torres Strait Islander Health Survey <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4715.0/>.
- National Nutrition and Physical Activity Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.007~2011-12~Main%20Features~About%20the%20National%20Nutrition%20and%20Physical%20Activity%20Survey~731>.
- National Health Measures Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.005Chapter1102011-12>.

National Hospital Morbidity Database

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010a). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of

Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

Deadly Ears Program

In Queensland, the Deadly Ears Program has been established to address middle ear disease and its impacts. Its work includes health promotion, workforce development, population-based allied health services, and ENT clinical and surgical outreach to *Remote* communities. Deadly Ears clients report to outreach clinics after they have already been identified as having ear health issues through screening or referrals from other health services. Deadly Ears data do not necessarily reflect population-level hearing statistics for the communities they work with.

Bettering the Evaluation and Care of Health survey

The Bettering the Evaluation and Care of Health (BEACH) survey collects information about encounters with general practitioners (GPs), including: GP and patient characteristics; patient reasons for the visit; problems managed; and treatments provided. The survey has been conducted annually since April 1998. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. Each participating GP provides details of 100 consecutive patient encounters. Although the questionnaire contains an Indigenous identifier, it is unknown whether all GPs ask their patients this question.

In a sub-study of approximately 9,000 patients, Supplementary Analysis of Nominated Data, it was found that if the question on Indigenous status was asked within the context of a series of questions about origin and cultural background, 1.3% identified as Aboriginal and Torres Strait Islander. This is twice the rate routinely recorded in BEACH, indicating that BEACH may under-estimate the number of encounters with Indigenous Australians.

Under the National Indigenous Reform Agreement, governments have agreed to the implementation of *National best practice guidelines for collecting Indigenous status in health data sets* (AIHW 2010b), which include recommended strategies for local service providers such as GPs and practice nurses to improve Indigenous identification data. General practices and Aboriginal and Torres Strait Islander health services that meet accreditation requirements are eligible for financial incentives when they do the following activities: sign on to the Practice Incentives Program—Indigenous Health Incentive (PIP IHI); obtain consent from their Indigenous clients to be registered for chronic disease management through the IHI; and provide a targeted level of care for each registered patient. Participation in the PIP IHI also provides eligibility for other initiatives under Medicare.

A Voluntary Indigenous Identifier was introduced into the Medicare database from November 2002. By July 2014, 415,730 people had identified as Aboriginal, Torres Strait Islander, or both.

Stronger Futures in the Northern Territory hearing health data collection

This collection was previously known as the Northern Territory Emergency Response Child Health Check Initiative—hearing health data collection.

In response to the high level of need identified in the Northern Territory Emergency Response Child Health Check Initiative (started in August 2007), the Australian Government initiated a program of follow-up services, including ear and oral health services, initially as part of the NTER CHCI and later through the Closing the Gap in the Northern Territory National Partnership Agreement (CtG).

The National Partnership Agreement on Stronger Futures in the Northern Territory (SFNT) was implemented mid–2012 outlining a 10 year commitment to 2021–22. The hearing health component of this agreement replaced, and expanded upon, services implemented under the NTER CHCI (CtG). The funding was mainly used to provide outreach audiology services to children aged 0–15.

Northern Territory outreach audiology data collection

- Children who receive outreach audiology services are not a random sample of Indigenous children in the Northern Territory. Although outreach audiology services are available to all Indigenous children aged under 21, not all eligible children access these services.
- The data that have been collected as part of the hearing health program are a by–product of a clinical process. That is, health professionals providing services document the results on standard data collection forms which are then forwarded to the AIHW.
- The extent of missing data should be taken into account when using and interpreting hearing health data. Where possible, published tables show the percentage of missing data (AIHW 2015a).

Northern Territory ENT teleotology data collection

- Children who receive Ear, Nose and Throat (ENT) teleotology services are not a random sample of Indigenous children in the Northern Territory. ENT teleotology services are provided to children and young people who were aged under 21 and lived in *Remote* areas.

- The methods of assessment used at ENT teleotology services differ from those for face-to-face consultations. The diagnoses made by ENT nurses from teleotology services are presumptive diagnoses.
- Services are targeted at children in most need. In 2013, the Northern Territory Department of Health implemented the use of priority listing categories, so children with poorer ear and hearing health are more likely to receive ENT teleotology services.
- The data that have been collected are a by–product of a clinical process. That is, health professionals providing services document the results on standard data collection forms which are then forwarded to the AIHW (AIHW 2015b).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/181162>.

List of symbols used in tables

n.a.	not available
0	zero
—	rounded to zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 16 of 68

Detailed analyses

1.16 Eye health

This measure reports on the prevalence of eye health issues including low vision, blindness, refractive error, cataract, diabetic retinopathy and trachoma for Aboriginal and Torres Strait Islander people, as well as related health service use

Introduction

This is no. 16 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- National Indigenous Eye Health Survey
- Australian Aboriginal and Torres Strait Islander Health Survey
- National Trachoma Surveillance
- Bettering the Evaluation and Care of Health survey
- National Hospital Morbidity Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

The World Health Organization (WHO) and the Australian Government have identified eye health as an important health area. Although often undiagnosed, eye illnesses affect a large proportion of Australians of all ages (AIHW 2008).

Time series analyses may be affected by changes in the quality of Indigenous identification over time. An AIHW study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08 (AIHW 2010b). A more recent study of public hospital data from 2011–12 found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level (AIHW 2013). Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analyses.

For more information relating to eye health, see measure 1.09. Also see 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Prevalence of eye and sight problems, see tables 1.16.1–2
- Self-reported eye and sight problems, see tables 1.16.3–8
- Trachoma and trichiasis screening, see tables 1.16.9–10
- GP management of eye health problems, see Table 1.19.11
- Hospitalisations for eye conditions, see tables 1.16.12–19
- Outreach services, see tables 1.16.20–21.

Prevalence of eye and sight problems

Current period

In 2008:

- About 9% of Indigenous adults had vision impairment and 2% suffered blindness. (Centre for Eye Research Australia 2009).
- The leading cause of vision loss among Indigenous Australians was refractive error (54%) and the leading cause of blindness was cataract (32%) (Table 1.16.1).

In 2012:

- In 204 at-risk communities in Queensland, Western Australia, South Australia and the Northern Territory combined, the prevalence of trachoma among children aged 1–9 was 4%. The trachoma screening coverage rate in these at-risk communities was 70% (Table 1.16.9).
- In 108 at-risk communities screened in Western Australia, South Australia and the Northern Territory combined, the prevalence of trichiasis among adults aged over 40 was 2% of those screened. Trichiasis screening coverage was low, with a total of 4,468 adults of an estimated at-risk population of 13,406 screened (Table 1.16.10).

Self-reported eye and sight problems

Current period

In 2012–13:

- The proportion of Indigenous Australians reporting eye or sight problems was 33%. After adjusting for age, the Indigenous and non-Indigenous rates were similar (Table 1.16.3).
- After adjusting for age, the rate of blindness (complete and partial) among Indigenous Australians was 3 times as high as that of non-Indigenous Australians (3% and 1%, respectively); and the rate of cataracts for Indigenous Australians was almost 2 times as high as for non-Indigenous Australians (3% and 2%, respectively) (Table 1.16.3).
- The proportion of Indigenous Australians with diabetes who had sight problems due to diabetes was 29%. After adjusting for age, this was almost 3 times as high as the proportion for non-Indigenous Australians with diabetes (Table 1.16.4).

GP consultations

- Based on the BEACH study of GP clinical practices, eye problems accounted for 1% of all problems managed by GPs at encounters with Indigenous patients during 2008–13. Overall management rates were similar to those for other Australians except for cataracts, where rates for Indigenous Australians Indigenous were significantly higher (3.5 times).

Hospitalisations for eye conditions

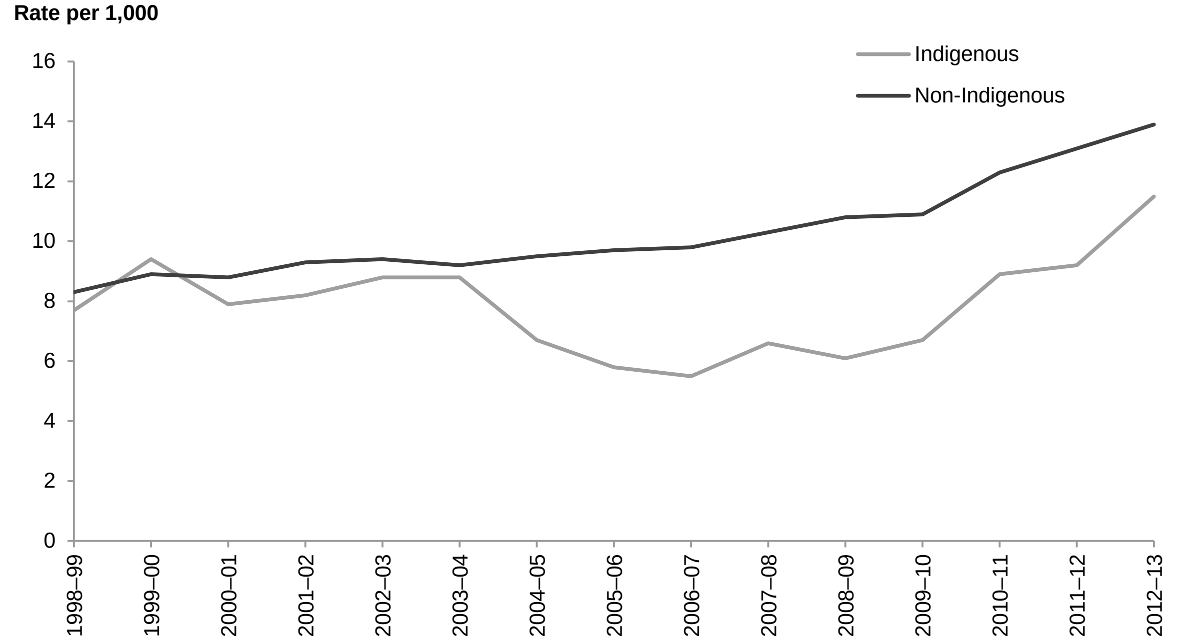
Current period

In 2011–12 to 2012–13:

- There were 5,674 hospitalisations of Indigenous Australians for diseases of the eye and adnexa (mainly cataracts).
  - The hospitalisation rate for disease of the eye and adnexa was lower for Indigenous Australians than for non-Indigenous Australians (10 per 1,000 and 13 per 1,000, respectively) — a ratio of 0.8. (Table 1.16.14)
- In *Remote* areas of Australia, the hospitalisation rate for diseases of the eye and adnexa was higher among Indigenous than non-Indigenous Australians (14 per 1,000 and 11 per 1,000, respectively) — a ratio of 1.2. In contrast, in *Non-remote* areas, the rate for Indigenous Australians was lower than for non-Indigenous Australians (8 and 13 per 1,000) — a ratio of 0.7 (Table 1.16.13).
- There were 1,673 hospitalisations of Indigenous Australians for eye injuries. The hospitalisation rate for eye injuries for Indigenous Australians was 3 times the rate for non-Indigenous Australians.
  - The difference between Indigenous and non-Indigenous Australians in hospitalisation rates for eye injury was largest in the middle age groups. Among those aged 35–44, the hospitalisation rate for Indigenous Australians was almost 6 times that for non-Indigenous Australians (Table 1.16.17).

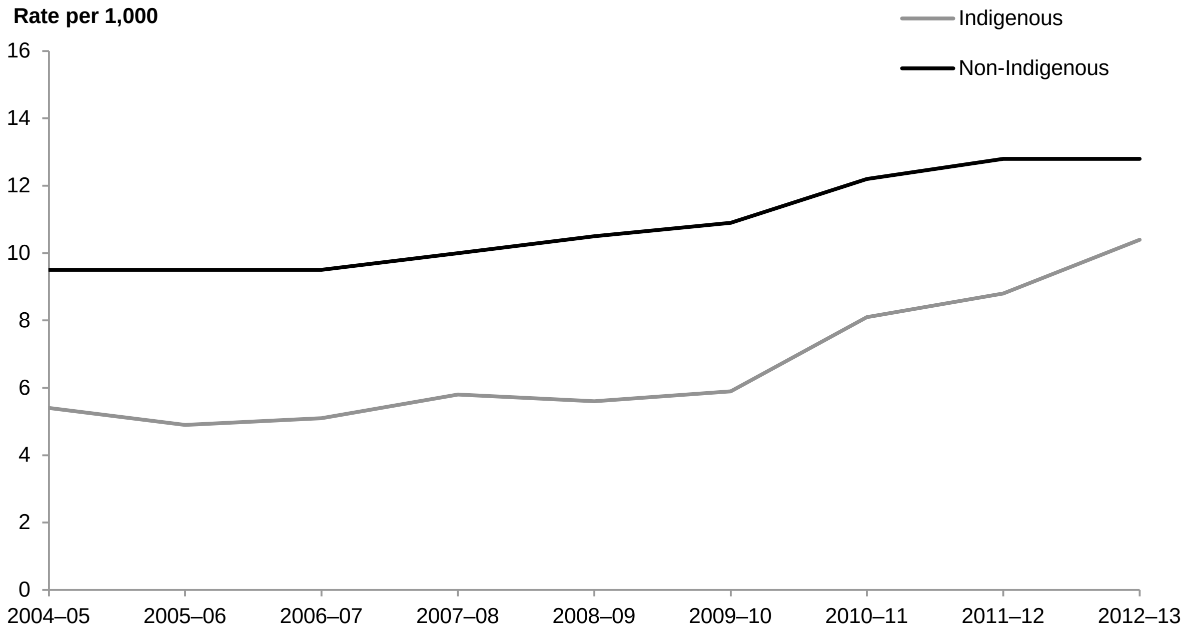
Trend

- From 1998–99 to 2012–13, in Queensland, Western Australia, South Australia and the Northern Territory combined, there was not much change in the hospitalisation rate for diseases of the eye and adnexa among Indigenous Australians. For non-Indigenous Australians, there was a 61% increase, leading to an increase in the rate difference (Table 1.16.18, Figure 1.16.1).
- From 2004–05 to 2012–13, in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, there was an increase in the hospitalisation rate for diseases of the eye and adnexa for both Indigenous and non-Indigenous Australians. The rate for Indigenous Australians increased from 5 per 1,000 in 2004–05 to 10 per 1,000 in 2012–13. However, there was not much change in the rate difference between Indigenous and non-Indigenous Australians (Table 1.16.19, Figure 1.16.2).



Source: Table 1.16.18.

Figure 1.16.1: Age-standardised hospitalisation rates from diseases of the eye and adnexa, by Indigenous status, Qld, WA, SA and NT combined, 1998–99 to 2012–13



Source: Table 1.16.19.

Figure 1.16.2: Age-standardised hospitalisation rates from diseases of the eye and adnexa, NSW, Vic, Qld, WA, SA and NT combined, 2004–05 to 2012–13

Table 1.16.1: Leading cause of vision loss and blindness for Indigenous adults, 2008

	Vision loss		Blindness	
Causes of vision loss/blindness	**Number**	**Per cent**	**Number**	**Per cent**
Refractive error	60	53.6	3	13.6
Cataract	30	26.8	7	31.8
Diabetic retinopathy	13	11.6	2	9.1
Glaucoma	1	0.9	0	0.0
Trachoma	2	1.8	1	4.5
Optic atrophy	1	0.9	3	13.6
Other	5	4.5	6	27.3

Source: National Indigenous Eye Health Survey 2008.

Table 1.16.2: Percentage of Indigenous adults affected by cataract who have had cataract surgery, by remoteness, 2008

	Adults surveyed	Vision loss due to cataract		Cataract surgery coverage[(a)]
	Number	**Number**	**Per cent**	**Per cent**
Major city	117	3	2.6	57
Inner regional	167	3	1.8	75
Outer regional	168	4	2.4	60
Remote	245	5	2.1	67
Very remote coastal	263	10	3.8	66
Very remote inland	229	12	5.3	63

(a) Needed cataract surgery and received it.

Source: National Indigenous Eye Health Survey 2008.

Table 1.16.3: Age, sex and Indigenous status by types of eye/sight problems, 2012–13

	Crude indigenous rate							Age-standardised rate[a]		
	Age			Sex		Total Indigenous		Total		
	0–24	25–44	45+	Males	Females			Indigenous	Non-Indigenous	Rate ratio[b]
	Per cent[c]					Number	Per cent[c]	Per cent[c]		
Whether has a sight problem										
Yes	13.5	36.5	89.7	28.7	38.0	213,117	33.4	48.3	51.9	0.9
No	86.5	63.5	10.3	71.3	62.0	425,207	66.6	51.7	48.1	1.1
Type of sight problem										
Cataract	0.9‡	2.5†	4.7	4.2	2.5	6,868	3.2	3.1	1.7	1.8
Short sighted/myopia	38.8	40.6	36.3	36.1	39.6	81,145	38.1	37.3	47.2	0.8
Long-sighted/hyperopia	40.9	44.1	71.0	51.9	60.2	120,673	56.6	53.0	43.1	1.2
Blindness (complete and partial)	1.6†	3.4†	2.8	3.7	1.9	5,748	2.7	2.5	0.8	3.1
Glaucoma	n.p.	0.7‡	1.0†	0.4†	0.9†	1,495	0.7	0.6	0.9	0.7
Macular degeneration	0.4‡	0.3‡	1.9†	0.8†	1.3†	2,370†	1.1†	1.1†	0.9	1.2
Other[d]	31.5	25.2	13.4	24.0	18.5	44,378	20.8	24.0	30.7	0.8
Total number with sight problem[e]	*48,364*	*60,124*	*104,628*	*91,339*	*121,777*	*213,117*	*100.0*	. .	. .	. .
Wears glasses/contact lenses to correct or partially correct eyesight										
Yes	66.0	69.7	89.8	73.5	82.7	167,765	78.7	75.8	87.3	0.9
No	34.0	30.3	10.2	26.5	17.3	45,351	21.3	24.2	12.7	1.9
Total number with sight problem	*48,364*	*60,124*	*104,628*	*91,339*	*121,777*	*213,117*	*100.0*	. .	. .	. .
Total number	**357,105**	**164,575**	**116,644**	**317,958**	**320,366**	**638,324**	**100.0**	**. .**	**. .**	**. .**

(continued)

Table 1.16.3 (continued): Age, sex and Indigenous status by types of eye/sight problems, 2012–13

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(b) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(c) Percentages add within columns.

(d) Includes other age-related sight problems, presbyopia, astigmatism, lazy eye/stabismus, colour blindness.

(e) Multiple responses allowed, sum of components may exceed total.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.16.4: Remoteness and sex by eye/sight factors for people with reported diabetes[(a)] 2012–13

	Crude Indigenous rate						Age-standardised rate[(b)]		
	Remoteness		Sex						
	Non-remote	Remote	Males	Females	Total Indigenous		Indigenous	Non-Indigenous	Rate ratio[(c)]
	Per cent[(d)]				Number	Per cent[(d)]	Per cent[(d)]		
People with diabetes									
Has an eye condition	83.6	72.5	81.1	79.9	39,290	80.4	58.4	64.7	0.9
Does not have an eye condition	16.4	27.5	18.9	20.1	9,592	19.6	41.6	35.3†	1.2
Has sight problems due to diabetes									
Yes	26.8	36.6	26.7	31.4	11,559	29.4	23.5	9.2†	2.6
No	56.9	35.5	51.6	51.0	20,142	51.3	58.6†	85.3	0.7
Total number with diabetes and an eye condition/s[(e)]	*28,918*	*10,372*	*16,516*	*22,774*	*39,290*	*100.0*	. .	. .	. .
Time since last consulted an eye specialist/optometrist									
Less than 1 year	49.8	45.5	49.2	48.1	23,743	48.6	42.6	58.2	0.7
1–2 years	22.0	16.1	21.8	19.2	9,921	20.3	16.3	21.3	0.8
2–5 years	12.0	14.6	11.7	13.5	6,239	12.8	9.2	12.0†	0.8
5+ years	5.6†	6.3†	8.1†	4.2†	2,854	5.8	5.7†	2.3†	2.5
Never	9.6†	12.8	8.6	12.0†	5,165	10.6	24.6†	6.2‡	4.0
Don't know	0.8‡	4.7†	0.6‡	3.0†	961†	2.0†	1.6†	0.0	. .
Total number with diabetes	**34,580**	**14,302**	**20,367**	**28,515**	**48,882**	**100.0**	**. .**	**. .**	**. .**

(continued)

Table 1.16.4 (continued): Remoteness and sex by eye/sight factors for people with reported diabetes(a) 2012–13

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting diabetes which has lasted, or is expected to last, for six months or more. Includes Type 1 and Type 2 diabetes, type unknown, and persons who reported they had diabetes but that it was not current at the time of interview.

(b) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(c) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(d) Percentages add within columns.

(e) Total includes ‘Not known if has sight problem due to diabetes/high sugar levels (HSL)’.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.16.5: Selected population characteristics by Indigenous persons reporting eye/sight problems and remoteness 2012–13(a)

	Remoteness						Overall population distribution
	Non-remote		Remote		Total		
	Number	Rate(b)	Number	Rate(b)	Number	Rate(b)	Per cent(c)
Age							
0–14	17,735	9.6	2,482	5.5	20,216	8.8	35.9
15–24	24,770	24.3	3,378	13.1	28,148	22.0	20.0
25–34	19,943	30.3	3,852	18.4	23,794	27.4	13.6
35–44	28,836	48.1	7,494	41.8	36,330	46.7	12.2
45–54	41,831	89.9	10,471	77.8	52,302	87.2	9.4
55+	41,468	94.6	10,858	84.7	52,326	92.4	8.9
Sex							
Males	73,605	29.4	17,735	26.2	91,339	28.7	49.8
Females	100,978	40.1	20,800	30.5	121,777	38.0	50.2
State/territory							
NSW	67,678	35.3	4,473	49.4	72,150	35.9	31.5
Vic	17,352	37.9	. .	. .	17,352	37.9	7.2
Qld	48,603	33.2	11,402	33.3	60,006	33.2	28.3
SA	10,236	34.7	1,636	27.1	11,871	33.4	5.6
WA	14,452	29.6	10,173	31.1	24,625	30.2	12.8
Tas	8,866	38.7	499†	64.9†	9,365	39.6	3.7
NT	4,885	43.1	10,352	19.5	15,237	23.6	10.1
ACT	2,511	42.6	. .	. .	2,511	42.6	0.9
Total per cent	**. .**	**34.8**	**. .**	**28.3**	**. .**	**33.4**	**100.0**
Total number	**174,582**	**. .**	**38,535**	**. .**	**213,117**	**. .**	**638,324**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Self-reported data consisting of persons reporting current eye/sight problems, which had lasted, or were expected to last for six months or more.

(b) Indigenous persons reporting eye/sight problems per 100 Indigenous persons.

(c) Distribution of total Indigenous population.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.16.6: Age-standardised rates of persons reporting eye/sight problems, by Indigenous status, remoteness, age, sex and state/territory, 2012–13[(a)(b)]

	Remoteness											Overall population distribution	
	Non-remote			Remote			Total						
	Indig.	Non-Indig.	Rate ratio[(c)]	Indig.	Non-Indig.	Rate ratio[(c)]	Indig.	Non-Indig.	Rate ratio[(c)]	Indig.	Non-Indig.	Indig.	Non-Indig.
	Rate[(d)]									Number		Per cent[(e)]	
Age[(f)]													
0–14	9.6	11.4	0.8	5.5	3.3‡	1.7	8.8	11.3	0.8	20,216	456,638	35.9	18.6
15–24	24.3	33.6	0.7	13.1	7.1†	1.8	22.0	33.3	0.7	28,148	980,403	20.0	13.6
25–34	30.3	38.6	0.8	18.4	27.8†	0.7	27.4	38.5	0.7	23,794	1,211,589	13.6	14.6
35–44	48.1	44.2	1.1	41.8	46.8	0.9	46.7	44.3	1.1	36,330	1,363,870	12.2	14.2
45–54	89.9	85.5	1.1	77.8	83.3	0.9	87.2	85.4	1.0	52,302	2,539,290	9.4	13.7
55+	94.6	94.9	1.0	84.7	93.5	0.9	92.4	94.9	1.0	52,326	5,170,002	8.9	25.2
Sex													
Males	46.0	48.1	1.0	39.7	42.0	0.9	44.6	48.1	0.9	91,339	5,355,228	49.8	49.9
Females	54.4	55.9	1.0	42.9	47.1	0.9	51.9	55.8	0.9	121,777	6,366,564	50.2	50.1
State/territory													
NSW	49.9	53.1	0.9	57.3	n.p.	n.p.	50.3	53.2	0.9	72,150	3,920,436	31.5	32.5
Vic	52.9	51.4	1.0	. .	. .	. .	52.9	51.4	1.0	17,352	2,945,395	7.2	25.5
Qld	50.5	51.7	1.0	46.7	48.5	1.0	49.8	51.7	1.0	60,006	2,294,532	28.3	19.8
SA	49.1	49.8	1.0	43.1	41.0†	1.1	48.0	49.6	1.0	11,871	853,346	5.6	7.3
WA	46.5	51.5	0.9	42.6	42.4	1.0	44.7	51.0	0.9	24,625	1,168,618	12.8	10.3
Tas	51.6	51.4	1.0	51.9	37.0	1.4	51.9	51.2	1.0	9,365	269,325	3.7	2.2
NT	54.0	51.1	1.1	33.5	47.4	0.7	37.5	50.4	0.7	15,237	72,389	10.1	0.7
ACT	56.9	55.3	1.0	. .	. .	. .	56.9	55.3	1.0	2,511	197,750	0.9	1.6
Total per cent	**50.3**	**52.0**	**1.0**	**41.3**	**44.9**	**0.9**	**48.3**	**51.9**	**0.9**	**. .**	**. .**	**100.0**	**100.0**
Total number	**174,582**	**11,600,138**	**. .**	**38,535**	**121,654**	**. .**	**213,117**	**11,721,792**	**. .**	**213,117**	**11,721,792**	**638,324**	**21,622,358**

(continued)

Table 1.16.6 (continued): Aged standardised rates of persons reporting eye/sight problems, by Indigenous status, remoteness, age, sex and state/territory, 2012–13(a)(b)

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting any eye/sight problems, which had lasted, or were expected to last for six months or more.
(b) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.
(c) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.
(d) Persons reporting eye/sight problems per 100 persons.
(e) Distribution of total population.
(f) Data for specific age groups are not age-standardised, only the totals.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.16.7: Indigenous persons (15 years and over) reporting eye/sight problems, by selected socioeconomic and health characteristics, 2012–13

	Has eye/sight problem[a]	Does not have eye/sight problem	Total		Overall population distribution
	Percent[b]		Percent[b]	Number	Percent[c]
SEIFA[d]					
1st quintile (most disadvantaged)	45.7	54.3	100.0	211,804	51.8
5th quintile (most advantaged)	51.4	48.6	100.0	15,072	3.7
Ratio most disadvantaged/most advantaged	0.9*	1.1	1.0	14.1	14.0
Employment					
Employed	46.9	53.1	100.0	187,107	45.8
Unemployed	34.8	65.2	100.0	50,987	12.5
Not in the labour force	51.2	48.8	100.0	170,847	41.8
Ratio unemployed/employed	0.7*	1.2	1.0	0.3	0.3
Has non-school qualification[e]					
Yes	52.0	48.0	100.0	163,249	39.9
No	44.0	56.0	100.0	245,692	60.1
Ratio no/yes	0.8*	1.2	1.0	1.5	1.5
Highest year of school completed					
Year 12	40.0	60.0	100.0	100,362	24.5
Year 9 or below[f]	56.1	43.9	100.0	119,529	29.2
Ratio Year 9 or below/Year 12	1.4*	0.7	1.0	1.2	1.2
Smoker status					
Current smoker[g]	43.2	56.8	100.0	175,768	43.0
Non-smoker[h]	50.2	49.8	100.0	233,173	57.0
Ratio smoker/non-smoker	0.9*	1.1	1.0	0.8	0.8
Adequate daily vegetable intake[i]					
Yes	57.9	42.1	100.0	20,158	4.9
No	46.6	53.4	100.0	388,783	95.1
Ratio no/yes	0.8*	1.3	1.0	19.3	19.4
Adequate daily fruit intake[j]					
Yes	46.7	53.3	100.0	175,227	42.8
No	47.6	52.4	100.0	233,714	57.2
Ratio no/yes	1.0*	1.0	1.0	1.3	1.3
Obese[k]					
Yes	56.3	43.7	100.0	124,997	37.0
No	42.6	57.4	100.0	212,509	63.0
Ratio yes/no	1.3*	0.8	1.0	0.6	0.6
Total number[l]	*161,005*	*176,501*	*337,506*	*337,506*	*337,506*

(continued)

Table 1.16.7 (continued): Indigenous persons (15 years and over) reporting eye/sight problems, by selected socioeconomic and health characteristics, 2012–13

	Has eye/sight problem[(a)]	Does not have eye/sight problem	Total		Overall population distribution
	Percent[(b)]		Percent[(b)]	Number	Percent[(c)]
Self-assessed health status					
Excellent/very good/good	40.3	59.7	100.0	307,649	75.2
Fair/poor	68.2	31.8	100.0	101,292	24.8
Ratio fair, poor/excellent, very good, good	1.7*	0.5	1.0	0.3	0.3
Diabetes[(m)(n)]					
Yes	81.7	18.3	100.0	47,898	11.7
No	42.6	57.4	100.0	361,043	88.3
Ratio yes/no	1.9*	0.3	1.0	0.1	0.1
Total number[(o)]	**47.2***	**52.8**	**100.0**	**408,941**	**100.0**
Total number of persons 15+	**192,900**	**216,041**	**408,941**	**408,941**	**408,941**

* Represents statistically significant differences at the $p < 0.05$ level. Only ‘Has eye/sight problem’ column tested.

(a) Self-reported data consisting of persons reporting any eye/sight problems, which had lasted, or were expected to last for six months or more.

(b) Percentages add within rows.

(c) Distribution of total population.

(d) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(e) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED) (includes e.g. Bachelor degree or higher, diploma, advanced diploma, certificate).

(f) Year 9 or below includes never attended school.

(g) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(h) Includes ex-smoker and those who have never smoked.

(i) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 years and over, with the exception of 18–49 year old males who eat 6 serves.

(j) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 years and over.

(k) Body Mass Index greater than 30.0 for people aged 18 years and over. For information on the calculation of BMI scores for people aged 15–17 years, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001).

(l) Total excludes measurement not taken.

(m) Includes Type 1 and Type 2 diabetes, and type unknown. Includes persons who reported they had diabetes but that it was not current at the time of interview.

(n) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(o) Reference category for statistical testing: ‘Does not have eye/sight problem’.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.16.8: Selected household and health risk factors by Indigenous persons (15 years and over) reporting eye/sight problems, 2012–13

	Has eye/sight problem[(a)]	Does not have eye/ sight problem	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Equivalised gross household income[(d)]					
1st quintile (lowest)	46.7	53.3	100.0	140,304	42.7
4th/5th quintile (highest)	51.9	48.1	100.0	55,728	17.0
Ratio lowest/highest	*0.9*	*1.1*	*1.0*	*2.5*	*2.5*
Total number	*155,302*	*173,389*	*. .*	*328,690*	*328,690*
Financial stress—whether household could raise $2,000 in an emergency[(d)]					
Yes	49.1	50.9	100.0	177,097	46.2
No	45.6	54.4	100.0	206,614	53.8
Ratio yes/no	*1.1*	*0.9*	*1.0*	*0.9*	*0.9*
Total number	*181,143*	*202,568*	*. .*	*383,711*	*383,711*
Household had day/s without money for basic living expenses in last 12 months[(d)]					
Yes	46.5	53.5	100.0	164,764	40.5
No	47.9	52.1	100.0	241,932	59.5
Ratio yes/no	*1.0*	*1.0*	*1.0*	*0.7*	*0.7*
Total number	*192,447*	*214,249*	*. .*	*406,696*	*406,696*
Housing tenure type[(e)]					
Owner	56.4	43.6	100.0	124,490	30.6
Renter	43.2	56.8	100.0	281,001	69.0
Ratio renter/owner	*0.8*	*1.3*	*1.0*	*2.3*	*2.3*
Total number	*192,516*	*214,495*	*. .*	*407,011*	*407,011*
Lives in overcrowded household[(f)]					
Yes	33.9	66.1	100.0	81,548	20.1
No	50.7	49.3	100.0	325,148	79.9
Ratio yes/no	*0.7*	*1.3*	*1.0*	*0.3*	*0.3*
Total number	*192,447*	*214,249*	*. .*	*406,696*	*406,696*
Lives in household with regular smoker					
Yes	42.8	57.2	100.0	240,281	58.8
No	53.4	46.6	100.0	168,660	41.2
Ratio yes/no	*0.8*	*1.2*	*1.0*	*1.4*	*1.4*
Alcohol consumption					
Abstained from alcohol in last 12 months[(g)]	47.3	52.7	100.0	108,024	26.4
Short-term/single occasion risk[(h)]					
Yes	43.0	57.0	100.0	219,176	53.6
No	59.3	40.7	100.0	74,582	18.2
Ratio yes/no	*0.7*	*1.4*	*1.0*	*2.9*	*2.9*

(continued)

Table 1.16.8 (continued): Selected household and health risk factors by Indigenous persons (15 years and over) reporting eye/sight problems, 2012–13

	Has eye/sight problem[(a)]	Does not have eye/ sight problem	Total		Overall population distribution
	Per cent[(b)]		Per cent[(b)]	Number	Per cent[(c)]
Physical activity[(i)]					
Met guidelines[(j)]	47.8	52.2	100.0	117,125	41.4
Did not meet guidelines[(k)]	56.2	43.8	100.0	165,910	58.6
Ratio did not meet/met guidelines	*1.2*	*0.8*	*1.0*	*1.4*	*1.4*
Total number	*149,211*	*133,824*	*. .*	*283,035*	*283,035*
Disability status[(l)]					
Has profound, severe or moderate core activity limitation	70.5	29.5	100.0	51,009	12.5
Has a schooling/employment restriction only	58.2	41.8	100.0	44,580	10.9
Has unspecified limitation or restriction	66.2	33.8	100.0	88,239	21.6
Total with disability/long-term health condition	*65.4*	*34.6*	*100.0*	*183,828*	*45.0*
No disability/long-term health condition	32.3	67.7	100.0	225,113	55.0
Ratio disability/no disability	*2.0*	*0.5*	*1.0*	*0.8*	*0.8*
Psychological distress (Kessler 5)[(m)]					
Low/moderate	48.0	52.0	100.0	252,230	69.8
High/very high	56.7	43.3	100.0	109,134	30.2
Ratio high, very high/low, moderate	*1.2*	*0.8*	*1.0*	*0.4*	*0.4*
Total number[(n)(o)]	*182,847*	*178,517*	*. .*	*361,364*	*361,364*
Stressors experienced in last 12 months[(p)]					
No stressors	41.2	58.8	100.0	107,171	26.3
Experienced one or more stressor	49.3	50.7	100.0	300,159	73.5
Ratio one or more/no stressors	*1.2*	*0.9*	*1.0*	*2.8*	*2.8*
Total number	*192,454*	*215,765*	*. .*	*408,220*	*408,220*
Long term health conditions[(q)]					
One	27.9	72.1	100.0	76,185	18.6
Two	45.1	54.9	100.0	63,404	15.5
Three or more	75.5	24.5	100.0	189,444	46.3
Ratio three or more/one conditions	*2.7*	*0.3*	*1.0*	*2.5*	*2.5*
Total number of persons 15+	**192,900**	**216,041**	**. .**	**408,941**	**408,941**

(continued)

Table 1.16.8 (continued): Selected household and health risk factors by Indigenous persons (15 years and over) reporting eye/sight problems, 2012–13

(a) Self-reported data consisting of persons reporting any eye/sight problems, which had lasted or were expected to last for six months or more.

(b) Percentages add within rows.

(c) Distribution of total Indigenous population.

(d) Excludes ‘not stated’ and ‘not known’.

(e) Total includes ‘other’ and ‘life tenure scheme’.

(f) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(g) Abstainer includes those who have never consumed alcohol.

(h) Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(i) Physical activity data collected from persons 18 years and over; and non-remote areas only.

(j) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(k) Includes ‘don’t know’.

(l) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities. Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person’s overall level of core activity limitation is determined by their highest level of limitation in any of these activities. Only current difficulties with education and/or employment were collected. Respondents aged 65 years and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned ‘schooling/employment restriction only’ had they been asked the question.

(m) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25. Total population is 18 years and over. Excludes No Score.

(n) Total population is 18 years and over.

(o) Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(p) Stressors experienced by self, family or friends.

(q) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.16.9: Trachoma screening coverage and prevalence among 5–9 year olds, by jurisdiction, 2012

	At-risk communities[(a)]				
	NT	**SA**	**WA**	**Qld**[(b)]	**Total**
			Number		
Estimated Indigenous population at risk	3,893	1,176	2,306	385	7,760
Communities at-risk	82	38	78	6	204
Communities screened	76	36	77	6	195
Children examined for trachoma	2,610	933	1,689	194	5,426
Children with active trachoma	117	13	71	0	201
			Per cent		
Screening coverage (%)	67.0	79.3	73.2	50.4	69.9
Active trachoma prevalence 5–9 years (%)	4.5	1.4	4.2	0.0	3.7
Trachoma prevalence 1–9 years (%)(c)(d)	6	1	3	0	4

(a) Communities were classified as at-risk or not at-risk by jurisdictions.

(b) In 2012 Qld undertook a mapping exercise to investigate whether trachoma was a public health concern. Only 6 communities were screened in this exercise, thus the numbers are comparatively small.

(c) Represents a weighted estimate. Weighting accounts for the difference in screening coverage in different age groups. For example, the 1 to 4 age group has a lower screening coverage, but in some places a higher population, therefore that age group prevalence would have a greater weighting. Weighting provides a statistical means to obtain a more accurate picture of prevalence, i.e. the likely prevalence if screening at all ages had the same coverage.

(d) The 1–9 year age group is the WHO’s target age group for establishing trachoma prevalence, and the target age group to establish if a community has been eliminated from trachoma.

Source: National Trachoma Surveillance and Reporting Unit. Trachoma surveillance report 2012.

Table 1.16.10: Trichiasis screening coverage, prevalence and treatment among Aboriginal and Torres Strait Islander adults age over 40 years, by jurisdiction, 2012

	At risk communities(a)							
	NT		SA		WA		Total	
	Number	Per cent	Number	Per cent	Number	Per cent	Number(b)	Per cent
Estimated adult population of at-risk communities(c)	7,030	n.a.	2,246	n.a.	4,130	n.a.	13,406	n.a.
Number of communities at-risk	82	n.a.	38	n.a.	78	n.a.	198	n.a.
Number of communities screened for trichiasis	42	51	14	37	52	69	108	52
Adults examined (% of total estimated population)	1,278	18	1,061	47	2,129	52	4,468	31
With trichiasis	61	5	11	1	22	1	94	2
Offered ophthalmic consultation	49	n.a.	11	n.a.	22	n.a.	82	n.a.
Surgery in past 12 months	5	n.a.	2	n.a.	9	n.a.	16	n.a.

(a) Communities were classified as at-risk or not at-risk by jurisdictions.

(b) This number may also include cases detected in previous years screening.

(c) The potential population at risk is difficult to quantify. Adults at risk are those who lived in trachoma endemic communities during their childhood. In the past the NTSRU only included those adults in current trachoma endemic regions. This approach changed however, recognising that 40+ years ago trachoma endemicity was widespread. The adult population of the trachoma endemic regions thus likely underestimates the at-risk population.

Source: National trachoma surveillance and reporting unit. Trachoma surveillance report 2012.

Table 1.16.11: Problems managed relating to eye health(a) managed by general practitioners, by Indigenous status of the patient, BEACH survey years April 2008–March 2009 to April 2012–March 2013 inclusive(b)(c)

	Number		Per cent		Crude rate (no. per 1,000 encounters)						Age-standardised rate (no. per 1,000 encounters)(d)			
Problem managed	**Indig.**	**Other(e)**	**Indig.**	**Other(e)**	**Indig.**	**95% LCL(f)**	**95% UCL(g)**	**Other**	**95% LCL(f)**	**95% UCL(g)**	**Indig.**	**Other(e)**	**Ratio(h)**	**Rate difference(i)**
Retinopathy (F83)	1	74	0.01	0.01	0.1	0.0	0.4	0.2	0.1	0.2	0.1	0.2	0.9	0.0
Macular degeneration (F84)	1	285	0.01	0.04	0.1	0.0	0.4	0.6	0.5	0.7	0.6	0.6	1.0	0.0
Trachoma (F86)	0	1	0.00	0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refractive error (F91)	3	165	0.03	0.02	0.4	0.0	0.9	0.3	0.3	0.4	0.3	0.3	1.0	0.0
Cataract (F92)	15	747	0.13	0.10	2.0	1.0	3.0	1.5	1.4	1.7	5.4*	1.5*	3.5*	3.9*
Glaucoma (F93)	5	915	0.04	0.12	0.7	0.1	1.3	1.9	1.8	2.0	2.1	1.9	1.1	0.2
Blindness (F94)	1	78	0.01	0.01	0.1	0.0	0.4	0.2	0.1	0.2	0.1	0.2	0.9	0.0
Other Eye Problems(j)	105	9,758	0.90	1.28	14.2	11.4	17.1	20.1	19.7	20.6	15.6*	20.1*	0.8*	–4.5*
Total eye problems (F01–99)	*131*	*12,023*	*1.12*	*1.57*	*17.8*	*14.6*	*20.9*	*24.8*	*24.3*	*25.4*	*24.3*	*24.8*	*1.0*	*–0.5*
Other problems managed	11,558	752,673	98.88	98.43	1,566.1	1,516.6	1,615.7	1,553.4	1,544.4	1,562.5	1,660.9*	1,552.0*	1.1*	109.0*
Total problems	**11,689**	**764,696**	**100.00**	**100.00**	**1,583.9**	**1,534.0**	**1,633.8**	**1,578.3**	**1,569.1**	**1,587.4**	**1,685.3***	**1,576.7***	**1.1***	**108.5***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Classified according to ICPC-2 codes (Classification Committee of the World Organization of Family Doctors (WICC) 1998).

(b) Data from five combined BEACH years April 2008–March 2009 to April 2012–March 2013 inclusive.

(c) Data for Indigenous and other Australians have not been weighted.

(d) Directly age-standardised rate (no. per 1,000 encounters). Figures do not add to 100 as more than one problem can be managed at each encounter.

(e) 'Other' includes encounters with non-Indigenous patients and those with patients for whom Indigenous status was not stated.

(f) LCL = lower confidence interval.

(g) UCL = upper confidence interval.

(h) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for other Australians.

(i) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for other Australians.

(j) ICPC–2 codes: F01–F82, F85, 95–F99.

Source: Analyses conducted by the Family Medicine Research Centre, University of Sydney, of BEACH data collected by that Centre.

Table 1.16.12: Age-specific hospitalisations rates for principal diagnosis of diseases of the eye and adnexa, by Indigenous status and sex, Australia, 2011–12 to 2012–13(a)(b)

	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65+	Total (crude)(c)	Total (age-standardised)(d)
Males										
Indigenous	1.5	0.9	0.5	1.1	2.8	6.5	14.4	44.1	3.8	9.1
Non-Indigenous	2.2	1.0	0.8	1.2	2.0	5.3	16.4	69.8	12.8	12.3
Rate ratio(e)	0.7	0.9	0.7	0.9	1.4	1.2	0.9	0.6	0.3	0.7
Rate difference(f)	–0.6	–0.2	–0.3	–0.1	0.8	1.2	–1.9	–25.7	–9.1	–3.2
Females										
Indigenous	2.1	0.8	0.6	1.1	2.4	5.7	18.0	49.7	4.5	10.0
Non-Indigenous	2.2	1.0	0.9	1.3	1.9	5.7	18.5	78.0	15.8	13.2
Rate ratio(e)	0.9	0.8	0.7	0.9	1.2	1.0	1.0	0.6	0.3	0.8
Rate difference(f)	–0.1	–0.2	–0.2	–0.2	0.4	0.0	–0.5	–28.4	–11.3	–3.1
Persons(g)										
Indigenous	1.8	0.8	0.6	1.1	2.6	6.1	16.3	47.2	4.1	9.6
Non-Indigenous	2.2	1.0	0.8	1.2	2.0	5.5	17.5	74.2	14.3	12.7
Rate ratio(e)	0.8	0.8	0.7	0.9	1.3	1.1	0.9	0.6	0.3	0.8
Rate difference(f)	–0.4	–0.2	–0.2	–0.1	0.6	0.6	–1.2	–27.0	–10.2	–3.1

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes H00–H59.

(b) Data includes public and private hospitals in all jurisdictions.

(c) All age data includes age not stated.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(g) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.16.13: Hospitalisations for principal diagnosis of diseases of the eye and adnexa, by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[(a)(b)]

	Indigenous		**Non-Indigenous**			
	Number	**No. per 1,000**[(c)]	**Number**	**No. per 1,000**[(c)]	**Rate ratio**[(d)]	**Rate difference**[(e)]
Major cities	1,307	7.2	426,048	12.7	0.6	–5.5
Inner regional	1,154	9.7	137,816	13.0	0.7	–3.3
Outer regional[(f)]	1,242	9.1	58,836	12.4	0.7	–3.4
Total non-remote	*3,703*	*8.4*	*622,700*	*12.7*	*0.7*	*–4.3*
Remote[(g)]	728	13.8	6,063	11.5	1.2	2.3
Very remote	1,213	13.4	1,739	9.2	1.5	4.2
Total remote	*1,941*	*13.5*	*7,802*	*10.9*	*1.2*	*2.6*
Australia[(h)]	**5,674**	**9.6**	**632,155**	**12.7**	**0.8**	**–3.1**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes H00-H59.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Outer regional includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS' 2011 Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.16.14: Hospitalisations for the eye and adnexa (excluding dialysis), by Indigenous status, sex and jurisdiction, Australia, 2011–12 to 2012–13[(a)(b)(c)(d)]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Number	Crude rate per 1,000	ASR rate per 1,000[(e)]	Ratio[(f)]	Difference[(g)]
NSW								
Males	741	3.5	7.9	94,751	13.4	12.4	0.6	–4.4
Females	900	4.2	9.5	118,978	16.6	13.2	0.7	–3.8
Persons[(h)]	1,641	3.9	8.8	213,729	15.1	12.8	0.7	–4.0
Vic								
Males	113	2.3	6.3	63,608	11.5	11.1	0.6	–4.8
Females	177	3.6	8.5	82,730	14.7	12.2	0.7	–3.6
Persons[(h)]	290	3.0	7.5	146,340	13.1	11.6	0.6	–4.1
Qld								
Males	625	3.2	8.6	56,376	12.9	12.8	0.7	–4.1
Females	666	3.4	7.9	66,314	15.1	13.4	0.6	–5.5
Persons[(h)]	1,291	3.3	8.2	122,691	14.0	13.1	0.6	–4.9
WA								
Males	462	5.2	12.3	34,733	14.7	15.8	0.8	–3.5
Females	570	6.3	13.4	41,206	17.7	16.3	0.8	–2.9
Persons[(h)]	1,032	5.7	13.0	75,939	16.2	16.0	0.8	–3.1
SA								
Males	150	4.0	8.8	20,954	13.1	11.3	0.8	–2.5
Females	216	5.6	10.9	28,409	17.4	12.7	0.9	–1.8
Persons[(h)]	366	4.8	9.9	49,367	15.3	12.0	0.8	–2.1
Tas								
Males	n.p.	2.8	6.0	n.p.	14.1	11.1	0.5	–5.1
Females	n.p.	3.3	8.1	n.p.	18.9	13.5	0.6	–5.4
Persons[(h)]	n.p.	3.0	7.0	n.p.	16.5	12.3	0.6	–5.3
NT								
Males	n.p.	5.5	13.2	n.p.	7.1	10.0	1.3	3.2
Females	n.p.	6.9	13.8	n.p.	6.2	9.5	1.5	4.4
Persons[(h)]	n.p.	6.2	13.5	n.p.	6.7	9.7	1.4	3.8
ACT								
Males	n.p.	1.5	5.7	n.p.	5.2	6.0	1.0	–0.3
Females	n.p.	2.3	6.3	n.p.	6.4	6.5	1.0	–0.2
Persons[(h)]	n.p.	1.9	6.0	n.p.	5.8	6.3	1.0	–0.3

(continued)

Table 1.16.14 (continued): Hospitalisations for the eye and adnexa (excluding dialysis), by Indigenous status, sex and jurisdiction, Australia, 2011–12 to 2012–13[a][b][c][d]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Ratio[f]	Difference[g]
Australia								
Males	**2,563**	**3.8**	**9.1**	**281,198**	**12.8**	**12.3**	**0.7**	**–3.2**
Females	**3,111**	**4.5**	**10.0**	**350,939**	**15.8**	**13.2**	**0.8**	**–3.1**
Persons[h]	**5,674**	**4.1**	**9.6**	**632,155**	**14.3**	**12.7**	**0.8**	**–3.1**

(a) Data include public and private hospital in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes H00–H59.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.16.15: Hospitalisations of Indigenous persons for principal diagnosis of diseases of the eye and adnexa, by principal diagnosis and Indigenous status, Australia, 2011–12 to 2012–13[(a)(b)]

	Number		Per cent[(c)]		Indigenous		Non-Indigenous		
Principal diagnosis	Indig.	Non-Indig.	Indig.	Non-Indig.	Crude no. per 1,000	No. per 1,000[(d)]	No. per 1,000[(d)]	Rate ratio[(e)]	Rate difference[(f)]
Disorders of eyelid, lacrimal system and orbit (H00–H06)	468	44,486	8.2	7.0	0.3	0.6	0.9	0.6	–0.3
Disorders of conjunctiva (H10–H13)	*536*	*17,283*	*9.4*	*2.7*	*0.4*	*0.6*	*0.4*	*1.5*	*0.2*
Disorders of sclera, cornea, iris and ciliary body (H15–H22)	*170*	*8,158*	*3.0*	*1.3*	*0.1*	*0.2*	*0.2*	*1.1*	*0.0*
Disorders of lens (H25–H28)	3,342	414,067	58.9	65.5	2.4	6.9	8.2	0.8	–1.4
Other cataract (H26)	*3,009*	*351,529*	*53.0*	*55.6*	*2.2*	*6.2*	*7.0*	*0.9*	*–0.8*
Senile cataract (H25)	*288*	*61,002*	*5.1*	*9.6*	*0.2*	*0.6*	*1.2*	*0.5*	*–0.6*
Disorders of choroid and retina (H30–H36)	459	110,477	8.1	17.5	0.3	0.7	2.2	0.3	–1.5
Glaucoma (H40–H42)	*95*	*8,246*	*1.7*	*1.3*	*0.1*	*0.1*	*0.2*	*0.9*	*0.0*
Disorders of vitreous body and globe (H43–H45)	155	5,286	2.7	0.8	0.1	0.2	0.1	2.0	0.1
Disorders of optic nerve and visual pathways (H46–H48)	49	1,751	0.9	0.3	__	__	__	__	__
Disorders of ocular muscles, binocular movement, accommodation and refraction (H49–H52)	240	14,886	4.2	2.4	0.2	0.1	0.3	0.4	–0.2
Visual disturbances and blindness (H53–H54)	79	3,477	1.4	0.6	0.1	0.1	0.1	1.3	0.0
Other disorders of eye and adnexa (H55–H59)	81	4,038	1.4	0.6	0.1	0.1	0.1	1.1	0.0
Total	**5,674**	**632,155**	**100.0**	**100.0**	**4.1**	**9.6**	**12.7**	**0.8**	**–3.1**

(continued)

Table 1.16.15 (continued): Hospitalisations of Indigenous persons for principal diagnosis of diseases of the eye and adnexa, by principal diagnosis and Indigenous status, Australia, 2011–12 to 2012–13(a)(b)

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) codes: H00–H59.

(c) Proportion of male, female and total hospitalisations of Indigenous persons in the period 2011–12 to 2012–13.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous Australians.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous Australians.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.16.16: Principal diagnosis for eye injury hospitalisations by sex and Indigenous status, Australia, 2011–12 to 2012–13[a][b]

	Number		Per cent		Indigenous		Non-Indigenous		
	Indig.	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Crude no. per 1,000**	**No. per 1,000[c]**	**No. per 1,000[c]**	**Rate ratio[d]**	**Rate diff.[e]**
Periorbital fracture (S021, S023, S028)	471	7,233	28.2	34.1	0.3	0.4	0.2	2.3	0.2
Superficial injuries of eyelid and periocular area (S001, S002)	279	2,193	16.7	10.3	0.2	0.2	0.1	4.6	0.2
Open wound of eyelid and periocular area (S011)	498	5,289	29.8	24.9	0.4	0.4	0.1	3.6	0.3
Foreign body in external eye (T150, T151, T158, T159)	31	1,503	1.9	7.1	—	—	—	0.6	—
Contusion of eyeball and orbital tissues (S051)	80	984	4.8	4.6	0.1	0.1	—	2.8	—
Penetrating wound (S054, S055, S056)	48	864	2.9	4.1	—	—	—	1.7	—
Other eye injuries (S040–S042, S044, S050, S052,S053,S057–S059, T260–T264, T495, T904)	266	3,161	15.9	14.9	0.2	0.2	0.1	2.9	0.1
Total	**1,673**	**21,227**	**100.0**	**100.0**	**1.2**	**1.3**	**0.5**	**2.8**	**0.9**

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(b) Data includes public and private hospitals in all jurisdictions.

(c) Directly age-standardised using the 2001 Australian standard population.

(d) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(e) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database

Table 1.16.17: Age-specific hospitalisation rates for eye injury by Indigenous status and age, Australia, 2011–12 to 2012–13[(a)(b)]

	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65+	Total (crude)[(c)]	Total (age-standardised)[(d)]
Males										
Indigenous	0.7	0.6	1.4	2.2	2.6	1.9	1.2	1.2	1.4	1.6
Non-Indigenous	0.7	0.4	0.9	0.8	0.7	0.5	0.4	0.8	0.7	0.7
Rate ratio[(e)]	1.0	1.5	1.5	2.8	3.9	3.8	3.0	1.5	. .	2.4
Rate difference[(f)]	0.0	0.2	0.4	1.4	1.9	1.4	0.8	0.4	. .	0.9
Females										
Indigenous	0.6	0.3	1.2	2.1	2.1	0.8	0.6	0.5	1.1	1.1
Non-Indigenous	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.9	0.3	0.3
Rate ratio[(e)]	1.1	1.4	5.7	12.7	12.2	4.7	3.3	0.6	. .	3.9
Rate difference[(f)]	0.1	0.1	1.0	2.0	2.0	0.6	0.4	-0.4	. .	0.8
Persons[(g)]										
Indigenous	0.6	0.5	1.3	2.2	2.4	1.3	0.9	0.8	1.2	1.3
Non-Indigenous	0.6	0.3	0.6	0.5	0.4	0.3	0.3	0.8	0.5	0.5
Rate ratio[(e)]	1.1	1.5	2.2	4.5	5.6	4.0	3.0	1.0	. .	2.8
Rate difference[(f)]	0.0	0.2	0.7	1.7	1.9	1.0	0.6	0.0	. .	0.9

(continued)

Table 1.16.17 (continued): Age-specific hospitalisation rates for eye injury by Indigenous status and age, Australia, 2011–12 to 2012–13(a)(b)

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) codes: ICD-10-AM codes S021, S023, S028, S001, S002, S011, T150, T151, T158, T159, S051, S054, S055, S056, S040–S042, S044, S050, S052,S053,S057–S059, T260–T264, T495, T904.

(b) Data includes public and private hospitals in all jurisdictions.

(c) All age data includes age not stated.

(d) Directly age-standardised using the 2001 Australian standard population.

(e) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(f) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(g) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.16.18a: Age-standardised hospitalisation separations from diseases of the eye and adnexa Qld, WA, SA and NT, 1998–99 to 2012–13(a)(b)(c)

	Indigenous separations			Non-Indigenous separations		
	Males	Females	Persons(d)	Males	Females	Persons(d)
1998–99	432	515	947	23,184	29,101	52,285
1999–00	486	597	1,083	25,798	31,713	57,511
2000–01	387	511	898	26,133	32,444	58,578
2001–02	522	476	998	28,342	35,840	64,182
2002–03	539	563	1,102	29,301	37,429	66,730
2003–04	502	577	1,079	29,571	36,875	66,446
2004–05	456	449	905	31,202	39,870	71,072
2005–06	390	431	821	32,617	41,271	73,888
2006–07	414	423	837	34,002	42,754	76,756
2007–08	450	517	967	36,660	46,439	83,099
2008–09	478	468	946	39,403	49,958	89,362
2009–10	530	516	1,046	40,994	52,042	93,037
2010–11	655	814	1,469	49,612	58,973	108,585
2011–12	733	829	1,562	54,452	64,976	119,432
2012–13	882	1,098	1,980	58,640	71,699	130,340
Annual change(e)	20.3	24.0	44.3	2,269.3	2,695.8	4,965.2
Per cent change(f)	74.3	80.4	77.5	158.0	145.8	151.1

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: H00–H59.

(b) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Persons data includes sex not stated and indeterminate.

(e) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(f) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
2. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.16.18b: Age-standardised hospitalisation rates from diseases of the eye and adnexa Qld, WA, SA and NT, 1998–99 to 2012–13[(a)(b)(c)]

	Indigenous rate per 1,000[(d)]			Non-Indigenous rate per 1,000[(d)]		
	Males	**Females**	**Persons[(e)]**	**Males**	**Females**	**Persons[(e)]**
1998–99	6.9	8.6	7.7	8.2	8.3	8.3
1999–00	8.1	10.5	9.4	8.9	8.9	8.9
2000–01	6.9	8.7	7.9	8.7	8.8	8.8
2001–02	8.5	7.9	8.2	9.1	9.5	9.3
2002–03	8.6	8.9	8.8	9.1	9.7	9.4
2003–04	8.5	9.0	8.8	8.9	9.4	9.2
2004–05	7.5	6.1	6.7	9.2	9.9	9.5
2005–06	5.8	5.7	5.8	9.3	10.0	9.7
2006–07	5.5	5.5	5.5	9.4	10.1	9.8
2007–08	6.6	6.5	6.6	9.8	10.7	10.3
2008–09	7.2	5.4	6.1	10.2	11.3	10.8
2009–10	7.8	5.9	6.7	10.4	11.4	10.9
2010–11	9.2	8.8	8.9	12.1	12.6	12.3
2011–12	9.8	8.9	9.2	12.9	13.4	13.1
2012–13	10.7	12.0	11.5	13.4	14.4	13.9
Annual change[(f)]	0.1	__	__	0.3	0.4	0.3
Per cent change[(g)]	25.4	–5.4	7.5	57.0	64.5	60.7

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: H00–H59.

(b) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Directly age-standardised using the 2001 Australian standard population, by 5-year age group.

(e) Persons data includes sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.16.18c: Age-standardised hospitalisation rate ratios and rate differences from diseases of the eye and adnexa Qld, WA, SA and NT, 1998–99 to 2012–13[(a)(b)(c)]

	Rate ratio(d)			Rate difference(e)		
	Males	**Females**	**Persons(f)**	**Males**	**Females**	**Persons(f)**
1998–99	0.8	1.0	0.9	–1.2	0.3	–0.5
1999–00	0.9	1.2	1.1	–0.7	1.6	0.5
2000–01	0.8	1.0	0.9	–1.8	–0.1	–0.9
2001–02	0.9	0.8	0.9	–0.6	–1.7	–1.1
2002–03	0.9	0.9	0.9	–0.5	–0.9	–0.7
2003–04	1.0	1.0	1.0	–0.4	–0.4	–0.4
2004–05	0.8	0.6	0.7	–1.7	–3.8	–2.8
2005–06	0.6	0.6	0.6	–3.4	–4.3	–3.9
2006–07	0.6	0.5	0.6	–3.8	–4.6	–4.2
2007–08	0.7	0.6	0.6	–3.2	–4.2	–3.7
2008–09	0.7	0.5	0.6	–3.1	–5.8	–4.6
2009–10	0.8	0.5	0.6	–2.5	–5.5	–4.2
2010–11	0.8	0.7	0.7	–2.9	–3.7	–3.4
2011–12	0.8	0.7	0.7	–3.1	–4.5	–3.9
2012–13	0.8	0.8	0.8	–2.7	–2.4	–2.4
Annual change(g)	n.a.	n.a.	n.a.	–0.2	–0.4	–0.3
Per cent change(h)	n.a.	n.a.	n.a.	334	Increase	n.p.(i)

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: H0–-H59.

(b) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for other Australians.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for other Australians.

(f) Persons data includes sex not stated and indeterminate.

(g) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(h) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

(i) Because the linear regression trend line crosses zero, the results from the analysis are difficult to interpret and could not be published.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes: separations with episode types 5.3 and 7 for 1998–99 and 1999–00; separations with care types 7.3, 9 and 10 for 2001 onward (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.16.19: Age-standardised hospitalisation rates from diseases of the eye and adnexa, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a][b][c]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[d]	Per cent change over period[e]
Indigenous separations											
Males	613	550	618	675	704	754	991	1,135	1,334	91.1	160.1
Females	645	622	657	763	750	819	1,230	1,369	1,635	123.4	219.4
Persons[f]	1,258	1,172	1,275	1,438	1,454	1,573	2,221	2,504	2,969	214.5	189.6
Non-Indigenous separations											
Males	80,746	82,622	84,581	90,747	98,316	104,129	123,937	133,974	137,476	7,884.5	87.0
Females	107,079	109,474	111,629	119,633	128,462	137,402	154,870	166,517	171,866	8,908.8	72.4
Persons[f]	187,825	192,096	196,210	210,380	226,779	241,533	278,812	300,496	309,344	16,793.9	78.6
Indigenous no. per 1,000[g]											
Males	5.7	4.8	5.1	5.7	5.7	6.3	8.0	8.6	9.6	0.6	101.1
Females	5.2	4.9	5.1	5.9	5.5	5.7	8.2	9.0	11.0	0.7	139.3
Persons[f]	5.4	4.9	5.1	5.8	5.6	5.9	8.1	8.8	10.4	0.6	121.8
Non-Indigenous no. per 1,000[g]											
Males	9.1	9.1	9.0	9.4	9.9	10.2	11.8	12.4	12.3	0.5	46.3
Females	9.9	10.0	10.0	10.4	11.0	11.4	12.6	13.2	13.2	0.5	41.1
Persons[f]	9.5	9.5	9.5	10.0	10.5	10.9	12.2	12.8	12.8	0.5	43.2
Rate ratio[h]											
Males	0.6	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.8	n.a.	n.a.
Females	0.5	0.5	0.5	0.6	0.5	0.5	0.7	0.7	0.8	n.a.	n.a.
Persons[f]	0.6	0.5	0.5	0.6	0.5	0.5	0.7	0.7	0.8	n.a.	n.a.

(continued)

Table 1.16.19 (continued): Age-standardised hospitalisation rates from diseases of the eye and adnexa, NSW, Vic, Qld, WA, SA and NT, 2004–05 to 2012–13[a][b][c]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[d]	Per cent change over period[e]
Rate difference[i]											
Males	–3.4	–4.2	–3.9	–3.7	–4.3	–4.0	–3.8	–3.8	–2.7	0.1	–13.4
Females	–4.7	–5.1	–4.9	–4.6	–5.5	–5.7	–4.4	–4.1	–2.3	0.2	–30.8
Persons[f]	–4.1	–4.7	–4.4	–4.1	–4.9	–4.9	–4.1	–3.9	–2.4	0.1	–25.0

(a) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: H00–H59.

(b) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(c) Data are reported by state/territory of usual residence of the patient hospitalised.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(f) Persons data includes sex not stated and indeterminate.

(g) Directly age-standardised using the 2001 Australian standard population, by 5-year age group.

(h) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for other Australians.

(i) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for other Australians.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.16.20: Patients seen under Visiting Optometrists Scheme (VOS), by Indigenous status and state/territory, 2013–14

	Indigenous	Other Australian	Total
NSW/ACT	3,392	5,728	9,120
Vic/Tas	857	2,026	2,883
Qld	5,003	6,529	11,532
NT	6,920	1,227	8,147
SA	921	2,452	3,373
WA(a)	2,074	1,941	4,015
Australia	**19,167**	**19,903**	**39,070**

(a) There are 10 VOS agreements managed by the WA Office. All 10 submitted a report for July–December 2013 but only 7 have so far submitted reports for January–June 2014. According to the 17 reports submitted, total clients were 4,015 of whom 2,074 were Indigenous. As the numbers of clients seen tend to be fairly consistent from one reporting period to the next, based on the July–December 2013 reports it is estimated that the 3 missing reports would contribute an additional 514 clients, of whom 75 would be Indigenous. Accordingly, it is estimated that approximately 2,149 Indigenous people were treated under the VOS program in WA in 2013–14, out of a total 4,529 patients.

Source: Unpublished data from Department of Health.

Table 1.16.21: Patients seen under Rural Health Outreach Fund, by Indigenous status, 2013–14

	Indigenous	Other Australian	Total
Ophthalmologists	4,224	16,140	20,364
Other eye health professionals	1,696	2,368	4,064

Source: Unpublished data from Department of Health.

Data quality issues

National Indigenous Eye Health Survey

The National Indigenous Eye Health survey was conducted in 2008 by the Indigenous Eye Health Unit at the University of Melbourne in collaboration with the Centre for Eye Research Australia and the Vision Cooperative Research Centre. At the time of the survey, an informal census was done to establish the size of the eligible population of Indigenous children aged 5–15 and adults aged 40 and above. Sources included community and local council housing lists, health service and hospital lists, Aboriginal housing or legal aid records, and local informants.

A multi-staged random cluster sample was selected after consultation with the ABS using data from the 2006 Census. 30 clusters containing 300–400 people were selected. In each cluster, all children aged 5–15 and all adults over 40 were examined. Additional ineligible people were examined at their request. In 2 *Remote* and *Very remote* communities, a sample of non-Indigenous adults was also examined.

Standardised demographic data were collected, and a standardised eye examination was done on all participants. Overall, 1,694 children aged 5 to 15 (84% of those eligible) and 1,189 adults aged 40 and above (72% of those eligible) were examined.

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Australian Health Survey

The Australian Health Survey (AHS) combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) together with 2 new elements: a National Nutrition and Physical Activity Survey (NNPAS) and a National Health Measures Survey (NHMS).

For more information see:

- National Health Survey <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4363.0.55.001Main+Features12011-13?OpenDocument>.
- National Aboriginal and Torres Strait Islander Health Survey <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4715.0/>.
- National Nutrition and Physical Activity Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.007~2011-12~Main%20Features~About%20the%20National%20Nutrition%20and%20Physical%20Activity%20Survey~731>.
- National Health Measures Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.005Chapter1102011-12>.

National Trachoma Surveillance

The National Trachoma Surveillance and Reporting Unit (NTSRU) is the central collection point for trachoma data collected from state and territories where trachoma has been identified as present.

Caution must be taken when quoting trachoma prevalence as screening took place in predominantly *Remote* and *Very remote* communities designated as being at-risk of endemic trachoma.

Interpretation of coverage data is limited by the accuracy of community population estimates, the school-based approach to screening and the designation of communities at risk. Community population estimates are based upon projections from the Census data. Although this approach is current best practice, the estimates may not accurately reflect populations at the time of screening, given the small size and mobility of some communities.

Designation of at-risk status does not appear to have been systematically reviewed in any jurisdiction. Data collected in Western Australia in 2010, as well as previous Annual National Trachoma Reports and the National Indigenous Eye Health Survey have all demonstrated that communities considered not at-risk may in fact have endemic trachoma.

Bettering the Evaluation and Care of Health survey

The Bettering the Evaluation and Care of Health (BEACH) survey collects information about encounters with general practitioners (GPs), including: GP and patient characteristics; patient reasons for the visit; problems managed; and treatments provided. The survey has been conducted annually since April 1998. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. Each participating GP provides details of 100 consecutive patient encounters. Although the questionnaire contains an Indigenous identifier, it is unknown whether all GPs ask their patients this question.

In a sub-study of approximately 9,000 patients, Supplementary Analysis of Nominated Data, it was found that if the question on Indigenous status was asked within the context of a series of questions about origin and cultural background, 1.3% identified as Aboriginal and Torres Strait Islander. This is twice the rate routinely recorded in BEACH, indicating that BEACH may under-estimate the number of encounters with Indigenous Australians.

Under the National Indigenous Reform Agreement, governments have agreed to the implementation of *National best practice guidelines for collecting Indigenous status in health data sets* (AIHW 2010a), which include recommended strategies for local service providers such as GPs and practice nurses to improve Indigenous identification data. General practices and Aboriginal and Torres Strait Islander health services that meet accreditation requirements are eligible for financial incentives when they do the following activities: sign on to the Practice Incentives Program—Indigenous Health Incentive (PIP IHI); obtain consent from their Indigenous clients to be registered for chronic disease management through the IHI; and provide a targeted level of care for each registered patient. Participation in the PIP IHI also provides eligibility for other initiatives under Medicare.

A Voluntary Indigenous Identifier was introduced into the Medicare database from November 2002. By July 2014, 415,730 people had identified as Aboriginal, Torres Strait Islander, or both.

National Hospital Morbidity Database

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia's off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of 'not stated', though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010b). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

List of symbols used in tables

n.a.	not available
. .	not applicable
—	rounded to zero
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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References

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Other related information

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 17 of 68

Detailed analyses

1.17 Perceived health status

This measure reports on self-reported, self-assessed health status of Aboriginal and Torres Strait Islander Australians

Introduction

This is no. 17 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- Australian Aboriginal and Torres Strait Islander Health Survey
- National Aboriginal and Torres Strait Islander Social Survey.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Self-assessed health status is dependent on an individual's awareness and expectations regarding their health. Self-assessed health status is a useful measure of overall health status, but is not an objective measure and needs to be interpreted with some caution.

For more information on the relationships between perceived health status and related to chronic health conditions, risk factors, and community functioning, see measures 1.05, 1.10, 1.13 and 2.15. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Self-assessed health status, see Table 1.17.1
- Socio-economic and health factors, see tables 1.17.2–4.

Self-assessed health status

Current period

In 2012–13 among people aged 15 and over:

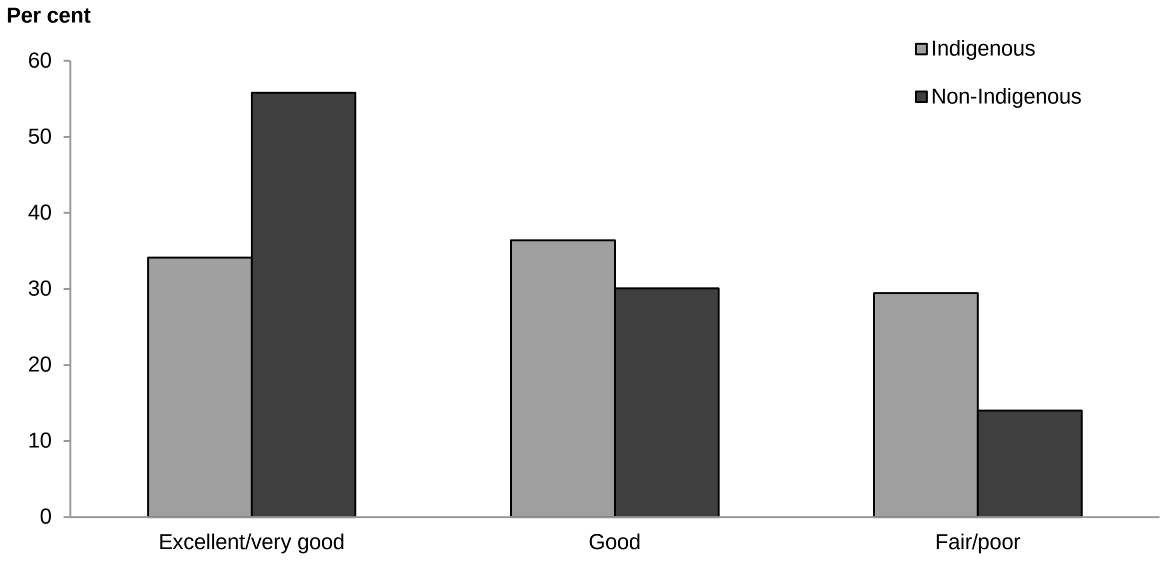
- An estimated 39% of Indigenous Australians reported their health status as being excellent/very good. An estimated 37% reported their health status as being good, and 24% reported their health status as being fair/poor.
  - After adjusting for age, the proportion of Indigenous Australians reporting their health as fair/poor was twice that of non-Indigenous Australians (Table 1.17.1, Figure 1.17.1).
- Indigenous Australians living in *Remote* (which is the combination of both *Remote* and *Very remote*) areas were less likely to report their health status as fair/poor (20%) compared with those in *Non-remote* areas (25%). The proportion of Indigenous Australians who reported their health status as excellent/very good was similar across *Remote* and *Non-remote* areas (38% and 40% respectively) (ABS 4727.0.55.006 Table 2.3).

Trend

Between 2004–05 and 2012–13 among people aged 15 and over:

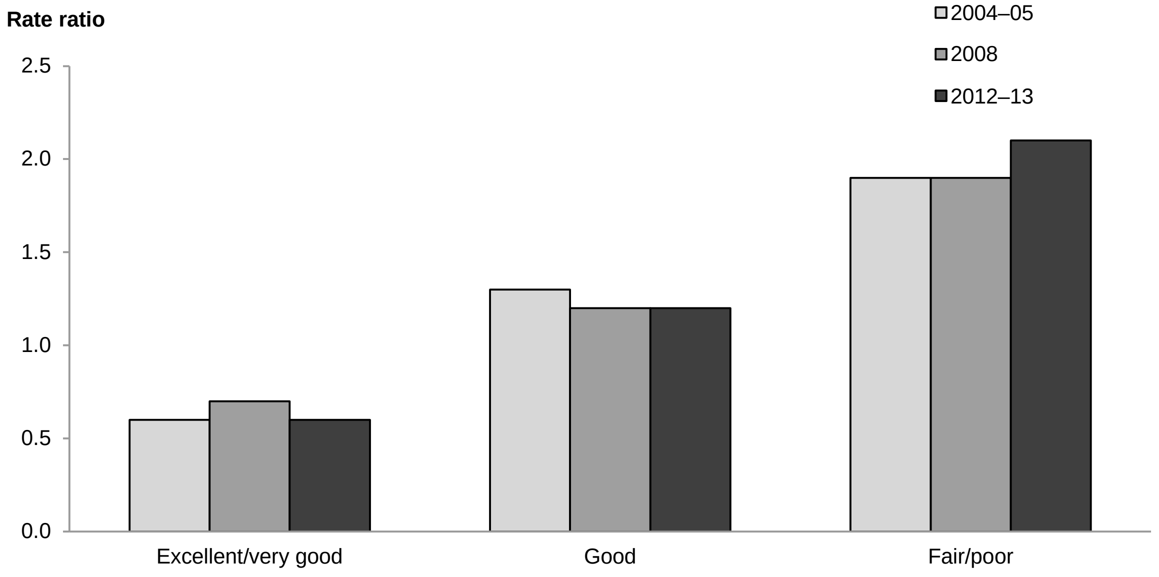
- The proportion of Indigenous Australians who rated their health as excellent/very good was 43% in 2004–05 and 39% in 2012–13. The proportion who rated their health as good was 35% in 2004–05 and 37% in 2012–13. The proportion who rated their health as fair/poor was 22% in 2004–05 and 24% in 2012–13 (Table 1.17.1).
- The proportion of Indigenous Australians who reported their health status as excellent/very good was 0.6 times as high as for non-Indigenous Australians in both 2004–05 and 2012–13.

- The proportion of Indigenous Australians who reported their health status as fair/poor was 1.9 times as high as for non-Indigenous Australians in 2004–05, and 2.1 times as high in 2012–13 (Table 1.17.1, Figure 1.17.2).



Source: Table 1.17.1.

Figure 1.17.1: Self-assessed health status (age-standardised) by Indigenous status, persons aged 15 and over, 2012–13



Source: Table 1.17.1.

Figure 1.17.2: Self-assessed health status, Indigenous to non-Indigenous rate ratio, 2004–05, 2008 and 2012–13

Table 1.17.1: Self-assessed health status, by age and Indigenous status, 2004–05, 2008 and 2012–13[a]

	0–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total non-age-std. 15 and over	Total age-std. 15 and over	Rate ratio[b]	Total persons non-age-std.	Total persons age-std.
2012–13							**Per cent**					
Indigenous												
Excellent	. .	. .	20.3	12.6	9.8	5.9	6.2	12.6	10.4	0.5	. .	. .
Very good	. .	. .	33.6	30.6	26.1	19.0	14.1	26.7	23.7	0.7	. .	. .
Subtotal excellent/very good	. .	. .	*53.8*	*43.2*	*35.9*	*24.9*	*20.3*	*39.3*	*34.1*	*0.6*	. .	. .
Good	. .	. .	35.3	37.1	39.0	36.7	34.8	36.5	36.4	1.2	. .	. .
Fair	. .	. .	8.6	14.9	17.6	27.0	30.3	17.4	20.7	2.0	. .	. .
Poor	. .	. .	2.3	4.8	7.5	11.4	14.6	6.9	8.7	2.3	. .	. .
Subtotal fair/poor	. .	. .	*10.9*	*19.7*	*25.1*	*38.4*	*44.9*	*24.2*	*29.4*	*2.1*	. .	. .
Total	**. .**	**. .**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**. .**	**. .**	**. .**
Total number	**. .**	**. .**	**127,722**	**86,720**	**77,855**	**60,002**	**56,642**	**408,941**	**. .**	**. .**	**. .**	**. .**
Non-Indigenous												
Excellent	. .	. .	22.4	22.4	22.3	19.0	14.3	19.3	19.6	0.5	. .	. .
Very good	. .	. .	39.8	41.2	37.2	36.2	30.2	36.0	36.3	0.7	. .	. .
Subtotal excellent/very good	. .	. .	*62.2*	*63.6*	*59.5*	*55.2*	*44.5*	*55.3*	*55.8*	*0.6*	. .	. .
Good	. .	. .	29.0	28.8	29.4	30.4	32.0	30.2	30.1	1.2	. .	. .
Fair	. .	. .	7.4	6.0	8.9	10.0	16.2	10.6	10.3	2.0	. .	. .
Poor	. .	. .	1.4	1.6	2.2	4.5	7.3	3.9	3.8	2.3	. .	. .
Subtotal fair/poor	. .	. .	*8.8*	*7.6*	*11.1*	*14.4*	*23.5*	*14.5*	*14.0*	*2.1*	. .	. .
Total	**. .**	**. .**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**. .**	**. .**	**. .**
Total number	**. .**	**. .**	**2,956,621**	**3,154,927**	**3,086,648**	**2,979,308**	**5,444,648**	**17,622,152**	**. .**	**. .**	**. .**	**. .**

(continued)

Table 1.17.1 (continued): Self-assessed health status, by age and Indigenous status, 2004–05, 2008 and 2012–13[(a)]

	0–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total non-age-std. 15 and over	Total age-std. 15 and over	Rate ratio[(b)]	Total persons non-age-std.	Total persons age-std.
							95% confidence intervals (±)					
Indigenous												
Excellent	. .	. .	2.5	2.1	2.0	1.9	1.7	1.0	0.9	. .	. .	. .
Very good	. .	. .	2.9	3.1	2.8	2.8	2.3	1.4	1.3	. .	. .	. .
Subtotal excellent/very good	. .	. .	*3.0*	*3.2*	*2.9*	*3.3*	*2.6*	*1.5*	*1.5*	. .	. .	. .
Good	. .	. .	2.9	3.1	3.2	4.0	3.2	1.5	1.5	. .	. .	. .
Fair	. .	. .	1.9	2.2	2.5	3.5	3.2	1.1	1.2	. .	. .	. .
Poor	. .	. .	1.0	1.5	1.8	2.5	2.7	0.8	1.0	. .	. .	. .
Subtotal fair/poor	. .	. .	*2.1*	*2.5*	*2.8*	*4.0*	*3.5*	*1.2*	*1.5*	. .	. .	. .
Non-Indigenous												
Excellent	. .	. .	2.0	1.6	1.6	1.5	0.9	0.7	0.7	. .	. .	. .
Very good	. .	. .	2.7	1.7	1.8	2.1	1.2	0.9	0.9	. .	. .	. .
Subtotal excellent/very good	. .	. .	*2.8*	*1.7*	*1.6*	*1.9*	*1.2*	*0.8*	*0.8*	. .	. .	. .
Good	. .	. .	2.6	1.6	1.5	1.9	1.3	0.8	0.8	. .	. .	. .
Fair	. .	. .	1.1	0.8	1.1	1.0	0.9	0.4	0.4	. .	. .	. .
Poor	. .	. .	0.6	0.5	0.6	0.8	0.7	0.3	0.3	. .	. .	. .
Subtotal fair/poor	. .	. .	*1.2*	*1.0*	*1.2*	*1.1*	*1.1*	*0.5*	*0.5*	. .	. .	. .

(continued)

Table 1.17.1 (continued): Self-assessed health status, by age and Indigenous status, 2004–05, 2008 and 2012–13[(a)]

	0–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total non-age-std. 15 and over	Total age-std. 15 and over	Rate ratio[(b)]	Total persons non-age-std.	Total persons age-std.
2008							**Per cent**					
Indigenous												
Excellent	52.0	43.5	25.2	16.4	12.7	10.6	5.7	16.2	13.2	0.6	27.4	20.0
Very good	30.2	33.3	32.8	33.4	26.1	19.0	16.4	27.5	24.7	0.7	29.3	26.3
Subtotal excellent/very good	*82.2*	*76.8*	*58.0*	*49.8*	*38.7*	*29.6*	*22.0*	*43.7*	*37.9*	*0.7*	*56.7*	*46.3*
Good	15.3	18.8	32.2	35.1	37.6	34.2	31.3	34.0	33.9	1.2	27.9	30.6
Fair	1.8	3.5	7.6	10.7	18.0	22.6	26.5	14.9	18.0	1.7	10.5	14.9
Poor	0.7†	0.9†	2.1	4.4	5.7	13.6	20.2	7.3	10.2	2.6	4.9	8.3
Subtotal fair/poor	*2.5*	*4.3*	*9.8*	*15.1*	*23.7*	*36.2*	*46.7*	*22.2*	*28.2*	*1.9*	*15.4*	*23.2*
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**. .**	**100.0**	**100.0**
Total number	**66,090**	**127,159**	**103,780**	**69,931**	**63,851**	**46,912**	**42,627**	**327,101**	**. .**	**. .**	**520,350**	**. .**
Non-Indigenous												
Excellent	. .	. .	26.9	24.8	22.7	19.3	13.7	20.5	20.7	0.6	n.a.	n.a.
Very good	. .	. .	40.8	39.5	38.5	36.3	28.3	35.6	35.9	0.7	n.a.	n.a.
Subtotal excellent/very good	*. .*	*. .*	*67.7*	*64.2*	*61.2*	*55.6*	*42.1*	*56.1*	*56.6*	*0.7*	*n.a.*	*n.a.*
Good	. .	. .	25.8	28.1	28.3	28.8	31.7	28.9	28.8	1.2	n.a.	n.a.
Fair	. .	. .	5.3	6.6	7.8	11.5	18.0	10.9	10.6	1.7	n.a.	n.a.
Poor	. .	. .	1.2†	1.1	2.7	4.2	8.2	4.1	3.9	2.6	n.a.	n.a.
Subtotal fair/poor	*. .*	*. .*	*6.5*	*7.7*	*10.5*	*15.7*	*26.2*	*15.0*	*14.5*	*1.9*	*n.a.*	*n.a.*
Total	**. .**	**. .**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**. .**	**n.a.**	**n.a.**
Total number	**. .**	**. .**	**2,783,949**	**2,819,126**	**2,987,518**	**2,864,016**	**4,919,592**	**16,374,202**	**. .**	**. .**	**n.a.**	**n.a.**

(continued)

Table 1.17.1 (continued): Self-assessed health status, by age and Indigenous status, 2004–05, 2008 and 2012–13[(a)]

	0–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total non-age-std. 15 and over	Total age-std. 15 and over	Rate ratio[(b)]	Total persons non-age-std.	Total persons age-std.
							95% confidence intervals (±)					
Indigenous												
Excellent	3.6	2.9	3.0	2.6	2.7	3.0	1.9	1.3	1.2	. .	1.3	1.1
Very good	3.3	2.8	2.9	3.7	3.5	3.3	3.4	1.7	1.7	. .	1.6	1.6
Subtotal excellent/very good	*3.1*	*2.3*	*3.2*	*3.8*	*3.9*	*4.0*	*3.8*	*1.9*	*1.8*	. .	*1.4*	*1.4*
Good	2.9	2.0	3.2	3.4	4.0	4.6	4.2	1.9	2.1	. .	1.4	1.7
Fair	0.7	0.9	2.0	2.3	3.3	3.5	3.8	1.2	1.7	. .	0.8	1.4
Poor	0.5	0.5	1.0	1.6	1.7	3.7	3.6	0.9	1.4	. .	0.6	1.2
Subtotal fair/poor	*0.9*	*1.1*	*2.3*	*2.7*	*3.4*	*4.6*	*4.5*	*1.5*	*2.1*	. .	*1.0*	*1.8*
Non-Indigenous												
Excellent	. .	. .	2.4	2.3	2.0	1.7	1.2	0.9	0.9	. .	n.a.	n.a.
Very good	. .	. .	2.5	2.4	2.1	2.3	1.3	0.8	0.8	. .	n.a.	n.a.
Subtotal excellent/very good	. .	. .	*2.7*	*2.4*	*2.0*	*2.6*	*1.6*	*1.0*	*1.0*	. .	*n.a.*	*n.a.*
Good	. .	. .	2.6	2.3	2.1	2.4	1.7	1.0	1.0	. .	n.a.	n.a.
Fair	. .	. .	1.3	1.5	1.1	1.6	1.2	0.6	0.6	. .	n.a.	n.a.
Poor	. .	. .	0.6	0.5	0.7	1.1	1.0	0.4	0.4	. .	n.a.	n.a.
Subtotal fair/poor	. .	. .	*1.4*	*1.5*	*1.2*	*1.9*	*1.5*	*0.7*	*0.7*	. .	*n.a.*	*n.a.*

(continued)

Table 1.17.1 (continued): Self-assessed health status, by age and Indigenous status, 2004–05, 2008 and 2012–13[(a)]

	0–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total non-age-std. 15 and over	Total age-std. 15 and over	Rate ratio[(b)]	Total persons non-age-std.	Total persons age-std.
2004–05							**Per cent**					
Indigenous												
Excellent	. .	. .	23	12	10	7	5	14	11	0.5	. .	. .
Very good	. .	. .	36	37	28	18	14	30	25	0.7	. .	. .
Subtotal excellent/very good	. .	. .	*59*	*49*	*38*	*25*	*19*	*43*	*36*	*0.6*	. .	. .
Good	. .	. .	32	36	38	38	32	35	35	1.3	. .	. .
Fair	. .	. .	8	12	18	24	31	16	20	1.8	. .	. .
Poor	. .	. .	1†	3	6	12	19	6	10	2.2	. .	. .
Subtotal fair/poor	. .	. .	*9*	*15*	*24*	*36*	*50*	*22*	*29*	*1.9*	. .	. .
Total	**. .**	**. .**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**. .**	**. .**
Total number	**. .**	**. .**	**92,067**	**69,772**	**59,057**	**39,578**	**33,167**	**293,641**	**293,641**	**. .**	**. .**	**. .**
Non-Indigenous												
Excellent	. .	. .	31	24	22	19	13	21	21	0.5	. .	. .
Very good	. .	. .	39	40	40	36	28	35	36	0.7	. .	. .
Subtotal excellent/very good	. .	. .	*70*	*64*	*62*	*55*	*41*	*56*	*57*	*0.6*	. .	. .
Good	. .	. .	24	28	27	29	30	28	28	1.3	. .	. .
Fair	. .	. .	6	7	9	11	19	11	11	1.8	. .	. .
Poor	. .	. .	1	2	2	5	9	4	4	2.2	. .	. .
Subtotal fair/poor	. .	. .	*7*	*9*	*11*	*16*	*28*	*16*	*15*	*1.9*	. .	. .
Total	**. .**	**. .**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**. .**	**. .**
Total number	**. .**	**. .**	**2,636,199**	**2,761,354**	**2,899,566**	**2,705,580**	**4,529,678**	**15,532,377**	**15,532,377**	**. .**	**. .**	**. .**

(continued)

Table 1.17.1 (continued): Self-assessed health status, by age and Indigenous status, 2004–05, 2008 and 2012–13[(a)]

	0–4	5–14	15–24	25–34	35–44	45–54	55 and over	Total non-age-std. 15 and over	Total age-std. 15 and over	Rate ratio[(b)]	Total persons non-age-std.	Total persons age-std.
							95% confidence intervals (±)					
Indigenous												
Excellent	. .	. .	3.7	2.5	2.7	2.2	2.0	1.5	1.2	. .	. .	. .
Very good	. .	. .	4.0	4.5	3.8	3.8	3.5	2.1	1.8	. .	. .	. .
Subtotal excellent/very good	. .	. .	*4.4*	*4.4*	*4.0*	*4.1*	*3.9*	*2.3*	*2.0*	. .	. .	. .
Good	. .	. .	4.0	3.8	4.0	4.4	6.0	2.0	2.3	. .	. .	. .
Fair	. .	. .	2.1	2.1	3.2	3.9	5.1	1.4	1.8	. .	. .	. .
Poor	. .	. .	0.5	1.1	1.7	3.3	5.0	0.9	1.7	. .	. .	. .
Subtotal fair/poor	. .	. .	*2.2*	*2.5*	*3.9*	*4.5*	*5.9*	*1.7*	*2.2*	. .	. .	. .
Non-Indigenous												
Excellent	. .	. .	2.0	2.0	1.5	1.8	1.0	0.7	0.8	. .	. .	. .
Very good	. .	. .	2.3	2.3	2.0	1.8	1.5	0.8	0.8	. .	. .	. .
Subtotal excellent/very good	. .	. .	*2.3*	*2.4*	*1.8*	*2.2*	*1.6*	*0.9*	*0.9*	. .	. .	. .
Good	. .	. .	1.9	2.1	1.4	2.0	1.2	0.7	0.7	. .	. .	. .
Fair	. .	. .	1.1	1.1	1.2	1.4	1.1	0.5	0.5	. .	. .	. .
Poor	. .	. .	0.5	0.6	0.5	0.9	0.9	0.3	0.3	. .	. .	. .
Subtotal fair/poor	. .	. .	*1.2*	*1.3*	*1.2*	*1.5*	*1.3*	*0.6*	*0.6*	. .	. .	. .

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Data for Indigenous children aged 0–14 years, and for some young people aged 15–17, were obtained from an adult proxy. For the majority of Indigenous and non-Indigenous people aged 15 years and over, responses were self-reported.

(b) The rate ratio is calculated by dividing the rate for Indigenous people by the corresponding rate for non-Indigenous people.

Source: ABS and AIHW analysis of 2004–05 National Aboriginal and Torres Strait Islander Health Survey, 2004–05 National Health Survey, 2008 National Aboriginal and Torres Strait Islander Social Survey, 2007–08 National Health Survey, 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011-12 Australian Health Survey.

Table 1.17.2: Self-assessed health status, by selected socioeconomic and health characteristics, Indigenous persons aged 15 and over, 2012–13

	Self-assessed health status[(a)]			Total		Overall population distribution
	Excellent/ very good	Good	Fair/ poor			
	Percent[(b)]			Percent[(b)]	Number	Percent[(c)]
SEIFA[(d)]						
1st quintile (most disadvantaged)	36.0	37.1	26.9	100.0	214,140	52.4
5th quintile (most advantaged)	52.8	31.7	15.5	100.0	17,168	4.2
Ratio most disadvantaged/most advantaged	0.7*	1.2*	1.7*	1.0	12.5	12.5
Employment						
Employed	46.4	38.1	15.5	100.0	186,246	45.5
Unemployed	39.8	36.4	23.8	100.0	48,692	11.9
Not in the labour force	31.5	34.8	33.7	100.0	174,003	42.5
Ratio unemployed/employed	0.9*	1.0*	1.5*	1.0	0.3	0.3
Has non-school qualification[(e)]						
Yes	39.6	37.0	23.5	100.0	166,000	40.6
No	39.1	36.2	24.7	100.0	242,941	59.4
Ratio no/yes	1.0*	1.0*	1.1*	1.0	1.5	1.5
Highest year of school completed						
Year 12	49.1	36.3	14.6	100.0	101,295	24.8
Year 9 or below[(f)]	28.6	35.9	35.5	100.0	121,511	29.7
Ratio Year 9 or below/Year 12	0.6*	1.0	2.4*	1.0	1.2	1.2
Smoker status						
Current smoker[(g)]	33.0	39.7	27.3	100.0	178,720	43.7
Non-smoker[(h)]	44.1	34.1	21.8	100.0	230,221	56.3
Ratio smoker/non-smoker	0.7*	1.2*	1.3*	1.0	0.8	0.8
Adequate daily vegetable intake[(i)]						
Yes	42.4	36.1	21.5	100.0	19,633	4.8
No	39.1	36.5	24.4	100.0	389,308	95.2
Ratio no/yes	0.9*	1.0	1.1*	1.0	19.8	19.8
Adequate daily fruit intake[(j)]						
Yes	44.3	35.5	20.2	100.0	171,847	42.0
No	35.6	37.2	27.1	100.0	237,094	58.0
Ratio no/yes	0.8*	1.1*	1.3*	1.0	1.4	1.4
Obese[(k)]						
Yes	28.1	40.4	31.5	100.0	128,145	37.4
No	46.0	34.3	19.8	100.0	214,639	62.6
Ratio yes/no	0.6*	1.2*	1.60*	1.0	0.6	0.6
Total number[(l)]	*134,659*	*125,310*	*82,815*	*342,783*	*342,783*	*342,783*
Total[(l)]	**39.3**	**36.5***	**24.2***	**100.0**	**408,941**	**100.0**
Total number of persons 15+	**160,545**	**149,335**	**99,060**	**408,941**	**408,941**	**408,941**

(continued)

Table 1.17.2 (continued): Self-assessed health status, by selected socioeconomic and health characteristics, Indigenous persons aged 15 and over, 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Overall population distribution columns not tested.

(a) Self-reported data, persons 15 years and over.

(b) Percentages add within rows.

(c) Distribution of total population.

(d) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(e) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED)(includes e.g. Bachelor degree or higher, diploma, advanced diploma, certificate).

(f) Year 9 or below includes never attended school.

(g) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(h) Includes ex-smoker and those who have never smoked.

(i) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 years and over, with the exception of 18–49 year old males who eat 6 serves.

(j) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 9 years and over.

(k) Body Mass Index greater than 30.0 for people aged 18 years and over. For information on the calculation of BMI scores for people aged 15–17 years, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001).

(l) Reference category for statistical testing: ‘Excellent/very good health’.

Note: Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.17.3: Selected household and health risk factors, by self-assessed health status Indigenous persons (15 and over), 2012–13

	Self-assessed health status[a]					Overall population distribution
	Excellent/ very good	Good	Fair/poor		Total	
	Per cent[b]			Per cent[b]	Number	Per cent[c]
Equivalised household income[d]						
1st quintile (lowest)	31.9	36.5	31.6	100.0	140,304	42.7
4th/5th quintile (highest)	45.6	37.9	16.5	100.0	55,728	17.0
Ratio lowest/highest	0.7*	0.96*	1.9*	1.0	2.5	2.5
Total number	**127,179**	**119,291**	**82,220**	. .	**328,690**	**328,690**
Financial stress - whether household could raise $2,000 in an emergency[d]						
Yes	46.6	35.1	18.3	100.0	177,097	46.2
No	32.9	36.7	30.4	100.0	206,614	53.8
Ratio yes/no	1.4*	1.0	0.6*	1.0	0.9	0.9
Total number	**150,483**	**137,910**	**95,318**	. .	**383,711**	**383,711**
Household had day/s without money for basic living expenses in last 12 months						
Yes	32.6	35.7	31.7	100.0	164,764	40.5
No	43.5	36.3	20.2	100.0	241,932	59.5
Ratio yes/no	0.7*	0.98*	1.6*	1.0	0.7	0.7
Total number	**158,903**	**146,622**	**101,171**	. .	**406,696**	**406,696**
Housing tenure type[e]						
Owner	43.8	34.6	21.6	100.0	124,490	30.6
Renter	37.1	36.7	26.2	100.0	281,001	69.0
Ratio renter/owner	0.8*	1.1*	1.2*	1.0	2.3	2.3
Total number	**159,218**	**146,622**	**101,171**	. .	**407,011**	**407,011**
Lives in overcrowded household[f]						
Yes	41.2	38.8	20.1	100.0	81,548	20.1
No	38.5	35.4	26.1	100.0	325,148	79.9
Ratio yes/no	1.1*	1.1*	0.8*	1.0	0.3	0.3
Total number	**158,903**	**146,622**	**101,171**	. .	**406,696**	**406,696**
Alcohol consumption						
Abstained from alcohol in last 12 months[g]	38.9	34.8	26.2	100.0	108,024	26.4
Short-term/single occasion risk[h]						
Yes	40.1	36.2	23.6	100.0	219,176	53.6
No	38.3	36.4	25.4	100.0	74,582	18.2
Ratio yes/no	1.0	1.0	0.9	1.0	2.9	2.9

(continued)

Table 1.17.3 (continued): Selected household and health risk factors, by self-assessed health status Indigenous persons (15 and over), 2012–13

	Self-assessed health status[(a)]					
	Excellent/ very good	**Good**	**Fair/poor**		**Total**	**Overall population distribution**
	Per cent[(b)]			**Per cent[(b)]**	**Number**	**Per cent[(c)]**
Physical activity[(i)(j)]						
Met guidelines	44.1	34.8	21.1	100.0	117,125	41.4
Did not meet guidelines	32.0	35.6	32.3	100.0	165,910	58.6
Ratio did not meet/met guidelines	0.7*	1.02*	1.5*	1.0	1.4	1.4
Total number	**104,767**	**99,900**	**78,368**	**. .**	**283,035**	**100.0**
Total number of persons 15+	**160,316**	**147,333**	**101,292**	**. .**	**408,941**	**408,941**

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested. For Alcohol consumption, 'Abstained' was also tested against those who did not have 'Short term/single occasion risk'. Overall population distribution and Total columns not tested.

(a) Self-reported data, persons 15 years and over.

(b) Percentages add within rows.

(c) Distribution of total Indigenous population. Percentages add within columns.

(d) Excludes 'not known'.

(e) Total includes 'other' and 'life tenure scheme'.

(f) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(g) Abstainer includes those who have never consumed alcohol.

(h) Includes those who drank alcohol. Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(i) Physical activity data collected from persons 18 years and over; and non-remote areas only. Did not meet guidelines includes don't know responses.

(j) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.17.4: Self-assessed health status, by long-term conditions and Indigenous status, persons aged over 15 years, 2012–13

	Number of long term health conditions[(a)(b)]				
	0	**1**	**2**	**3+**	**Total**
			Per cent[(c)]		
Indigenous Australians					
Excellent/very good	46.0	47.0	36.5	25.1	34.0
Good	42.4	38.5	40.7	35.7	35.8
Fair/poor	11.6‡	14.6*	22.8*	39.2*	30.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Total number	**79,908**	**76,185**	**63,404**	**189,444**	**408,941**
Non-Indigenous Australians					
Excellent/very good	76.9	71.4	64.8	44.9	56.4
Good	20.0	23.3	28.6	34.5	29.8
Fair/poor	3.0	5.3*	6.6*	20.6*	13.8
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Total number	**2,437,253**	**3,393,987**	**3,181,580**	**8,582,489**	**17,595,309**

* Represents statistically significant differences at the $p < 0.05$ level. For those with 'Fair/poor' self-assessed health status, differences between percentages were tested between and 1 and 0 long term health conditions using 0 as the reference category, between 2 and 1 using 1 as the reference category and between 3+ and 2 using 2 as the reference category.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for six months or more.

(b) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(c) Percentages add within columns.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Data quality issues

National Aboriginal and Torres Strait Islander Social Survey

The NATSISS is conducted in all states and territories and includes *Remote* and *Non-remote* areas. The 2008 survey was undertaken between August 2008 and April 2009, with a sample size of 13,300 persons (5,500 aged 0–14 and 7,800 aged 15 and over) in 6,900 households, and a response rate of 82% of households. Up to 3 randomly selected Indigenous Australians were chosen from selected households to participate in the survey. Trained ABS interviewers conducted the survey using face-to-face interviews. In *Non-remote* areas interviewers used a notebook computer to record responses, while in *Remote* areas a paper questionnaire was used. Interviewers obtained the consent of a parent or guardian before interviewing those aged 15–17. Indigenous persons usually resident in non-private dwellings, such as hotels, motels, hostels, hospitals, short-stay caravan parks, prisons and other correctional facilities were excluded.

The NATSISS uses the standard Indigenous status question. The NATSISS sample was specifically designed to select a representative sample of Indigenous Australians.

As with other surveys, the NATSISS is subject to sampling and non-sampling errors.

Care has been taken to ensure that the results of this survey are as accurate as possible. Trained ABS officers conducted all interviews. However, some factors may affect the reliability of the data.

Information recorded in this survey is 'as reported' by respondents, and therefore may differ from information available from other sources or collected using different methodologies.

Data on health-related indicators have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the states and territories and the Indigenous and non-Indigenous population.

Time series comparisons for the 2008 survey are available through the 1994 National Aboriginal and Torres Strait Islander Survey and the 2002 NATSISS. However not all data elements align across the 3 (1994, 2001 and 2008) NATSISS surveys, hence care is required when reviewing results across the 3 surveys.

There are no strictly comparable non-Indigenous results available for the 2008 NATSISS. Where possible, the ABS has provided recommendations for non-Indigenous data comparisons (such as the 2007–08 National Health Survey) and these have been adopted in this report.

The 2008 NATSISS had a relatively large level of under-coverage when compared with other ABS surveys. There was also an increase in under-coverage compared to previous ABS Indigenous surveys. For example, the estimated under-coverage in the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) was 42%. The overall under-coverage rate for the 2008 NATSISS was approximately 53% of the in-scope population at the national level. This rate varied across the states and territories (ABS 2010).

Further information on NATSISS data quality issues can be found in the *National Aboriginal and Torres Strait Islander Social Survey: User's guide, 2008* (ABS 2010).

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Australian Health Survey

The Australian Health Survey (AHS) combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) together with 2 new elements: a National Nutrition and Physical Activity Survey (NNPAS) and a National Health Measures Survey (NHMS).

For more information see:

- National Health Survey <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4363.0.55.001Main+Features1 2011-13?OpenDocument>.
- National Aboriginal and Torres Strait Islander Health Survey <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4715.0/>.
- National Nutrition and Physical Activity Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.007~2011-12~Main%20Features~About%20the%20National%20Nutrition%20and%20Physical%20Activity%20Survey~731>.
- National Health Measures Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.005Chapter1102011-12>.

List of symbols used in tables

n.a.	not available
–	rounded to zero (including null cells)
0	zero
. .	not applicable
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 18 of 68

Detailed analyses

1.18 Social and emotional wellbeing

This measure reports on the social and emotional wellbeing of Aboriginal and Torres Strait Islander people expressed as a percentage by age group, age-standardised rate and ratio

Introduction

This is no. 18 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data sources

- Australian Aboriginal and Torres Strait Islander Health Survey
- National Aboriginal and Torres Strait Islander Social Survey
- Western Australian Aboriginal Child Health Survey
- Bettering the Evaluation and Care of Health survey
- National Hospital Morbidity Database
- National Mortality Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Age-standardised rates and ratios have been used as a measure of the Indigenous population relative to other Australians. Ratios of this type illustrate differences between the rates among Indigenous Australians and those of other Australians, taking into account differences in age distributions.

Time series analyses may be affected by changes in the quality of Indigenous identification over time.

For more information related to social and emotional wellbeing, see measures 1.03 and 1.13. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Psychological distress and life stressors, see tables 1.18.1–8
- Psychological and emotional well-being of children, see tables 1.18.9–11
- Mental health related mortality rates, see tables 1.18.12–13
- Hospitalisation rates for mental health related conditions, see tables 1.18.14–22
- Mental health problems managed by general practitioners see Table 1.18.23
- Intentional self-harm mortality rates, see tables 1.18.24–27.

Links with culture and family

Current period

In 2012–13 for Indigenous Australians aged 18 and over:

- An estimated 63% reported that they identified with a clan or language group, 73% recognised an area as homelands/traditional country and 86% felt accepted by other Indigenous Australians (Table 1.18.1).
- An estimated 54% reported that they and/or a relative had been removed from their natural family. Individuals removed from their natural family were more likely to have high/very high levels of psychological distress (35%) than those who were neither removed nor had relatives removed (26%) (Table 1.18.5).

In 2008:

- An estimated 89% of Indigenous Australians reported that they could get support from outside the household in times of crises, and and estimated 89% reported that they had been involved in social activities in the last 3 months (Table 1.13.4).

Psychological distress

Current period

In 2012–13:

- 30% of Indigenous Australians aged 18 and over experienced high/very high levels of psychological distress.
- After adjusting for age, Indigenous Australians were 2.7 times as likely as non-Indigenous Australians to experience high/very high levels of psychological distress (tables 1.18.2–3).

Life stressors

Current period

In 2012–13:

- An estimated 74% of Indigenous Australians aged 15 years and over reported that they, their family or close friends had experienced at least one stressor in the previous 12 months (Table 1.18.4).
- The most common stressors reported were death of a family member or close friend (37%), serious illness (23%), inability to get a job (23%), mental illness (16%), or alcohol or drug-related problems (18%) (ABS 4727.0.55.001: Table no. 19.3).
- Indigenous Australians in *Remote* areas were less likely than those in *Non-remote* areas to have experienced stressors in the previous 12 months (69% compared with 75%) (Table 1.18.4).

Depression and racism

Current period

In 2012–13:

- An estimated 16% of Indigenous Australians reported that they felt they had been treated badly in the last 12 months because they were Indigenous. Rates of psychological distress were higher for this group (47%) than for those who reported that they had not been treated badly (27%) (Table 1.18.5).

Social and emotional wellbeing of children

Current period

In 2011:

- Wave 4 of the Longitudinal Study of Indigenous Children found that Indigenous boys had an average behavioural and emotional difficulties score of 13, and Indigenous girls had a score of 11.4 (LSIC 2013). These scores were higher than scores obtained from studies of the general population (ranging from 9 to 9.9 for boys and 7.5 to 7.7 for girls (Hawes & Dadds 2004; Mellor 2005). Caution should be used in comparing these studies as they covered different geographies and ages.

Mental health conditions

Current period

In 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There were 347 deaths of Indigenous Australians from mental health-related conditions. After adjusting for age, the mental health related mortality rate for Indigenous Australians was 1.2 times that for non-Indigenous Australians (49 per 100,000 compared with 40 per 100,000). The rate difference between Indigenous and non-Indigenous Australians was 9 per 100,000 (tables 1.18.12–13).

In the period July 2011 to June 2013:

- The rate of hospitalisations for mental health related conditions was 24 per 1,000 for Indigenous Australians. After adjusting for age, the rate for Indigenous Australians was almost twice the rate for non-Indigenous Australians. The rate difference was 14 per 1,000 (Table 1.18.15).

In the period April 2008–March 2009 to April 2012–March 2013:

- About 11% of problems managed by GPs in encounters with Indigenous patients were mental health related problems, a management rate of 176 per 1,000 encounters. After adjusting for age, GPs managed mental health related problems in encounters with Indigenous patients at 1.3 times the rate for other Australians.
  - The age-adjusted management rate was higher in encounters with Indigenous patients compared with other patients for the specific problems of drug abuse (9.8 compared with 3.4 per 1,000 encounters), alcohol abuse (15.4 compared wiith 3.8 per 1,000 encounters), tobacco abuse (16.3 compared with 7.6 per 1,000 encounters) and schizophrenia (10.0 compared with 4.5 per 1,000 encounters) (Table 1.18.23).

Trend

From 1998–99 to 2012–13 in Queensland, Western Australia, South Australia and the Northern Territory combined:

- The rate of hospitalisations for mental health conditions for Indigenous Australians increased by 50% (from 20 to 31 per 1,000). The rate for non-Indigenous Australians changed little. The rate difference between Indigenous and non-Indigenous Australians increased by 188%, from 7 to 16 per 1,000 (Figure 1.18.1, Table 1.18.21).

From 2004–05 to 2012–13 in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The rate of hospitalisations for mental health conditions for Indigenous Australians increased by 40% (from 21 to 30 per 1,000) and the rate difference increased by 144% (from 7 to 15 per 1,000) (Table 1.18.22).

Suicide

Current period

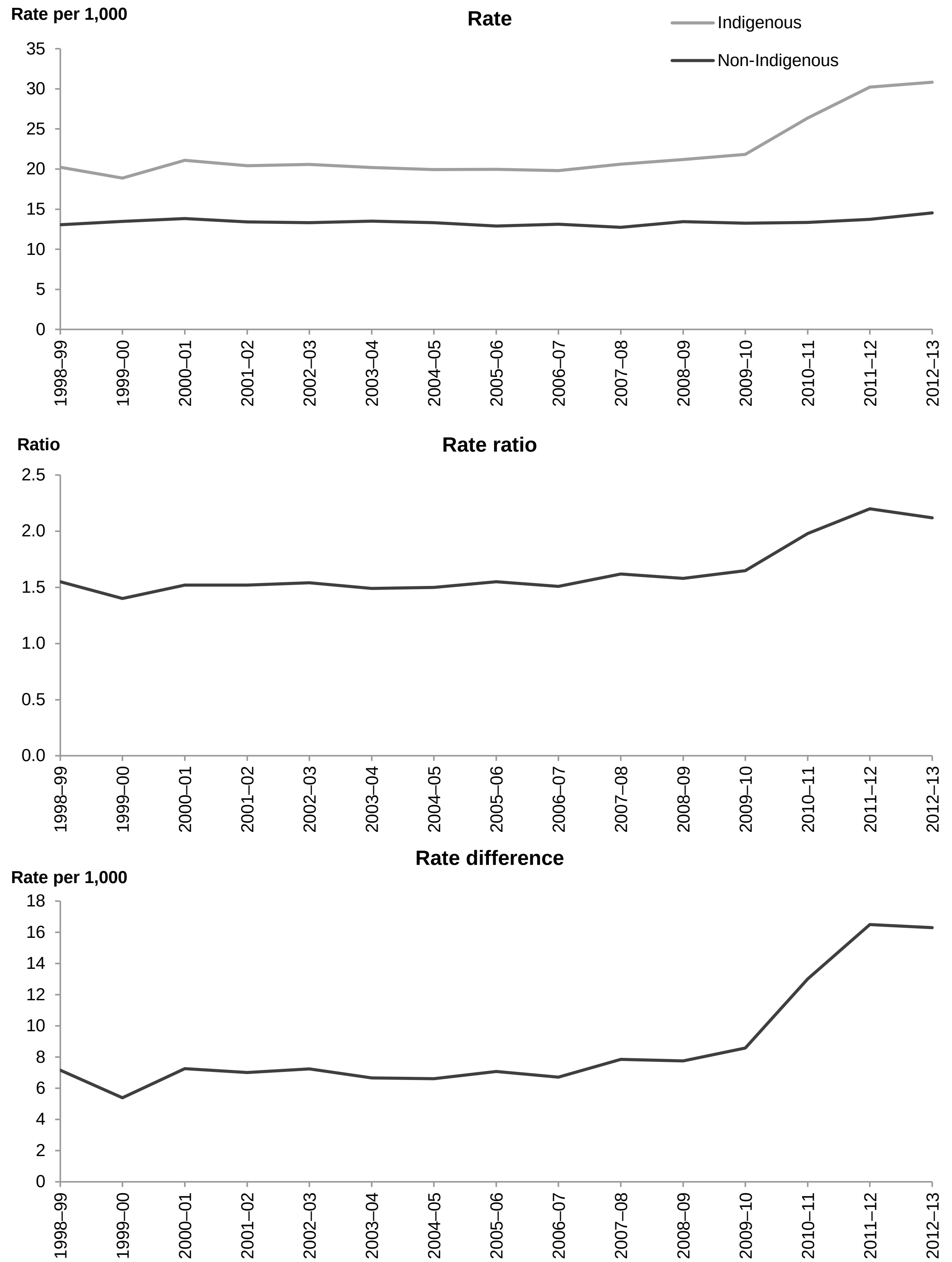
In 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There were 561 suicides, representing just under 5% of Indigenous Australian deaths (Table 1.03.1).
- The mortality rate from suicide (intentional self-harm) among Indigenous Australians was 19 per 100,000. After adjusting for age, the rate for Indigenous Australians was nearly twice as high as for non-Indigenous Australians. The gap was 10 per 100,000.
- Among Indigenous Australians aged 15–19, the suicide rate was more than 5 times the rate for non-Indigenous Australians (Table 1.18.24).

Trend

From 1998 to 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There was no significant change in the suicide mortality rate for Indigenous Australians, and no significant change in the gap (Table 1.18.25).



Source: Table 1.18.21.

Figure 1.18.1: Age-standardised hospitalisation rates, rate ratios and rate differences from mental health related conditions, Qld, WA, SA and NT, 1998–99 to 2012–13

Table 1.18.1: Selected family and culture characteristics, by age group, Indigenous persons (18 and over), 2012–13

	Age group (years)					Sex		Remoteness			
	18–24	**25–34**	**35–44**	**45–54**	**55+**	**Males**	**Females**	**Non-remote**	**Remote**	**Overall population distribution**	
	Per cent[a]									**Number**	**Per cent[b]**
Removal from natural family[c]											
Individual removed from family (with or without relative(s))	8.6	11.3	14.8	17.5	22.3	12.7	15.5	14.7	12.4	44,223	14.1
Relative(s) only removed from family	41.3	41.9	41.6	37.7	33.5	38.7	40.6	42.9	28.9	124,234	39.7
Neither individual nor relative(s) removed from family	50.1	46.8	43.6	44.8	44.2	48.6	43.9	42.4	58.7	144,433	46.2
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	. .	*100.0*
Total number	*73,371*	*73,646*	*67,368*	*49,507*	*48,997*	*148,826*	*164,064*	*241,162*	*71,727*	*312,889*	. .
Identifies with tribal/language group or clan[d]											
Yes	53.7	62.9	67.3	69.8	63.0	61.6	64.0	57.8	80.4	226,368	62.8
No	46.3	37.1	32.5	30.2	36.8	38.3	35.9	42.1	19.5	133,512	37.1
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*360,202*	*100.0*
Recognises an areas as homelands/traditional country											
Yes	65.3	71.0	76.3	77.9	76.8	72.7	73.0	68.2	88.8	262,404	72.9
No	34.7	29.0	23.7	22.1	23.2	27.3	27.0	31.8	11.2	97,779	27.1
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*360,183*	*100.0*

(continued)

Table 1.18.1 (continued): Selected family and culture characteristics, by age group, Indigenous persons (18 and over), 2012–13

	Age group (years)					Sex		Remoteness		Overall population distribution	
	18–24	25–34	35–44	45–54	55+	Males	Females	Non-remote	Remote		
	Per cent[(a)]									Number	Per cent[(b)]
Satisfaction level with own knowledge of culture											
Very satisfied/satisfied	56.4	58.5	60.3	58.3	67.9	59.9	59.7	53.8	80.7	215,801	59.8
Neutral	24.4	17.6	16.8	14.2	13.0	18.9	16.6	20.0	9.7	63,975	17.7
Not very satisfied/not at all satisfied	19.1	23.9	22.9	27.6	19.1	21.1	23.7	26.2	9.5	81,004	22.5
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*360,781*	*100.0*
Whether proud of culture/being Aboriginal and/or Torres Strait Islander[(e)]											
Yes	96.7	96.1	96.9	97.5	97.7	96.8	97.0	96.4	98.4	349,512	96.9
No	3.3	3.9	3.1†	2.5†	2.3†	3.2	3.0	3.6	1.6†	11,269	3.1
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	. .	*100.0*
Total number	*83,199*	*85,319*	*77,037*	*59,426*	*55,801*	*175,100*	*185,682*	*279,930*	*80,851*	*360,781*	. .
Whether people you mix with know you are Aboriginal and/or Torres Strait Islander[(f)]											
No, hardly anybody/not many people	6.0	7.7	5.5	8.0	10.0	7.1	7.4	7.3	. .	20,327	7.3
Some people	11.1	11.6	10.9	14.1	13.0	13.7	10.4	12.0	. .	33,571	12.0
Yes, most people/everyone	82.4	79.8	82.5	77.3	76.5	78.3	81.7	80.0	. .	224,066	80.0
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	. .	*279,930*	*100.0*

(continued)

Table 1.18.1 (continued): Selected family and culture characteristics, by age group, Indigenous persons (18 and over), 2012–13

	Age group (years)					**Sex**		**Remoteness**		**Overall population distribution**	
	18–24	**25–34**	**35–44**	**45–54**	**55+**	**Males**	**Females**	**Non-remote**	**Remote**		
	Per cent(a)									**Number**	**Per cent(b)**
Whether people you meet for first time know you are Aboriginal and/or Torres Strait Islander(f)											
No, hardly anybody/not many people	56.6	52.9	45.5	45.5	45.5	49.4	50.2	49.8	. .	139,450	49.8
Some people	11.1	15.6	16.4	17.1	11.6	15.1	13.7	14.4	. .	40,174	14.4
Yes, most people/everyone	30.0	29.7	36.0	34.3	40.1	32.7	34.2	33.5	. .	93,739	33.5
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	. .	*279,930*	*100.0*
Whether feels accepted by other Aboriginal and/or Torres Strait Islander people(f)											
Yes	85.4	86.5	86.7	84.5	88.9	88.6	84.2	86.3	. .	241,609	86.3
No	14.6	13.5	13.3	15.5	11.1	11.4	15.8	13.7	. .	38,322	13.7
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	. .	. .	*100.0*
Total number	*65,823*	*64,769*	*59,482*	*46,381*	*43,475*	*135,435*	*144,495*	*279,930*	. .	*279,930*	. .
Whether felt treated badly because Aboriginal or Torres Strait Islander in last 12 months											
Yes	11.9	16.1	21.3	18.9	13.0	13.8	18.5	17.2	13.0	58,828	16.2
No	88.1	83.9	78.7	81.1	87.0	86.2	81.5	82.8	87.0	303,666	83.8
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	. .	*100.0*
Total number	*83,297*	*85,770*	*77,485*	*59,652*	*56,291*	*176,256*	*186,237*	*280,884*	*81,610*	*362,494*	. .
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**. .**	**100.0**
Total number	**84,649**	**86,720**	**77,855**	**60,002**	**56,642**	**178,787**	**187,081**	**283,035**	**82,833**	**365,868**	**. .**

(continued)

Table 1.18.1 (continued): Selected family and culture characteristics, by age group, Indigenous persons (18 and over), 2012–13

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Percentages add within columns.

(b) Distribution of total Indigenous population.

(c) Total excludes ‘don’t know’.

(d) Includes respondents who identified with tribal group, language group, a clan, a mission, or an Aboriginal/Torres Strait Islander regional group.

(e) Question asked differently between remote and non-remote areas.

(f) Non-remote only.

Notes

1. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.
2. Data excludes not stated responses and refusals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.18.2: Selected population characteristics of Indigenous persons (18 and over) reporting high levels of psychological distress 2012–13[(a)]

	Remoteness						Overall population distribution
	Non-remote		Remote		Australia		
	Number	Rate[(b)]	Number	Rate[(b)]	Number	Rate[(b)]	Per cent[(c)]
Age							
18–24	21,459	32.5	3,794	22.2	25,253	30.4	23.1
25–34	19,529	30.1	6,119	29.6	25,648	30.0	23.7
35–44	19,598	33.0	4,085	23.2	23,683	30.7	21.3
45–54	17,774	38.3	2,981	22.6	20,755	34.8	16.4
55+	11,408	26.1	2,388	19.2	13,797	24.6	15.5
Sex							
Males	34,438	25.4	7,934	19.9	42,372	24.1	48.9
Females	55,330	38.3	11,432	27.8	66,763	35.9	51.1
State/territory							
NSW	33,901	31.7	1,329†	23.6	35,230	31.3	31.1
Vic	8,444	32.4	. .	. .	8,444	32.4	7.2
Qld	26,783	33.4	4,374	22.0	31,157	31.2	27.5
SA	5,420	32.1	1,098†	30.6†	6,518	31.9	5.7
WA	8,900	32.7	5,126	26.6	14,026	30.2	13.0
Tas	3,498	27.2	81‡	13.1‡	3,579	26.5	3.7
NT	1,743	26.3	7,357	23.0	9,100	23.5	10.8
ACT	1,080	30.3	. .	. .	1,080	30.3	1.0
All	**. .**	**32.0**	**. .**	**23.9**	**. .**	**30.2**	**100.0**
Total number	**89,768**	**. .**	**19,366**	**. .**	**109,134**	**. .**	**365,868**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. High/very high is a score of 12–25.

(b) Indigenous persons aged 18 years and over reporting high levels of psychological distress per 100 Indigenous persons.

(c) Distribution of total population.

Notes

1. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.
2. Data excludes not stated responses.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.18.3: Persons (18 and over) reporting high levels of psychological distress, by Indigenous status, remoteness, age, sex and state/territory, 2012–13[a][b]

	Remoteness											Overall population distribution	
	Non-remote			Remote			Australia						
	Indigenous	Non-Indigenous	Rate ratio[c]	Indigenous	Non-Indigenous	Rate ratio[c]	Indigenous	Non-Indigenous	Rate ratio[c]	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	Rate[d]									Number		Per cent[e]	
Age[f]													
18–24	32.5	13.4	2.4	22.2	n.p.	. .	30.4	13.3	2.3	25,253	280,501	23.1	12.7
25–34	30.1	11.0	2.7	29.6	10.5†	2.8	30.0	11.0	2.7	25,648	346,013	23.7	18.8
35–44	33.0	11.2	2.9	23.2	12.1‡	1.9	30.7	11.2	2.7	23,683	342,670	21.3	18.4
45–54	38.3	11.2	3.4	22.6	14.4†	1.6	34.8	11.2	3.1	20,755	331,033	16.4	17.8
55+	26.1	9.3	2.8	19.2	14.5†	1.3	24.6	9.3	2.6	13,797	500,783	15.5	32.3
Sex													
Males	24.7	9.0	2.7	19.8	9.0†	2.2	23.6	9.0	2.6	42,372	737,359	48.9	49.3
Females	37.4	12.7	2.9	26.2	13.8†	1.9	35.0	12.7	2.8	66,763	1,063,641	51.1	50.7
State/territory													
NSW	30.9	10.0	3.1	22.9	0.0	. .	30.5	10.0	3.1	35,230	540,658	31.1	32.5
Vic	31.6	11.3	2.8	. .	. .	. .	31.6	11.3	2.8	8,444	480,768	7.2	25.7
Qld	33.0	11.5	2.9	20.7	14.7‡	1.4	30.3	11.5	2.6	31,157	371,662	27.5	19.6
SA	33.1	12.2	2.7	30.8	11.8†	2.6	32.8	12.3	2.7	6,518	150,317	5.7	7.4
WA	30.1	10.9	2.8	26.6	15.7†	1.7	28.9	11.0	2.6	14,026	187,655	13.0	10.2
Tas	27.3	9.9	2.8	n.p.	11.9†	. .	26.3	10.0	2.6	3,579	35,746	3.7	2.2
NT	25.7	8.3	3.1	20.8	8.1†	2.6	21.7	8.3	2.6	9,100	9,343	10.8	0.7
ACT	30.9	9.0	3.4	. .	. .	. .	30.9	9.0	3.4	1,080	24,851	1.0	1.6

(continued)

Table 1.18.3 (continued): Persons (18 and over) reporting high levels of psychological distress, by Indigenous status, remoteness, age, sex and state/territory, 2012–13(a)(b)

	Remoteness											Overall population distribution	
	Non-remote			Remote			Australia						
	Indigenous	Non-Indigenous	Rate ratio(c)	Indigenous	Non-Indigenous	Rate ratio(c)	Indigenous	Non-Indigenous	Rate ratio(c)	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	Rate(d)									Number		Per cent(e)	
All	**31.3**	**10.9**	**2.9**	**23.1**	**11.6**	**2.0**	**29.5**	**10.9**	**2.7**	**. .**	**. .**	**100.0**	**100.0**
Total number	**89,768**	**1,778,177**	**. .**	**19,366**	**22,823†**	**. .**	**109,134**	**1,800,999**	**. .**	**109,134**	**1,800,999**	**365,868**	**16,644,605**

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

‡ Estimate has a relative standard error greater than 50% and is considered too unreliable for general use.

(a) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on frequency responses. High/very high is based on a score of 12–25.

(b) Directly age-standardised to the 2001 Australian Estimated Resident Population based on the 2001 Census, using 10 year age groups up to 55+.

(c) Rate ratio is calculated by dividing the Indigenous rate by the non-Indigenous rate.

(d) Persons aged 18 and over reporting high levels of psychological distress per 100 persons aged 18 and over.

(e) Distribution of total population.

(f) Data for specific age groups are not age-standardised, only the totals.

Note: Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey and 2011–12 Australian Health Survey.

Table 1.18.4: Remoteness by personal stressors experienced in last 12 months, Indigenous Australians aged 15 and over 2012–13[(a)]

	Remoteness							
	Major cities	Inner regional	Outer regional	Total non-remote	Remote	Very remote	Total remote	Australia
	Per cent							
Experienced stressors in last 12 months								
Yes	74.4	76.2	73.8	74.8	75.4	65.8	69.2*	73.5
No	25.2	n.p	n.p	25.0	24.5	34.0	30.6*	26.3
Total number[(b)(c)]	**144,703**	**86,727**	**86,188**	**317,618**	**32,339**	**58,263**	**90,602**	**408,220**
Number of stressors experienced								
One	25.1	29.9	26.0	26.6	28.9	30.0	29.6	27.3
Two	19.6	18.8	21.3	19.8	22.5	24.5	23.7	20.6
Three or more	54.9	51.1	52.5	53.2	48.5	45.1	46.4*	51.8
Total one or more stressors[(b)(c)]	**108,205**	**66,223**	**63,747**	**238,175**	**24,422**	**38,451**	**62,873**	**301,048**
Mean number of stressors	4	3	4	4	3	3	3	4
Type of stressor/s experienced[(d)]								
Health related								
Serious illness	31.8	36.4	32.7	33.3	27.7	20.2	23.1	31.2
Serious accident	8.7	11.0	9.1	9.4	9.2	10.4	9.9	9.5
Mental illness	26.8	24.1	19.6	24.1	16.1	9.3	12.0	21.6
Serious disability	8.8	8.9	7.4	8.5	7.0	4.0†	5.1	7.8
Total	**52.9**	**54.8**	**49.3**	**52.5**	**43.6**	**32.7**	**36.9**	**49.2**
Sub-total health related	*57,187*	*36,321*	*31,445*	*124,954*	*10,660*	*12,569*	*23,229*	*148,183*
Household and relationships								
Death of a family member or close friend	45.1	46.8	49.7	46.8	59.0	61.0	60.2	49.6
Getting married/marriage	5.6	6.3	4.5	5.5	4.4†	2.9	3.5	5.1

(continued)

Table 1.18.4 (continued): Remoteness by personal stressors experienced in last 12 months, Indigenous Australians aged 15 and over 2012–13[(a)]

	Remoteness							
	Major cities	Inner regional	Outer regional	Total non-remote	Remote	Very remote	Total remote	Australia
Divorce or separation	13.3	10.1	10.6	11.7	8.8	7.4	8.0	10.9
Getting back together with spouse	5.1	5.3	3.7	4.8	4.4	2.8†	3.5	4.5
Pregnancy	18.9	13.8	17.4	17.1	13.1	6.7	9.2	15.4
New family member	10.7	6.7	7.7	8.8	7.2	5.4	6.1	8.2
Overcrowding at home	11.7	10.0	12.5	11.4	16.6	22.7	20.3	13.3
Total	**68.5**	**64.8**	**68.9**	**67.6**	**73.9**	**74.6**	**74.3**	**69.0**
Sub-total household and relationships	*74,142*	*42,894*	*43,950*	*160,987*	*18,051*	*28,671*	*46,721*	*207,708*
Work related								
Not able to get a job	33.2	31.2	31.3	32.1	23.1	28.4	26.3	30.9
Involuntary loss of job	15.9	12.8	11.6	13.9	8.7	6.7	7.5	12.5
Started a new job/changed job	14.8	10.1	14.7	13.5	11.7	7.4	9.0	12.5
Pressure to fulfil cultural responsibilities	6.3	4.2†	7.3	6.0	5.4†	5.5	5.5	5.9
Total	**49.9**	**45.0**	**48.1**	**48.0**	**35.8**	**38.2**	**37.3**	**45.8**
Sub-total work related	*53,956*	*29,793*	*30,636*	*114,386*	*8,731*	*14,698*	*23,429*	*137,815*
Community safety								
Alcohol-related problems	17.7	16.9	22.0	18.6	22.1	21.8	21.9	19.3
Drug-related problems	17.8	13.2	13.6	15.4	15.9	12.4	13.8	15.1
Gambling problems	11.3	9.6	9.9	10.4	8.2	15.0	12.4	10.8
Witness to violence	11.7	8.5	9.6	10.2	10.8	10.3	10.5	10.3
Abuse or violent crime	9.8	7.2	11.0	9.4	9.9	10.4	10.2	9.6
Feeling unsafe	12.0	11.6	10.9	11.6	7.2	6.3	6.6	10.6
Trouble with the police	16.8	14.1	17.7	16.3	18.5	20.0	19.4	17.0
You/family member/close friend spent time in jail	14.2	11.6	14.8	13.6	15.5	15.4	15.4	14.0

(continued)

Table 1.18.4 (continued): Remoteness by personal stressors experienced in last 12 months, Indigenous Australians aged 15 and over 2012–13[(a)]

	Remoteness							
	Major cities	Inner regional	Outer regional	Total non-remote	Remote	Very remote	Total remote	Australia
Total	**47.8**	**41.5**	**46.9**	**45.8**	**46.1**	**51.2**	**49.2**	**46.5**
Sub-total community safety	*51,677*	*27,475*	*29,888*	*109,039*	*11,266*	*19,669*	*30,935*	*139,974*
Discrimination								
Treated badly because you are Aboriginal/Torres Strait Islander	11.6	8.0	12.8	10.9	10.3	5.1	7.1	10.1
Unwelcome at child's school	1.6†	1.6†	1.2†	1.5	3.1†	1.1†	1.9†	1.6
Total	**12.4**	**9.0**	**13.7**	**11.8**	**12.2**	**5.8**	**8.3**	**11.1**
Sub-total discrimination	*13,398*	*5,970*	*8,725*	*28,092*	*2,976*	*2,232*	*5,208*	*33,300*
Other stressor(s)[(e)]	**4.3**	**2.3†**	**1.6†**	**3.0**	**2.1†**	**3.0†**	**2.7**	**2.9**
Sub-total other stressor(s)	*4,615*	*1,514†*	*1,024†*	*7,153*	*517†*	*1,170†*	*1,687*	*8,840*
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Total population with one or more stressors	**108,205**	**66,223**	**63,747**	**238,175**	**24,422**	**38,451**	**62,873**	**301,048**
Total number of persons 15 years and over	**144,840**	**86,887**	**86,401**	**318,128**	**32,458**	**58,355**	**90,813**	**408,941**

* Represents statistically significant differences at the $p < 0.05$ level. For percentages answering whether they 'Experienced stressors in the last 12 months'', and the 'Number of stressors experienced', differences were tested between the Total Remote and Total non-remote columns, with Total non-remote used as the reference category.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Stressors experienced by self, family or friends.

(b) Total includes 'don't know'.

(c) Total excludes 'refused'.

(d) Multiple responses allowed. Components will not add to total.

(e) Includes 'don't know'.

Note: Percentages add within columns. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.18.5: Levels of psychological distress, by selected family and culture characteristics, Indigenous persons (18 and over), 2012–13

	Level of psychological distress[(a)]				
	Low/Moderate (5–11)		High/Very high (12–25)		Total number
	Number	Per cent	Number	Per cent	
Removal from natural family[(b)]					
Individual removed from family (with or without relative(s))	28,663	64.9	15,482	35.1	44,145
Relative(s) only removed from family	83,605	67.6*	40,110	32.4*	123,716
Neither individual nor relative(s) removed from family	107,155	74.3*	37,073	25.7*	144,228
Total	**219,423**	**70.3**	**92,665**	**29.7**	**312,088**
Ratio neither individual nor relative/individual removed	3.7	1.1*	2.4	0.7*	3.3
Identifies with tribal/language group or clan[(c)(d)]					
Yes	154,556	68.5	70,918	31.5	225,474
No	95,663	71.8	37,554	28.2	133,217
Total	**250,541**	**69.8**	**108,472**	**30.2**	**359,013**
Ratio yes/no	1.6	0.95*	1.9	1.1*	1.7
Recognises an areas as homelands/traditional country[(e)]					
Yes	180,990	69.3	80,309	30.7	261,299
No	69,551	71.2	28,144	28.8	97,695
Total	**250,541**	**69.8**	**108,453**	**30.2**	**358,994**
Ratio yes/no	2.6	0.97*	2.9	1.1*	2.7
Satisfaction level with own knowledge of culture[(e)(f)]					
Very satisfied/satisfied	151,312	70.4*	63,629	29.6*	214,941
Neutral	45,721	71.7	18,079	28.3	63,800
Not very satisfied/not at all satisfied	53,897	66.7*	26,895	33.3*	80,792
Total	**250,931**	**69.8**	**108,603**	**30.2**	**359,533**
Ratio very satisfied, satisfied/neutral	3.3	0.98*	3.5	1.04*	3.4
Whether proud of culture/being Aboriginal and/or Torres Strait Islander[(e)(f)]					
Yes	243,019	69.8	105,245	30.2	348,264
No	7,912	70.2	3,357	29.8	11,269
Total	**250,931**	**69.8**	**108,603**	**30.2**	**359,533**
Ratio yes/no	30.7	1.0	31.4	1.0	30.9
Whether people you mix with know you are Aboriginal and/or Torres Strait Islander[(e)(g)(h)]					
No, hardly anybody/not many people	13,651	67.2	6,677	32.8	20,327
Some people	24,602	73.3*	8,970	26.7*	33,571
Yes, most people/everyone	150,645	67.4	72,988	32.6	223,633
Total	**189,974**	**68.0**	**89,524**	**32.0**	**279,498**
Ratio some people/no, hardly anybody, not many people	1.8	1.1*	1.3	0.8*	1.7

(continued)

Table 1.18.5 (continued): Levels of psychological distress, by selected family and culture characteristics, Indigenous persons (18 and over), 2012–13

	Level of psychological distress[(a)]				
	Low/Moderate (5–11)		High/Very high (12–25)		Total number
	Number	Per cent	Number	Per cent	
Whether people you meet for first time know you are Aboriginal and/or Torres Strait Islander[(a)(g)(h)]					
No, hardly anybody/not many people	99,580	71.4	39,856	28.6	139,437
Some people	26,337	65.9*	13,639	34.1*	39,976
Yes, most people/everyone	59,744	63.9*	33,804	36.1*	93,548
Total	**189,974**	**68.0**	**89,524**	**32.0**	**279,498**
Ratio some people/no, hardly anybody, not many people	0.3	0.9*	0.3	1.2*	0.3
Whether feels accepted by other Aboriginal and/or Torres Strait Islander people[(e)(g)]					
Yes	165,656	68.7	75,520	31.3	241,176
No	24,318	63.5	14,004	36.5	38,322
Total	**189,974**	**68.0**	**89,524**	**32.0**	**279,498**
Ratio yes/no	6.8	1.1*	5.4	0.9*	6.3
Whether felt treated badly because Aboriginal or Torres Strait Islander in last 12 months[(c)]					
Yes	31,045	52.9	27,632	47.1	58,677
No	221,085	73.1	81,273	26.9	302,358
Total	**252,129**	**69.8**	**108,905**	**30.2**	**361,034**
Ratio yes/no	0.1	0.7*	0.3	1.8*	0.2
Total persons 18+	**252,230**	**69.8**	**109,134**	**30.2**	**361,364**

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested. For 'Removal from natural family', 'Relative(s) only removed' was also tested against 'Individual removed' using 'Individual removed' as the reference category. For 'Satisfaction level with own knowledge of culture', 'Not very satisfied/not at all satisfied' was also tested against 'Neutral' using 'Neutral' as the reference category. For 'Whether people you mix with know you are Aboriginal and/or Torres Strait Islander' and 'Whether people you meet for first time know you are Aboriginal and/or Torres Strait Islander', 'Yes, most people/everyone' was also tested against 'No, hardly anybody/not many people' using 'No, hardly anybody/not many people' as the reference category. Total rows not tested.

(a) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25. Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(b) Total excludes 'don't know', 'don't want to answer' and 'not asked'.

(c) Total excludes 'Refusal' and 'not asked'.

(d) Includes respondents who identified with tribal group, language group, a clan, a mission, or an Aboriginal/Torres Strait Islander regional group.

(e) Total excludes 'not asked'.

(f) Question asked differently between remote and non-remote areas.

(g) Non-remote only.

(h) Total includes 'unsure'.

Note: Percentages add within rows. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.18.6: Levels of psychological distress, by selected socioeconomic and health characteristics, Indigenous persons (18 and over), 2012–13

	Level of psychological distress[(a)]				
	Low/Moderate (5–11)		High/Very high (12–25)		Total number
	Number	Per cent	Number	Per cent	
SEIFA[(b)]					
1st quintile (most disadvantaged)	125,901	66.9	62,417	33.1	188,317
5th quintile (most advantaged)	10,081	74.4	3,460	25.6	13,541
Ratio most disadvantaged/most advantaged	12.5	0.9*	18.0	1.3*	13.9
Employment					
Employed	138,394	78.4	38,191	21.6	176,585
Unemployed	24,502	58.1	17,683	41.9	42,185
Not in the labour force	89,333	62.6	53,261	37.4	142,593
Ratio unemployed/employed	0.2	0.7*	0.5	1.9*	0.2
Has non-school qualification[(c)]					
Yes	114,541	72.7	42,924	27.3	157,465
No	137,689	67.5	66,210	32.5	203,899
Ratio no/yes	1.2	0.9*	1.5	1.2*	1.3
Highest year of school completed					
Year 12	71,968	73.8	25,533	26.2	97,501
Year 9 or below[(d)]	66,691	66.3	33,841	33.7	100,532
Ratio Year 9 or below/Year 12	0.9	0.9*	1.3	1.3*	1.0
Smoker status					
Current smoker[(e)]	103,383	62.3	62,564	37.7	165,946
Non-smoker[(f)]	148,847	76.2	46,570	23.8	195,417
Ratio smoker/non-smoker	0.7	0.8*	1.3	1.6*	0.8
Adequate daily vegetable intake[(g)]					
Yes	13,129	75.5	4,257	24.5	17,386
No	239,101	69.5	104,877	30.5	343,978
Ratio no/yes	18.2	0.9*	24.6	1.2*	19.8
Adequate daily fruit intake[(h)]					
Yes	112,724	73.5	40,643	26.5	153,367
No	139,506	67.1	68,491	32.9	207,997
Ratio no/yes	1.2	0.9*	1.7	1.2*	1.4
Obese[(i)]					
Yes	83,852	70.1	35,741	29.9	119,592
No	129,340	69.9	55,591	30.1	184,931
Ratio yes/no	0.6	1.0	0.6	1.0	0.6
Total number[(j)]	**213,191**	**70.0**	**91,332**	**30.0**	**304,524**

(continued)

Table 1.18.6 (continued): Levels of psychological distress, by selected socioeconomic and health characteristics, Indigenous persons (18 and over), 2012–13

	Level of psychological distress[(a)]				
	Low/Moderate (5–11)		High/Very high (12–25)		Total number
	Number	Per cent	Number	Per cent	
Self-assessed health status					
Excellent/very good/good	202,810	76.2	63,367	23.8	266,177
Fair/poor	49,419	51.9	45,768	48.1	95,187
Ratio fair, poor/excellent, very good, good	0.2	0.7*	0.7	2.0*	0.4
Heart/circulatory disease[(k)]					
Yes	45,557	64.8	24,780	35.2	70,337
No	206,673	71.0	84,354	29.0	291,027
Ratio yes/no	0.2	0.9*	0.3	1.2*	0.2
Diabetes[(l)]					
Yes	30,095	63.8	17,044	36.2	47,140
No	222,134	70.7	92,090	29.3	314,224
Ratio yes/no	0.1	0.9*	0.2	1.2*	0.2
Kidney disease[(m)]					
Yes	5,505	56.7	4,211	43.3	9,716
No	246,724	70.2	104,924	29.8	351,648
Ratio yes/no	0.0	0.8*	0.0	1.5*	0.0
Total persons 18+	**252,230**	**69.8**	**109,134**	**30.2**	**361,364**

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested. For Employment, 'Not in the labour force' was also tested against 'Employed'.

† Estimate has a relative standard error between 25% and 50% and should be used with caution.

(a) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25. Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(b) Index of Relative Socio-Economic Advantage and Disadvantage 2011.

(c) Non-school qualifications classified to the Australian Standard Classification of Education (ASCED) (includes e.g. Bachelor degree or higher, diploma, advanced diploma, certificate).

(d) Year 9 or below includes never attended school.

(e) Includes persons who smoke daily, persons who smoke at least once a week but not daily, and those who smoked less than weekly.

(f) Includes ex-smoker and those who have never smoked.

(g) As the 2012–13 AATSIHS only collected information on whole serves of vegetables, the 2013 NHMRC Australian Dietary Guidelines have been applied as follows: 5 serves of vegetables for persons aged 9 years and over, with the exception of 18–49 year old males who eat 6 serves.

(h) According to 2013 NHMRC Australian Dietary Guidelines, which recommend 2 serves of fruit per day for persons aged 18 years and over.

(i) Body Mass Index greater than 30.0 for people aged 18 years and over. For information on the calculation of BMI scores for people aged 15–17 years, see the Glossary in AATSIHS First Results 2012–13 (4727.0.55.001) or AATSIHS Updated Results 2012–13 (4727.0.55.006).

(j) Total excludes measurement not taken.

(k) Self-reported data consisting of persons reporting they have a current heart or circulatory condition which has lasted, or is likely to last, for 6 months or more.

(l) Self-reported data consisting of persons reporting diabetes which has lasted, or is expected to last, for six months or more. Includes Type 1 and Type 2 diabetes, type unknown, and persons who reported they had diabetes but that it was not current at the time of interview.

(m) Self-reported data consisting of persons reporting kidney disease which has lasted or is expected to last, for six months or more.

Note: Percentages add within rows. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.18.7: Levels of psychological distress, by selected household and health risk factors, Indigenous persons (18 and over), 2012–13

	Level of psychological distress[a][b]				Total number
	Low/Moderate (5–11)		High/Very high (12–25)		
	Number	Per cent	Number	Per cent	
Equivalised gross household income[c]					
1st quintile (lowest)	74,312	60.6	48,216	39.4	122,528
4th/5th quintile (highest)	42,888	83.1	8,713	16.9	51,601
Ratio lowest/highest	1.7	0.7*	5.5	2.3*	2.4
Total number	**200,159**	**69.2**	**89,065**	**30.8**	**289,224**
Financial stress - whether household could raise $2,000 in an emergency[c]					
Yes	124,505	79.2	32,775	20.8	157,280
No	112,547	61.8	69,511	38.2	182,058
Ratio yes/no	1.1	1.3*	0.5	0.5*	0.9
Total number	**237,052**	**69.9**	**102,286**	**30.1**	**339,338**
Household had day/s without money for basic living expenses in last 12 months[d]					
Yes	83,838	57.9	60,961	42.1	144,799
No	166,958	77.7	48,024	22.3	214,982
Ratio yes/no	0.5	0.7*	1.3	1.9*	0.7
Total number	**250,796**	**69.7**	**108,985**	**30.3**	**359,781**
Housing tenure type[e][d]					
Owner	85,355	78.6	23,218	21.4	108,573
Renter	165,202	66.1	84,660	33.9	249,862
Ratio renter/owner	1.9	0.8*	3.6	1.6*	2.3
Total number	**250,865**	**69.7**	**108,985**	**30.3**	**359,850**
Lives in overcrowded household[d][f]					
Yes	47,439	67.8	22,560	32.2	69,999
No	203,357	70.2	86,425	29.8	289,782
Ratio yes/no	0.2	0.96*	0.3	1.1*	0.2
Total number	**250,796**	**69.7**	**108,985**	**30.3**	**359,781**
Alcohol consumption					
Abstained from alcohol in last 12 months[g]	57,040	70.1*	24,352	29.9*	81,392
Short-term/single occasion risk[h]					
Yes	143,999	69.5	63,247	30.5	207,246
No	47,065	71.1	19,122	28.9	66,188
Ratio yes/no	3.1	0.97*	3.3	1.1*	3.1

(continued)

Table 1.18.7 (continued): Levels of psychological distress, by selected household and health risk factors, Indigenous persons (18 and over), 2012–13

	Level of psychological distress[(a)(b)]				Total number
	Low/Moderate (5–11)		High/Very high (12–25)		
	Number	Per cent	Number	Per cent	
Physical activity[(i)(j)]					
Met guidelines	81,467	69.9	35,158	30.1	116,626
Did not meet guidelines[(k)]	109,151	66.7	54,610	33.3	163,761
Ratio did not meet/met guidelines	1.3	0.95*	1.6	1.1*	1.4
Total number	**190,618**	**68.0**	**89,768**	**32.0**	**280,386**
Disability status[(l)]					
Has profound, severe or moderate core activity limitation[(m)]	22,492	48.4*	23,957	51.6*	46,448
Has a schooling/employment restriction only[(n)]	21,252	53.6*	18,387	46.4*	39,639
Has unspecified limitation or restriction	53,869	66.0*	27,713	34.0*	81,582
Total with disability/long-term health condition	**97,612**	***58.2***	**70,057**	***41.8***	***167,669***
No disability/long-term health condition	154,617	79.8	39,077	20.2	193,694
Ratio disability/no disability	0.6	0.7*	1.8	2.1*	0.9
Stressors experienced in last 12 months[(o)]					
No stressors	73,009	81.3	16,842	18.7	89,851
Experienced one or more stressor	178,681	66.1	91,773	33.9	270,454
Ratio one or more/no stressors	2.4	0.8*	5.4	1.8*	3.0
Total number[(p)]	**251,991**	**69.8**	**108,980**	**30.2**	**360,971**
Long term health conditions[(q)]					
No current long term health condition	50,559	80.5*	12,217	19.5*	62,776
One	51,023	80.1*	12,676	19.9*	63,699
Two	42,370	75.8*	13,549	24.2*	55,919
Three or more	108,276	60.5	70,693	39.5	178,969
Ratio three or more/no conditions	2.1	0.8*	5.8	2.0*	2.9
Total persons 18+	**252,230**	**69.8**	**109,134**	**30.2**	**361,364**

(continued)

Table 1.18.7 (continued): Levels of psychological distress, by selected household and health risk factors, Indigenous persons (18 and over), 2012–13

* Represents statistically significant differences at the $p < 0.05$ level. Rate ratios tested. For Alcohol consumption, 'Abstained' was also tested against those who did not have 'Short term/single occasion risk'. For those with disability or a long-term health condition, level of disability/ long-term health condition was also tested with 'Total with disability/long-term health condition' used as the reference category. Number of long term health conditions were also tested with 'Three or more' as the reference category.

(a) Based on the Kessler-5 (K5) measure of psychological distress. Overall levels of distress are based on how often respondents reported experiencing each feeling. Low/moderate is a score of 5–11. High/very high is a score of 12–25.

(b) Totals for Aboriginal and Torres Strait Islander people exclude a small number of people who were not present at interview and for whom responses were provided by a proxy, and persons for whom level of psychological distress was unable to be determined.

(c) Excludes 'not stated' and 'not known'.

(d) Excludes 'not stated'.

(e) Total includes 'other' and 'life tenure scheme'.

(f) Households requiring at least one additional bedroom, based on the Canadian National Occupancy Standard for Housing Appropriateness.

(g) Abstainer includes those who have never consumed alcohol.

(h) Includes those who drank alcohol. Risk level calculated on exceeding the NHMRC Australian Alcohol Guidelines 2009. For short-term/single occasion risk this is 5 or more standard drinks on any day over last 12 months.

(i) Physical activity data collected from persons 18 years and over; and non-remote areas only.

(j) 150 minutes of moderate/vigorous physical activity from five or more sessions over a week.

(k) Includes 'don't know'.

(l) Self-reported data consisting of persons who report having a disability or restrictive long-term health condition where a limitation, restriction, impairment, disease or disorder has lasted, or is expected to last for six months or more, and restricts everyday activities.

(m) Levels of activity limitation (profound, severe, moderate, and school/employment restriction only) are based on whether, and how often, a person needs help, has difficulty, or uses aids or equipment with any core activities (self-care, mobility or communication). A person's overall level of core activity limitation is determined by their highest level of limitation in any of these activities.

(n) Only current difficulties with education and/or employment were collected. Respondents aged 65 years and over were not asked about employment restrictions and so some may be categorised as not having a specific limitation or restriction that would otherwise have been assigned 'schooling/employment restriction only' had they been asked the question.

(o) Stressors experienced by self, family or friends.

(p) Total excludes 'refused' and includes 'not known'.

(q) Self-reported data consisting of persons reporting a current medical condition which has lasted, or is expected to last, for 6 months or more.

Note: Percentages add within rows. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.18.8: Aboriginal and Torres Strait Islander Persons aged 18 and over[(a)], Social and Emotional Wellbeing items, 2012–13

	Response						
	Yes		**Sometimes**		**No**		**Total**[(b)]
	Per cent	**Number**	**Per cent**	**Number**	**Per cent**	**Number**	
Pearlin mastery scale—individual items[(c)]							
I have little control over the things that happen to me	15.6	43,689	35.3	99,016	48.8	136,938	280,382
There is really no way I can solve some of the problems I have	14.8	41,569	28.8	80,837	56.2	157,654	280,382
There is little I can do to change many of the important things in my life	15.6	43,869	24.3	68,124	59.8	167,615	280,382
Sometimes I feel that I'm being pushed around in life	15.4	43,184	24.1	67,630	60.3	169,034	280,382
What happens to me in the future mostly depends on me	85.1	238,720	9.8	27,358	4.9	13,730	280,382
I can do just about anything I really set my mind to	77.6	217,609	17.9	50,110	4.3	12,036	280,333
WAACHS self-esteem items[(d)]							
I find it easy to make friends	73.1	205,285	18.7	52,579	8.2	22,902	280,765
I like most things about myself	74.0	207,768	20.0	56,132	6.0	16,839	280,740
I feel proud of who I am	82.5	231,488	13.6	38,108	3.9	11,019	280,740
I can usually sort out my own problems	79.1	221,945	18.5	51,817	2.4	6,774	280,740
When I try I can make good things happen for me	80.3	225,462	17.7	49,782	1.8	5,154	280,740
No matter how bad I feel I know I will feel better eventually	86.7	243,415	11.5	32,223	1.7	4,910	280,740
Multidimensional Scale of Perceived Social Support (MSPSS) individual items[(e)]							
My family really tries to help me	75.6	212,323	15.6	43,696	8.7	24,448	280,686
I get the emotional support and help I need from my family	75.3	211,510	15.1	42,406	9.4	26,447	280,735
I can talk about my problems with my family	67.5	189,442	19.7	55,296	12.7	35,696	280,709
My family is willing to help me make decisions	71.1	199,574	16.3	45,892	12.4	34,945	280,686
I can count on my friends when things go wrong	65.1	182,832	23.7	66,405	11.1	31,300	280,740
I can talk about my problems with my friends	65.3	183,386	21.9	61,539	12.7	35,651	280,740

(continued)

Table 1.18.8 (continued): Aboriginal and Torres Strait Islander Persons aged 18 and over(a), Social and Emotional Wellbeing items, 2012–13

(a) Persons aged 18 years and over living in non-remote areas of Australia only.

(b) Total includes ‘don’t know’. Excludes refusals.

(c) The Pearlin Mastery Scale is a 7-item, self-report scale that measures the extent to which an individual feels control over life outcomes. The 2012-13 NATSIHS included a modified version. Persons could respond with one of 3 responses to each of the 7 items: ‘Yes’, ‘Sometimes’, ‘No’.

(d) The Western Australian Aboriginal Child Health Survey (WAACHS) is one of the largest and most comprehensive studies into the health and wellbeing of Aboriginal Children in Western Australia. The WAACHS includes a 7-item, self-reported component designed to measure young people’s level of self-esteem. The 2012–13 NATSIHS included 6 of the 7 WAACHS self-esteem items. Persons could respond with one of 3 responses to each of the 6 items: ‘Yes’, ‘Sometimes’, ‘No’.

(e) The MSPSS is a 12-item, uni-dimensional tool used to measure how one perceives their support system, including support from family, friends and a significant other. The 2012–13 NATSIHS included 6 of the 12 MSPSS items: 4 MSPSS family support items and 2 MSPSS friendship support items. Persons could respond with one of 3 responses to each of the 6 items: ‘Yes’, ‘Sometimes’ and ‘No’.

Note: Percentages add within rows. Estimates have been rounded and discrepancies may occur between sums of the component items and totals.

Source: ABS and AIHW analysis of 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey.

Table 1.18.9: Mean Strengths and Difficulties Questionnaire (SDQ) total score, by age, Aboriginal and non-Aboriginal children aged 4–17, WA, 2001, 2002

	4	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
Aboriginal children	12.6	11.8	11.8	12.0	12.5	11.7	11.6	10.9	11.3	11.0	10.8	10.2	9.4	9.7
Non-Aboriginal children	10.5	10.0	9.1	11.0	8.7	10.4	11.8	10.8	9.3	9.3	7.8	8.0	8.1	7.8

Source: Zubrick et al. 2005; Computer-assisted telephone interview survey conducted for the WAACHS by the Survey Research Centre at the University of Western Australia.

Table 1.18.10: Proportion of Aboriginal children aged 4–17 at low, moderate and high risk of clinically significant emotional or behavioural difficulties, by number of life stress events, WA, 2001, 2002

	Low risk	Moderate risk	High risk
0–2	76.8	9.3	13.9
3–6	64.9	12.2	22.9
7–14	48.4	12.7	38.9
Total	**64.6**	**11.4**	**24.0**

Source: Zubrick et al. 2005.

Table 1.18.11: Proportion of Aboriginal young people who had seriously thought about ending own life, by sex and age, WA, 2001, 2002

	12	13	14	15	16	17
Males	9.3	12.7	8.3	10.4	16.4	16.2
Females	16.0	21.4	22.5	20.4	14.4	21.1

Source: Zubrick et al. 2005.

Table 1.18.12: Mental health related mortality rates per 100,000, by Indigenous status and age group, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)

Age group (years)	Indigenous rate(i)(j)	Non-Indigenous rate(i)(j)	Rate ratio(k)	Rate difference(l)
Less than 1	0.0	n.p.	n.p.	n.p.
1–4	0.0	n.p.	n.p.	n.p.
5–14	0.0	0.1	0.0	–0.1
15–24	n.p.	0.2	n.p.	n.p.
25–34	n.p.	0.7	n.p.	n.p.
35–44	7.2	1.3	5.7	5.9
45–54	14.7	3.0	4.9	11.7
55–64	18.3	6.9	2.7	11.4
65–74	91.2	31.3	2.9	59.8
75 and over	639.8	635.3	1.0	4.5
Total(m)(n)(o)	**48.8**	**40.1**	**1.2**	**8.7**

(a) ICD-10 codes: F00–F99, G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48.

(b) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010(final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(e) These data exclude 283 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Age-specific death rates per 100,000 using the midpoint populations for the relevant years.

(j) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(k) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(l) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(m) Includes deaths where the age of the deceased was not stated.

(n) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(o) Not stated for age has been pro-rated across each age group, for the calculation of age-standardised rates.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.18.13: Deaths from mental health related conditions for Indigenous Australians, by sex, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g]

Cause of death	Deaths	Rate per 100,000[h][i]	95% LCL[j]	95% UCL[k]	Rate ratio[l]	Rate difference[m]
			Males			
Mental and behavioural disorders due to psychoactive substances use (F10–F19)	77	11.5	4.5	18.6	5.0	9.2
Organic, including symptomatic mental disorders (F00–F09)	63	27.4	11.7	43.1	1.3	5.8
Other[n]	13	n.p.	n.p.	n.p.	n.p.	n.p.
Total	**153**	**42.8**	**24.8**	**60.8**	**1.3**	**10.1**
			Females			
Mental and behavioural disorders due to psychoactive substances use (F10–F19)	32	3.7	0.5	7	4.7	2.9
Organic, including symptomatic mental disorders (F00–F09)	124	37.3	22.4	52.2	1.2	6.9
Other[n]	38	11.1	3.0	19.2	0.8	–2.9
Total	**194**	**52.2**	**35.0**	**69.5**	**1.2**	**7.0**
			Persons			
Mental and behavioural disorders due to psychoactive substances use (F10–F19)	109	7.3	3.7	10.8	4.8	5.7
Organic, including symptomatic mental disorders (F00–F09)	187	33.4	22.4	44.3	1.2	6.6
Other[n]	51	8.2	2.9	13.5	0.7	–3.6
Total	**347**	**48.8**	**36.2**	**61.5**	**1.2**	**8.7**

(continued)

Table 1.18.13 (continued): Deaths from mental health related conditions for Indigenous Australians, by sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) All causes of death data from 2006 onward are subject to a revisions process – once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) These data exclude 283 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) LCL = lower confidence limit.

(k) UCL = upper confidence limit.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Includes ICD-10 codes: F20–F99, G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48.

Note: Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.18.14: Age-specific hospitalisation rates for a principal diagnosis of mental health related conditions, by Indigenous status and sex, Australia, 2011–12 to 2012–13[(a)(b)]

	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65+	All ages Crude[(c)]	All ages Age std.[(d)]
Males										
Indigenous	1.3	3.8	23.4	44.4	55.9	45.1	23.6	15.2	24.4	29.5
Non-Indigenous	3.7	2.3	10.5	15.6	18.3	16.1	15.4	18.4	13.3	13.1
Rate ratio[(e)]	0.4	1.7	2.2	2.8	3.1	2.8	1.5	0.8	1.8	2.3
Rate difference[(f)]	–2.4	1.5	12.9	28.8	37.6	29.0	8.2	–3.2	11.1	16.4
Females										
Indigenous	1.0	3.4	25.7	43.0	45.3	32.7	23.8	21.9	23.0	27.3
Non-Indigenous	3.2	2.2	18.1	19.3	22.8	21.1	18.2	20.1	16.9	16.4
Rate ratio[(e)]	0.3	1.5	1.4	2.2	2.0	1.5	1.3	1.1	1.4	1.7
Rate difference[(f)]	–2.2	1.1	7.6	23.7	22.5	11.6	5.7	1.8	6.1	10.8
Persons[(g)]										
Indigenous	1.2	3.6	24.5	43.7	50.4	38.7	23.7	18.9	23.7	28.4
Non-Indigenous	3.4	2.3	14.2	17.4	20.6	18.7	16.8	19.3	15.1	14.8
Rate ratio[(e)]	0.3	1.6	1.7	2.5	2.5	2.1	1.4	1.0	1.6	1.9
Rate difference[(f)]	–2.3	1.3	10.3	26.3	29.8	20.0	6.9	–0.4	8.6	13.7

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes F00–F99, G30, R44, R48, G470, G471, G472, G478, G479, O993, R450, R451, R454, Z004, Z032, Z046, Z093, Z133, Z502, Z503, Z543, Z619, Z631, Z638, Z639, Z658, Z659, Z714, Z715, Z760.

(c) All age data includes age not stated.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(g) Persons data includes sex not stated and indeterminate.

Notes

1. Rates calculated based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.15: Hospitalisations for principal diagnosis of mental health related conditions, by Indigenous status and sex, Australia, 2011–12 to 2012–13(a)(b)(c)(d)

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000(e)	Number	Crude rate per 1,000	ASR rate per 1,000(e)	Ratio(f)	Difference(g)
NSW								
Males	5,169	24.4	29.5	105,084	14.9	14.8	2.0	14.7
Females	4,700	22.1	25.4	131,244	18.4	17.9	1.4	7.5
Persons(h)	9,869	23.2	27.3	236,330	16.7	16.4	1.7	11.0
Vic								
Males	858	17.7	22.5	63,233	11.4	11.3	2.0	11.2
Females	991	20.4	23.8	92,691	16.4	15.8	1.5	8.0
Persons(h)	1,849	19.1	23.0	155,937	14.0	13.6	1.7	9.5
Qld								
Males	3,884	20.2	25.1	65,847	15.1	14.8	1.7	10.3
Females	3,634	18.7	23.9	82,187	18.7	18.5	1.3	5.4
Persons(h)	7,518	19.4	24.6	148,034	16.9	16.6	1.5	8.0
WA								
Males	3,315	37.1	43.6	26,820	11.3	11.2	3.9	32.4
Females	3,116	34.3	37.7	32,424	14.0	13.8	2.7	24.0
Persons(h)	6,431	35.7	40.5	59,244	12.6	12.5	3.2	28.0
SA								
Males	1,303	34.4	43.2	16,673	10.4	10.3	4.2	33.0
Females	1,469	38.1	51.0	18,291	11.2	10.8	4.7	40.2
Persons(h)	2,772	36.3	48.4	34,964	10.8	10.5	4.6	37.8
Tas								
Males	n.p.	6.5	8.5	n.p.	12.6	12.5	0.7	–3.9
Females	n.p.	11.0	14.1	n.p.	21.7	20.7	0.7	–6.7
Persons(h)	n.p.	8.8	11.2	n.p.	17.1	16.6	0.7	–5.4
NT								
Males	n.p.	22.4	24.8	n.p.	7.8	7.7	3.2	17.1
Females	n.p.	19.4	20.8	n.p.	6.2	6.3	3.3	14.4
Persons(i)	n.p.	20.9	22.7	n.p.	7.1	7.1	3.2	15.6
ACT								
Males	n.p.	19.8	23.0	n.p.	8.1	8.1	2.8	14.9
Females	n.p.	15.0	19.7	n.p.	10.8	10.6	1.9	9.1
Persons(h)	n.p.	17.5	21.8	n.p.	9.5	9.4	2.3	12.4

(continued)

Table 1.18.15 (continued): Hospitalisations for principal diagnosis of mental health related conditions, by Indigenous status and sex, Australia, 2011–12 to 2012–13[a][b][c][d]

	Indigenous			Non-Indigenous				
	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Number	Crude rate per 1,000	ASR rate per 1,000[e]	Ratio[f]	Difference[g]
Australia								
Males	**16,633**	**24.4**	**29.5**	**291,014**	**13.3**	**13.1**	**2.3**	**16.4**
Females	**15,750**	**23.0**	**27.3**	**373,883**	**16.9**	**16.4**	**1.7**	**10.8**
Persons[h]	**32,383**	**23.7**	**28.4**	**664,912**	**15.1**	**14.8**	**1.9**	**13.7**

(a) Data include public and private hospital in all jurisdictions. Number of hospitalisations in NT, ACT and TAS are not published for privacy reasons.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes F00–F99, G30, R44, R48, G470, G471, G472, G478, G479, O993, R450, R451, R454, Z004, Z032, Z046, Z093, Z133, Z502, Z503, Z543, Z619, Z631, Z638, Z639, Z658, Z659, Z714, Z715, Z760.

(c) Age-standardised rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Australia have been calculated using the direct method, age-standardised by 5 year age groups to 75+. Age-standardised rates for Tasmania and the Australian Capital Territory have been calculated using the direct method, age-standardised by 5 year age group to 65+.

(d) Data are reported by state/territory of usual residence of the patient hospitalised.

(e) Directly age-standardised using the Australian 2001 standard population.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.16: Hospitalisations with a principal diagnosis of mental health related conditions, by Indigenous status and remoteness, Australia, 2011–12 to 2012–13(a)(b)

	Indigenous		Non-Indigenous			
	Number	**No. per 1,000(c)**	**Number**	**No. per 1,000(c)**	**Ratio(d)**	**Difference(e)**
Major cities	11,913	31.3	502,001	15.6	2.0	15.7
Inner regional	5,433	21.9	103,852	12.9	1.7	8.9
Outer regional(f)	6,758	27.3	43,655	11.6	2.4	15.7
Remote(g)	3,477	36.6	4,921	9.3	3.9	27.3
Very remote	3,768	22.6	1,758	7.9	2.9	14.7
Total(h)	**32,383**	**28.4**	**664,912**	**14.8**	**1.9**	**13.7**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010): ICD-10-AM codes F00-F99, G30, R44, R48, G470, G471, G472, G478, G479, O993, R450, R451, R454, Z004, Z032, Z046, Z093, Z133, Z502, Z503, Z543, Z619, Z631, Z638, Z639, Z658, Z659, Z714, Z715, Z760.

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(e) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Disaggregation by remoteness area is based on the ABS' 2011 Australian Standard Geographical Classification (ASGC) and the Australian Statistical Geography Standard (ASGS) and relates to the patient's usual residence. Total includes hospitalisations where remoteness area of residence is unknown.

Notes

1. Rates by remoteness are calculated using AIHW derived populations using ABS population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.17: Hospitalisations of Indigenous persons for principal diagnosis of mental health related conditions, by type of condition and sex, Australia, 2011–12 to 2012–13[a][b]

Principal diagnosis	Number	Per cent[c]	No per 1,000[d]	Ratio[e]	Difference[f]
			Males		
Mental & behavioural disorders due to psychoactive substance use (F10–F19)	7,087	42.6	12.9	4.0	9.7
Schizophrenia, schizotypal and delusional disorders (F20–F29)	4,393	26.4	7.3	3.1	5.0
Mood disorders (F30–F39)	1,806	10.9	3.4	1.1	0.2
Neurotic, stress-related disorders (F40–F49)	1,921	11.5	3.2	1.3	0.8
Disorders of adult personality and behaviour (F60–F69)	298	1.8	0.5	2.1	0.2
Behavioural and emotional disorders (F90–F98)	335	2.0	0.3	1.6	0.1
Organic, including symptomatic, mental disorders (F00–F09)	230	1.4	1.0	1.5	0.3
Behavioural syndromes assoc. with physiological disturbances (F50–F59)	19	0.1	__	n.p.	__
Unspecified mental disorder (F99)	42	0.3	0.1	n.p.	__
Mental retardation (F70–F79)	62	0.4	0.1	3.7	0.1
Disorders of psych. Development (F80–F89)	51	0.3	__	n.p.	__
Other[g]	389	2.3	0.6	1.1	0.1
Total	**16,633**	**100.0**	**29.5**	**2.3**	**16.4**
			Females		
Mental & behavioural disorders due to psychoactive substance use (F10–F19)	4,880	31.0	8.1	3.5	5.8
Schizophrenia, schizotypal and delusional disorders (F20–F29)	3,130	19.9	5.3	3.1	3.6
Mood disorders (F30–F39)	2,940	18.7	5.9	0.9	–0.4
Neurotic, stress-related disorders (F40–F49)	2,870	18.2	4.6	1.5	1.6
Disorders of adult personality and behaviour (F60–F69)	648	4.1	1	1.2	0.2
Behavioural and emotional disorders (F90–F98)	159	1.0	0.2	2	0.1
Organic, including symptomatic, mental disorders (F00–F09)	233	1.5	0.9	1.6	0.3
Behavioural syndromes assoc. with physiological disturbances (F50–F59)	196	1.2	0.3	0.3	–0.6
Unspecified mental disorder (F99)	41	0.3	0.1	n.p.	__
Mental retardation (F70–F79)	34	0.2	__	n.p.	__
Disorders of psych. Development (F80–F89)	27	0.2	__	n.p.	__
Other[g]	592	3.8	0.9	1.4	0.3
Total	**15,750**	**100.0**	**27.3**	**1.7**	**10.8**

(continued)

Table 1.18.17 (continued): Hospitalisations of Indigenous persons for principal diagnosis of mental health related conditions, by type of condition and sex, Australia, 2011–12 to 2012–13[(a)(b)]

Principal diagnosis	Number	Per cent[(c)]	No per 1,000[(d)]	Ratio[(e)]	Difference[(f)]
			Persons[(h)]		
Mental & behavioural disorders due to psychoactive substance use (F10–F19)	11,967	37.0	10.4	3.7	7.6
Schizophrenia, schizotypal and delusional disorders (F20–F29)	7,523	23.2	6.3	3.1	4.3
Mood disorders (F30–F39)	4,746	14.7	4.8	n.p.	—
Neurotic, stress-related disorders (F40–F49)	4,791	14.8	3.9	1.5	1.2
Disorders of adult personality and behaviour (F60–F69)	946	2.9	0.7	1.4	0.2
Behavioural and emotional disorders (F90–F98)	494	1.5	0.2	1.7	0.1
Organic, including symptomatic, mental disorders (F00–F09)	463	1.4	1	1.5	0.3
Behavioural syndromes assoc. with physiological disturbances (F50–F59)	215	0.7	0.1	0.3	–0.3
Unspecified mental disorder (F99)	83	0.3	0.1	n.p.	—
Mental retardation (F70–F79)	96	0.3	0.1	n.p.	—
Disorders of psych. Development (F80–F89)	78	0.2	—	n.p.	—
Other[(g)]	981	3.0	0.8	1.3	0.2
Total	**32,383**	**100.0**	**28.4**	**1.9**	**13.7**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Proportion of male, female and total hospitalisations of Indigenous persons in the period 2011–12 to 2012–13.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous Australians.

(f) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous Australians.

(g) Other includes ICD-10-AM codes relating to mental health: G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48, Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z50.2, Z50.3, Z54.3, Z61.9, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5, Z76.0.

(h) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
3. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.18: Hospitalisations of Indigenous persons with principal diagnosis of injury and poisoning and a first reported external cause of assault or self-harm, by sex, Australia, 2011–12 to 2012–13[a][b]

Principal diagnosis	Number	Per cent[c]	No per 1,000[d]	Ratio[e]	Difference[f]
			Males		
Assault (X85–Y09)	5,852	79.2	9.5	8.0	8.3
Intentional self-harm (X60–X84)	1,540	20.8	2.5	2.9	1.6
Total	**7,392**	**100.0**	**12.0**	**5.9**	**9.9**
			Females		
Assault (X85–Y09)	6,431	72.6	10.1	32.4	9.8
Intentional self-harm (X60–X84)	2,423	27.4	3.6	2.3	2.0
Total	**8,854**	**100.0**	**13.7**	**7.3**	**11.8**
			Persons[g]		
Assault (X85–Y09)	12,283	75.6	9.8	13.0	9.0
Intentional self-harm (X60–X84)	3,963	24.4	3.0	2.5	1.8
Total	**16,246**	**100.0**	**12.8**	**6.5**	**10.9**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Proportion of male, female and total hospitalisations of Indigenous persons in the period 2011–12 to 2012–13.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Hospitalisation rates for Indigenous Australians divided by the hospitalisation rates for non-Indigenous Australians.

(f) Hospitalisation rates for Indigenous Australians minus the hospitalisation rates for non-Indigenous Australians.

(g) Persons data includes sex not stated and indeterminate.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.19: Hospitalisations of Indigenous people with principal diagnosis of injury and poisoning and other consequences of external causes and a first reported external cause of assault and self-harm, by Indigenous status and remoteness, Australia, 2011–12 to 2012–13[(a)(b)]

	Indigenous		Non-Indigenous			
	Number	No. per 1,000[(c)]	Number	No. per 1,000[(c)]	Ratio[(d)]	Difference[(e)]
Major cities	1,409	3.1	34,852	1.1	2.8	2.0
Inner regional	784	2.8	10,597	1.4	1.9	1.3
Outer regional[(f)]	745	2.7	5,028	1.5	1.8	1.2
Remote[(g)]	446	4.2	583	1.2	3.6	3.1
Very remote	527	2.8	184	0.9	3.2	2.0
Total[(h)]	**3,963**	**3.0**	**51,997**	**1.2**	**2.5**	**1.8**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010).

(c) Directly age-standardised using the Australian 2001 standard population.

(d) Rate ratio Indigenous: non-Indigenous Australians.

(e) Rate difference Indigenous: non-Indigenous Australians.

(f) Includes remote Victoria.

(g) Excludes remote Victoria.

(h) Total includes hospitalisations where remoteness area is missing.

Notes

1. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
2. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.20: Average length of stay in hospital (days), mental health related conditions, by Indigenous status and sex, Australia, 2011–12 to 2012–13[(a)(b)]

	Indigenous			Non-Indigenous		
Mental health related condition	**Males**	**Females**	**Persons**(c)	**Males**	**Females**	**Persons**(c)
Mental retardation (F70–F79)	92.2	18.6	66.2	52.1	61.2	56.1
Schizophrenia (F20–F29)	19.6	14.9	17.7	20.5	17.3	19.1
Organic mental disorders (F00–F09)	16.9	18.9	17.9	14.2	12.3	13.2
Behavioural syndromes (F50–F59)	10.3	8.9	9.0	7.2	8.3	8.3
Mood disorders (F30–F39)	8.8	7.4	8.0	7.9	7.2	7.4
Disorders of adult personality (F60–F69)	4.9	5.3	5.2	5.4	5.4	5.4
Neurotic, stress-related (F40–F49)	3.5	3.8	3.7	4.2	4.7	4.5
Mental disorders due to psychoactive substance use (F10–F19)	3.9	2.8	3.5	4.5	4.3	4.4
Behavioural & emotional disorders (F90–F98)	3.0	2.7	2.9	2.9	4.8	3.5
Unspecified mental disorder (F99)	2.5	4.6	3.5	12.5	13.0	12.8
Disorders of psychological development (F80–F89)	3.1	5.7	4.0	7.3	4.5	6.3
Total mental & behavioural disorders (F00–F99)	*9.2*	*6.9*	*8.1*	*8.9*	*7.7*	*8.2*
Other mental health conditions(b)	3.9	4.4	4.2	8.5	6.7	7.5
Total	**2.8**	**2.3**	**2.5**	**2.9**	**2.9**	**2.9**

(a) Data includes public and private hospitals in all jurisdictions.

(b) Other mental health conditions category are based on the ICD-10-AM seventh edition (National Centre in Health Classification 2012); ICD-10-AM codes G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48, Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z50.2, Z50.3, Z54.3, Z61.9, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5, Z76.0.

(c) Persons data includes sex not stated and indeterminate.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.21a: Age-standardised hospitalisation separations from mental health related conditions, Qld, WA, SA and NT, 1998–99 to 2012–13[(a)(b)]

	Indigenous separations			Non-Indigenous separations		
	Males	**Females**	**Persons**(c)	**Males**	**Females**	**Persons**(c)
1998–99	2,552	2,200	4,752	41,375	45,572	86,949
1999–00	2,667	2,051	4,718	41,895	49,276	91,172
2000–01	2,863	2,433	5,296	43,947	50,880	94,829
2001–02	2,876	2,564	5,440	43,498	49,837	93,335
2002–03	2,888	2,731	5,620	42,071	52,372	94,445
2003–04	2,879	2,765	5,644	43,290	54,144	97,434
2004–05	2,864	2,855	5,719	42,544	55,252	97,796
2005–06	2,983	2,805	5,788	42,458	54,313	96,771
2006–07	3,187	2,822	6,009	46,615	54,291	100,906
2007–08	3,334	2,964	6,298	46,369	54,158	100,527
2008–09	3,511	3,136	6,647	48,575	60,083	108,658
2009–10	3,682	3,371	7,053	49,584	59,949	109,533
2010–11	4,396	4,033	8,429	51,688	60,380	112,068
2011–12	4,892	4,662	9,554	53,657	63,960	117,617
2012–13	5,181	4,909	10,090	57,051	69,895	126,946
Annual change(d)	163.4	169.4	332.8	975.3	1,316.1	2,291.3
Per cent change(e)	102.1	124.8	112.5	34.6	39.7	37.3

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions; ICD-10-AM codes F70–F79; F20–F29; F00–F09; F99; F50–F59; F30–F39; F60–F69; F10–F19; F80–F89; F40–F49; F90–F98; F00–F99; G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48, Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z50.2, Z50.3, Z54.3, Z61.9, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5, Z76.0.
2. Principal diagnosis code used unless specified otherwise.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.21b: Age-standardised hospitalisation rates from mental health related conditions, Qld, WA, SA and NT, 1998–99 to 2012–13[(a)(b)]

	Indigenous rate per 1,000			Non-Indigenous rate per 1,000		
	Males	**Females**	**Persons**[(c)]	**Males**	**Females**	**Persons**[(c)]
1998–99	22.0	18.6	20.2	12.7	13.5	13.1
1999–00	21.9	16.0	18.9	12.5	14.4	13.5
2000–01	23.3	19.0	21.1	13.0	14.7	13.8
2001–02	22.1	18.8	20.4	12.6	14.2	13.4
2002–03	21.6	19.6	20.6	12.0	14.6	13.3
2003–04	21.1	19.3	20.2	12.1	14.9	13.5
2004–05	20.6	19.3	19.9	11.7	15.0	13.3
2005–06	21.4	18.7	20.0	11.4	14.4	12.9
2006–07	21.8	18.0	19.8	12.1	14.1	13.1
2007–08	22.4	19.0	20.6	11.7	13.7	12.7
2008–09	22.9	19.6	21.2	12.0	14.9	13.4
2009–10	23.7	20.2	21.8	12.0	14.6	13.3
2010–11	27.4	25.1	26.4	12.3	14.4	13.3
2011–12	30.5	29.5	30.2	12.5	14.9	13.7
2012–13	31.8	29.7	30.8	13.1	16.0	14.5
Annual change[(d)]	0.6	0.7	0.6	__	0.1	__
Per cent change[(e)]	39.0	60.1	49.9	–1.5	6.5	2.7

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Persons data includes sex not stated and indeterminate.

(d) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(e) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions; ICD-10-AM codes F70–F79; F20–F29; F00–F09; F99; F50–F59; F30–F39; F60–F69; F10–F19; F80–F89; F40–F49; F90–F98; F00–F99; G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48, Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z50.2, Z50.3, Z54.3, Z61.9, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5, Z76.0.
4. Principal diagnosis code used unless specified otherwise.
5. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.21c: Age-standardised hospitalisation rate ratios and rate differences from mental health related conditions, Qld, WA, SA and NT, 1998–99 to 2012–13[(a)(b)]

	Rate ratio(c)			Rate difference(d)		
	Males	Females	Persons(e)	Males	Females	Persons(e)
1998–99	1.7	1.4	1.5	9.3	5.1	7.2
1999–00	1.7	1.1	1.4	9.4	1.6	5.4
2000–01	1.8	1.3	1.5	10.3	4.3	7.3
2001–02	1.8	1.3	1.5	9.5	4.7	7.0
2002–03	1.8	1.3	1.5	9.6	4.9	7.2
2003–04	1.7	1.3	1.5	9.0	4.4	6.7
2004–05	1.8	1.3	1.5	9.0	4.3	6.6
2005–06	1.9	1.3	1.5	10.0	4.3	7.1
2006–07	1.8	1.3	1.5	9.7	3.9	6.7
2007–08	1.9	1.4	1.6	10.6	5.2	7.9
2008–09	1.9	1.3	1.6	10.9	4.7	7.8
2009–10	2.0	1.4	1.6	11.8	5.6	8.6
2010–11	2.2	1.7	2.0	15.1	10.7	13.0
2011–12	2.4	2.0	2.2	18.0	14.5	16.5
2012–13	2.4	1.9	2.1	18.7	13.7	16.3
Annual change(f)	n.a.	n.a.	n.a.	0.6	0.6	0.6
Per cent change(g)	n.a.	n.a.	n.a.	106.2	477.0	188.4

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(d) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

(e) Persons data includes sex not stated and indeterminate.

(f) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(g) Per cent change between 1998–99 and 2012–13 based on the average annual change over the period.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions; ICD-10-AM codes F70–F79; F20–F29; F00–F09; F99; F50–F59; F30–F39; F60–F69; F10–F19; F80–F89; F40–F49; F90–F98; F00–F99; G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48, Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z50.2, Z50.3, Z54.3, Z61.9, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5, Z76.0.
4. Principal diagnosis code used unless specified otherwise.
5. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.22: Age-standardised hospitalisation rates, rate ratios and rate differences from mental health related conditions, NSW, Vic, Qld, WA, SA and NT, 2004–2005 to 2012–13(a)(b)

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change(c)	Per cent change(d)
Indigenous separations											
Males	5,160	5,600	5,923	6,168	6,244	6,634	7,515	7,719	8,381	381.5	60.2
Females	4,850	4,853	5,119	5,385	5,655	5,829	6,539	7,330	7,932	384.1	69.7
Persons(e)	10,010	10,453	11,042	11,553	11,899	12,463	14,054	15,049	16,313	765.6	64.6
Non-Indigenous Australian separations											
Males	122,248	121,319	126,615	128,173	132,972	136,512	133,884	138,799	140,226	2,453.8	16.2
Females	155,038	157,639	158,494	162,048	169,813	182,816	168,172	174,374	183,416	3,397.4	17.6
Persons(e)	277,287	278,958	285,109	290,225	302,791	319,356	302,061	313,186	323,644	5,852.5	17.0
Indigenous rate (separations per 1,000)											
Males	22.7	23.9	24.6	25	24.7	25.5	28	29	30.9	0.9	33.1
Females	20.3	19.3	19.9	20.8	21.2	21.5	24.1	27	28.4	1.1	47.3
Persons(e)	21.4	21.5	22.1	22.8	22.9	23.4	26.1	28	29.6	1.0	40.3
Non-Indigenous Australian rate (separations per 1,000)											
Males	13.2	12.8	13.1	13	13.2	13.3	12.8	13.1	13	—	–0.1
Females	16.2	16.2	16	16.1	16.5	17.5	15.8	16.1	16.7	—	1.8
Persons(e)	14.7	14.5	14.6	14.5	14.8	15.4	14.3	14.6	14.8	—	1.0
Rate ratio(f)											
Males	1.7	1.9	1.9	1.9	1.9	1.9	2.2	2.2	2.4	n.a.	n.a.
Females	1.2	1.2	1.2	1.3	1.3	1.2	1.5	1.7	1.7	n.a.	n.a.
Persons(e)	1.5	1.5	1.5	1.6	1.5	1.5	1.8	1.9	2	n.a.	n.a.

(continued)

Table 1.18.22 (continued): Age-standardised hospitalisation rates, rate ratios and rate differences from mental health related conditions, NSW, Vic, Qld, WA, SA and NT, 2004–2005 to 2012–13[(a)(b)]

	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	Annual change[(c)]	Per cent change[(d)]
Rate difference[(g)]											
Males	9.5	11.1	11.4	12	11.4	12.2	15.2	15.9	17.9	0.9	80.1
Females	4	3.1	3.9	4.7	4.8	4	8.4	10.9	11.7	1.0	414.9
Persons[(e)]	6.8	7	7.5	8.3	8.1	8	11.8	13.4	14.8	1.0	144.0

(a) Data are from public and most private hospitals and exclude separations from private hospitals in the Northern Territory.

(b) Data are reported by state/territory of usual residence of the patient hospitalised.

(c) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(d) Per cent change between 2004–05 and 2012–13 based on the average annual change over the period.

(e) Persons data includes sex not stated and indeterminate.

(f) Rate ratio is the age-standardised rate for Indigenous Australians divided by the age-standardised rate for non-Indigenous.

(g) Rate difference is the age-standardised rate for Indigenous Australians minus the age-standardised rate for non-Indigenous.

Notes

1. Directly age-standardised using the 2001 Australian standard population.
2. Rates are calculated using ABS backcast population estimates and projections based on the 2011 Census.
3. Excludes separations with care types 7.3, 9 and 10 (newborn, unqualified days only; organ procurement; and hospital boarder).
4. Categories are based on the ICD-10-AM seventh edition (National Centre for Classification in Health 2010) and previous editions: ICD-10-AM codes F70–F79; F20–F29; F00–F09; F99; F50–F59; F30–F39; F60–F69; F10–F19; F80–F89; F40–F49; F90–F98; F00–F99; G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48, Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z50.2, Z50.3, Z54.3, Z61.9, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5, Z76.0.
5. Principal diagnosis code used unless specified otherwise.

Source: AIHW analysis of National Hospital Morbidity Database.

Table 1.18.23: Most frequently reported mental health related problems[a] managed by general practitioners, by Indigenous status of patient, BEACH years April 2008–March 2009 to April 2012–March 2013[b][c]

	Number		% of total problems		Crude rate (no. per 1,000 encounters)			Age-standardised rate (no. per 1,000 encounters)[d]							
Problem managed	**Indig.**	**Other[e]**	**Indig.**	**Other[e]**	**Indig.**	**95% LCL[f]**	**95% UCL[g]**	**Indig.**	**95% LCL[f]**	**95% UCL[g]**	**Other[e]**	**95% LCL[f]**	**95% UCL[g]**	**Rate ratio[h]**	**Rate difference[i]**
Depression (P03, P76)	357	22,150	3.1	2.9	48.4	42.3	54.5	44.5	38.3	50.8	45.7	44.7	46.7	1.0	–1.2
Drug abuse (P19)	89	1,659	0.8	0.2	12.1	8.8	15.4	9.8*	7.1*	12.5*	3.4*	2.9*	4.0*	2.8*	6.3*
Anxiety (P01, P74)	146	10,010	1.2	1.3	19.8	15.9	23.6	21.2	16.3	26.1	20.7	20.0	21.3	1.0	0.6
Sleep disturbance (P06)	104	7,397	0.9	1.0	14.1	11.2	17.0	17.3	13.1	21.6	15.2	14.7	15.7	1.1	2.1
Alcohol abuse (P15, P16)	122	1,828	1.0	0.2	16.5	11.9	21.2	15.4*	10.9*	19.9*	3.8*	3.5*	4.0*	4.1*	11.6*
Schizophrenia (P72)	81	2,178	0.7	0.3	11.0	7.7	14.3	10.0*	6.8*	13.2*	4.5*	4.2*	4.8*	2.2*	5.5*
Tobacco abuse (P17)	127	3,681	1.1	0.5	17.2	13.1	21.3	16.3*	12.4*	20.2*	7.6*	7.3*	7.9*	2.1*	8.7*
Acute stress reaction (P02)	61	3,598	0.5	0.5	8.3	6.0	10.5	8.1	5.6	10.5	7.4	7.1	7.8	1.1	0.6
Affective psychosis (P73)	23	1,436	0.2	0.2	3.1	1.8	4.4	2.8	1.6	4.1	3.0	2.8	3.2	1.0	–0.1
Dementia (P70)	19	2,882	0.2	0.4	2.6	1.1	4.1	9.3	3.7	14.8	5.9	5.3	6.4	1.6	3.4
Other mental health problems[j]	167	7,726	1.4	1.0	22.6	18.4	26.9	17.5	14.2	20.9	16.0	15.4	16.6	1.1	1.5
Total mental health	**1,296**	**64,545**	**11.1**	**8.4**	**175.6**	**160.3**	**190.9**	**172.3***	**156.5***	**188.0***	**133.2***	**130.7***	**135.7***	**1.3***	**39.1***

*Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Classified according to ICPC-2 codes (Classification Committee of the World Organization of Family Doctors (WICC) 2005).

(b) Data from five combined BEACH years April 2008–March 2009 to April 2012–March 2013 inclusive.

(c) Data for Indigenous and other Australians have not been weighted.

(d) Directly age-standardised rate (no. per 1,000 encounters) using total BEACH encounters in the period as the standard. Figures do not add to 100 as more than one problem can be managed at each encounter.

(e) 'Other' includes encounters with non-Indigenous patients and those with patients for whom Indigenous status was not stated.

(f) LCL = lower confidence interval.

(g) UCL = upper confidence interval.

(h) Rate ratio is rate for Indigenous divided by rate for Other Australians.

(i) Rate difference is rate for Indigenous minus rate for Other Australians.

(j) ICPC–2 codes: P04–P05, P07–P13, P18, P20, P22–P25, P27–P69, P71, P75, P77–P82, P85–P86, P98–P99.

Source: Analyses conducted by the Family Medicine Research Centre, University of Sydney, of BEACH data collected by that Centre.

Table 1.18.24: Intentional self-harm mortality rates by Indigenous status by age and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

	Number		Deaths per 100,000(k)(l)			
Age group (years)	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Rate ratio(m)	Rate difference(n)
			Males			
0–4 years	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
5–14	5	13	1.4	0.3	5.1	1.1
15–19	77	219	47.8	8.7	5.5	39.0
20–24	87	429	67.4	15.6	4.3	51.8
25–29	60	530	55.2	18.8	2.9	36.4
30–34	56	576	64.7	22.4	2.9	42.3
35–39	37	670	40.6	24.4	1.7	16.1
40–44	35	696	42.7	26.5	1.6	16.2
45–49	23	663	32.1	24.6	1.3	7.5
50–54	11	574	18.5	22.7	0.8	–4.2
55–59	8	466	18.4	20.4	0.9	–2.0
60–64	2	348	10.1	16.5	0.6	–6.3
65–69	4	249	10.8	15.6	0.7	–4.8
70–74	2	225	9.2	18.5	0.5	–9.4
75+	3	502	26.0	25.1	1.0	0.9
Total (crude)(l)(o)	**408**	**6,160**	**28.2**	**16.3**	**1.7**	**11.9**
Total (age-standardised)(l)(p)	**. .**	**. .**	**30.4**	**16.2**	**1.9**	**14.1**
			Females			
0–4 years	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
5–14	9	9	2.7	0.2	13.2	2.5
15–19	28	100	18.6	4.2	4.4	14.4
20–24	30	131	23.5	5.0	4.7	18.5
25–29	26	134	24.4	4.9	4.9	19.5
30–34	15	155	16.4	6.1	2.7	10.4
35–39	20	189	20.5	6.9	3.0	13.7
40–44	8	203	8.9	7.7	1.2	1.2
45–49	10	195	12.9	7.2	1.8	5.7
50–54	2	202	4.8	7.9	0.6	–3.1
55–59	1	157	2.1	6.8	0.3	–4.7
60–64	2	110	3.0	5.3	0.6	–2.2
65–69	1	71	4.7	4.4	1.1	0.3
70–74	0	62	0.0	4.9	0.0	–4.9
75+	3	149	5.7	5.3	1.1	0.3
Total (crude)(l)(o)	**153**	**1,868**	**10.5**	**4.9**	**2.1**	**5.6**
Total (age-standardised)(l)(p)	**. .**	**. .**	**10.5**	**4.8**	**2.2**	**5.6**

(continued)

Table 1.18.24 (continued): Intentional self-harm mortality rates by Indigenous status by age and sex, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g][h][i][j]

	Number		Deaths per 100,000[k][l]			
Age group (years)	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Rate ratio**[m]	**Rate difference**[n]
			Persons			
0–4 years	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
5–14	14	22	2.0	0.2	8.5	1.8
15–19	105	319	33.7	6.5	5.2	27.2
20–24	117	560	45.5	10.4	4.4	35.1
25–29	86	664	40.0	12.0	3.3	27.9
30–34	71	731	39.9	14.3	2.8	25.6
35–39	57	859	30.2	15.6	1.9	14.6
40–44	43	899	24.9	17.0	1.5	7.9
45–49	33	858	22.1	15.9	1.4	6.3
50–54	14	776	11.4	15.2	0.8	–3.8
55–59	9	623	10.0	13.6	0.7	–3.6
60–64	4	458	6.4	10.9	0.6	–4.5
65–69	4	320	7.5	10.0	0.8	–2.4
70–74	2	287	4.0	11.6	0.3	–7.6
75+	3	651	13.7	13.6	1.0	0.1
Total (crude)[l][o]	**561**	**8,028**	**19.3**	**10.6**	**1.8**	**8.7**
Total (age-standardised)[l][p]	**. .**	**. .**	**20.1**	**10.4**	**1.9**	**9.7**

(continued)

Table 1.18.24 (continued): Intentional self-harm mortality rates by Indigenous status by age and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

(a) Intentional self-harm ICD-10 codes X60-X84, Y87.0.

(b) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(c) Care needs to be taken in interpreting figures relating to suicide. See Cause of Death, Australia, 2012 (cat. No. 3303.0) Explanatory Notes 92–94 for further information.

(d) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(f) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(g) These data exclude 238 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(h) Cells with small values have been randomly assigned to protect the confidentiality of individuals, so some totals will not equal the sum of their components. Cells with a zero value have not been affected.

(i) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(j) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(k) Age-specific death rates per 100,000 using the midpoint populations for the relevant years.

(l) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(m) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(n) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(o) Crude rates calculated per 100,000 estimated resident population for the mid-point year. Crude rates cannot be compared across years or to age-standardised rates.

(p) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

Notes

1. Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.
2. Not stated for age has been pro-rated across each age group.
3. Cells with small values have been randomly assigned to protect the confidentiality of individuals. As a result, some totals will not equal the sum of their components. Cells with a zero value have not been affected by confidentialisation.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.18.25: Age-standardised mortality rates, rate ratios and rate differences, intentional self-harm (X60–X84, Y87.0), NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)

Year		Indigenous rate per 100,000(g)	Non-Indigenous rate per 100,000(g)	Rate ratio(h)	Rate difference(i)
1998		22.6	14.5	1.6	8.1
1999		13.3	12.8	1.0	0.5
2000		17.7	12.5	1.4	5.2
2001		20.4	12.5	1.6	7.9
2002		24.4	11.3	2.2	13.1
2003		15.4	10.6	1.5	4.8
2004		16.1	9.7	1.7	6.4
2005		17.6	9.8	1.8	7.8
2006		19.3	9.8	2.0	9.5
2007		18.2	10.5	1.7	7.7
2008		17.8	10.4	1.7	7.4
2009		17.7	9.9	1.8	7.8
2010(j)		21.1	10.7	2.0	10.5
2011		23.9	10.1	2.4	13.8
2012		19.6	11.2	1.8	8.5
Long term 1998–2012	**Annual change**(k)	0.1	–0.2*	n.a.	0.4
	% change over period(l)	10.5	–24.4*	n.a.	92.7
Medium term 2001–2012	**Annual change**(k)	0.1	–0.1	n.a.	0.2
	% change over period(l)	7.0	–7.3	n.a.	28.5
Medium term 1998–2006	**Annual change**(k)	–0.1	–0.6*	n.a.	0.4
	% change over period(l)	–5.9	–34.0*	n.a.	68.1
Short term 2006–2012	**Annual change**(k)	0.6	0.1	n.a.	0.4
	% change over period(l)	18.6	7.9	n.a.	33.0

(continued)

Table 1.18.25 (continued): Age-standardised mortality rates, rate ratios and rate differences, intentional self-harm (X60–X84, Y87.0), NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)

* Represents results with statistically significant increases or declines at the p < 0.05 level over the specified periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(f) These data exclude 710 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(g) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(h) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(i) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(j) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(k) Annual change determined using linear regression analysis.

(l) Per cent change based on the annual change over the period.

Notes

1. ICD-10 codes X60–X84, Y87.0 included.
2. Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.18.26: Intentional self-harm mortality rates by Indigenous status and age, NSW, Qld, WA, SA and NT, 1998–2012[a][b][c][d][e][f][g][h]

																Long term 1998–2012		Medium term 2001–2012		Medium term 1998–2006		Short term 2006–2012	
Years	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**Annual change**[i]	**% change over period**[j]	**Annual change**[i]	**% change over period**[j]	**Annual change**[i]	**% change over period**[j]	**Annual change**[i]	**% change over period**[j]
								Indigenous crude rate (per 100,000)[k][l]															
0–4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
5–14	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	4.4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
15–19	51.7	23.5	38.3	32.6	29.4	28.7	25.9	17.3	33.2	28.5	27.4	33.0	27.2	45.2	34.8	–0.1	–6.3	0.8	32.0	–2.0	–41.2	1.4	28.4
20–24	60.3	41.2	32.7	48.2	59.9	27.5	35.9	50.3	39.7	38.4	54.0	44.4	35.0	56.0	37.8	–0.2	–7.1	–0.2	–3.8	–1.2	–19.0	0.4	5.3
25–29	63.1	22.8	46.2	47.3	57.0	44.4	41.8	66.3	57.0	29.1	53.3	34.0	39.5	44.9	30.3	–0.8	–20.9	–1.5	–31.2	1.6	29.1	–2.2	–27.9
30–34	49.8	28.7	36.0	50.8	57.0	33.2	51.1	15.6	23.9	41.2	30.9	45.2	33.7	35.9	50.8	–0.3	–9.0	–0.5	–14.0	–2.2	–36.9	2.6	52.8
35–39	19.7	19.3	34.7	34.3	36.7	24.0	32.2	31.1	40.9	34.3	23.4	26.1	34.4	35.3	33.7	0.5	27.7	—	–0.8	1.7	60.0	–0.3	–5.5
40–44	24.7	n.p.	n.p.	n.p.	24.4	23.7	n.p.	32.4	25.6	18.8	18.4	24.0	29.0	22.3	29.7	0.1	3.4	0.1	3.9[n]	0.5	17.3	1.1	30.9
45–49	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	18.1	24.5	17.1	23.5	29.8	16.2	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	0.4	8.9[o]
50–54	n.p.	n.p.	0.0	n.p.	n.p.	0.0	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	23.5	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
55–59	0.0	n.p.	n.p.	0.0	0.0	n.p.	0.0	0.0	0.0	0.0	n.p.	n.p.	n.p.	n.p.	n.p.	0.0[p]	n.p.	0.0[q]	n.p.	0.0	n.p.	n.p.	n.p.
60–64	n.p.	0.0	n.p.	0.0	n.p.	n.p.	0.0	0.0	n.p.	n.p.	0.0	n.p.	n.p.	0.0	n.p.	0.0[r]	n.p.	0.0[s]	n.p.	0.0[t]	n.p.	n.p.	n.p.
65–69	n.p.	0.0	n.p.	n.p.	n.p.	0.0	n.p.	0.0	0.0	0.0	0.0	0.0	n.p.	n.p.	n.p.	0.0[u]	n.p.	0.0[v]	n.p.	0.0[w]	n.p.	0.0[x]	n.p.
70–74	0.0	0.0	0.0	n.p.	n.p.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.p.	0.0	0.0	0.0	n.p.	0.0[y]	n.p.	0.0	n.p.	0.0	n.p.
75+	0.0	0.0	0.0	0.0	0.0	0.0	0.0	n.p.	n.p.	n.p.	0.0	0.0	n.p.	n.p.	0.0	0.0	n.p.	0.0	n.p.	0.0[z]	n.p.	n.p.	n.p.
Total (crude)[k][l]	**23.6**	**13.5**	**17.7**	**20.2**	**22.8**	**15.3**	**16.3**	**16.9**	**18.4**	**17.4**	**18.1**	**17.6**	**18.4**	**23.0**	**19.4**	**—**	**3.5**	**0.1**	**5.0**	**–0.3**	**–12.5**	**0.5**	**17.9**
Total (age std.)[l][m]	**22.6**	**13.3**	**17.7**	**20.4**	**24.4**	**15.4**	**16.1**	**17.6**	**19.3**	**18.2**	**17.8**	**17.7**	**21.1**	**23.9**	**19.6**	**0.1**	**10.5**	**0.1**	**7.0**	**–0.1**	**–5.9**	**0.6**	**18.6**

(continued)

Table 1.18.26 (continued): Intentional self-harm mortality rates by Indigenous status and age, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)

																Long term 1998–2012		Medium term 2001 – 2012		Medium term 1998 – 2006		Short term 2006–2012	
Years	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Annual change(i)	% change over period(j)	Annual change(i)	% change over period(j)	Annual change(i)	% change over period(j)	Annual change(i)	% change over period(j)
						Non-Indigenous crude rate (per 100,000)(k)(l)																	
0–4	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
5–14	n.p.	0.6	n.p.	n.p.	n.p.	0.4	0.3	0.3	n.p.	n.p.	n.p.	0.0	n.p.	0.6	0.3	n.p.	n.p.	—(aa)	6.7(aa)	–0.1(bb)	–53.1*(bb)	n.p.	n.p.
15–19	9.8	8.6	8.4	8.1	8.5	6.9	5.0	6.0	7.0	7.2	6.3	6.2	6.0	6.7	7.5	–0.2*	–30.1*	–0.1	–11.7	–0.5*	–38.3*	—	0.6
20–24	23.0	19.4	16.5	17.2	13.6	13.4	11.6	12.8	12.0	11.0	10.5	8.9	10.3	11.3	11.5	–0.7*	–55.3*	–0.4*	–33.7*	–1.3*	–50.0*	—	–2.2
25–29	25.1	21.4	20.3	17.0	17.2	16.0	13.7	12.1	9.9	14.4	11.6	12.9	11.8	12.3	12.0	–0.8*	–54.8*	–0.5*	–31.3*	–1.7*	–57.6*	0.1	4.1
30–34	23.0	20.5	19.4	20.6	19.0	18.4	14.1	15.7	12.4	15.8	15.0	13.9	13.2	13.6	14.9	–0.6*	–41.6*	–0.5*	–30.8*	–1.2*	–40.8*	0.1	2.0
35–39	25.1	17.6	19.9	20.4	17.0	15.6	14.0	13.4	14.2	16.4	16.4	14.5	17.7	13.7	16.6	–0.4*	–29.7*	–0.2	–10.0	–1.2*	–43.5*	0.1	4.3
40–44	20.4	17.0	21.0	17.1	18.8	15.8	15.7	15.3	14.5	15.6	17.4	15.5	17.4	17.0	16.8	–0.2	–15.1	—	–0.4	–0.7*	–27.1*	0.4	13.6
45–49	16.2	15.8	14.6	18.2	14.4	17.2	12.4	15.8	15.2	14.0	15.9	14.7	16.0	16.1	17.2	—	0.9	—	1.6	–0.2	–7.8	0.4*	15.2*
50–54	15.4	15.3	13.9	15.7	13.8	10.1	11.2	11.7	12.1	14.7	15.5	15.1	15.4	12.9	17.1	0.1	6.6	0.3	24.4	–0.6*	–30.0*	0.4	18.0
55–59	13.0	13.7	11.1	12.5	10.4	9.4	9.0	9.2	12.8	11.8	12.7	12.5	14.2	14.1	14.1	0.2	18.7	0.4*	44.0*	–0.4	–22.7	0.4*	17.7*
60–64	14.2	12.2	11.2	11.7	12.2	9.1	11.1	11.2	10.3	12.9	9.1	11.0	12.7	9.8	12.1	–0.1	–11.2	—	1.3	–0.4*	–22.1*	0.1	5.5
65–69	16.4	11.9	11.1	11.8	10.5	12.4	11.7	8.3	11.8	11.2	11.2	9.8	8.6	10.1	10.0	–0.3*	–29.3*	–0.2	–17.0	–0.5	–26.9	–0.4	–19.0
70–74	11.4	15.6	16.2	13.1	9.5	10.3	12.0	10.4	14.7	9.1	13.2	9.8	11.5	10.0	13.4	–0.2	–17.1	—	2.7	–0.2	–13.4	–0.1	–6.7
75+	14.4	13.7	14.0	13.9	12.5	11.5	13.7	12.2	12.9	12.6	11.3	13.1	15.2	12.0	15.9	—	0.3	0.1	11.6	–0.2	–12.8	0.4	20.8
Total (crude)(k)(l)	**14.6**	**12.9**	**12.6**	**12.6**	**11.4**	**10.7**	**9.8**	**9.9**	**10.0**	**10.7**	**10.5**	**10.1**	**10.9**	**10.3**	**11.4**	**–0.2***	**–23.2***	**–0.1**	**–6.2**	**–0.6***	**–33.4***	**0.1**	**8.0**
Total (age std.)(l) (m)	**14.5**	**12.8**	**12.5**	**12.5**	**11.3**	**10.6**	**9.7**	**9.8**	**9.8**	**10.5**	**10.4**	**9.9**	**10.7**	**10.1**	**11.2**	**–0.2***	**–24.4***	**–0.1**	**–7.3**	**–0.6***	**–34.0***	**0.1**	**7.9**

(continued)

Table 1.18.26 (continued): Intentional self-harm mortality rates by Indigenous status and age, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level.

(a) Intentional self-harm ICD-10 codes X60–X84, Y87.0.

(b) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006—2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(c) Care needs to be taken in interpreting figures relating to suicide. See Cause of Death, Australia, 2012 (cat. No. 3303.0) Explanatory Notes 92–94 for further information.

(d) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(f) These data exclude 710 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Annual change determined using linear regression analysis.

(j) Per cent change based on the annual change over the period.

(k) Crude rates calculated per 100,000 estimated resident population for the mid-point year. Crude rates cannot be compared across years or to age-standardised rates.

(l) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(m) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(n) The annual change and percent change over period have been calculated from 2002 to 2012 due to inadequate data for longer time trend.

(o) The annual change and percent change over period have been calculated from 2007 to 2012 due to inadequate data for longer time trend.

(p) The annual change and percent change over period have been calculated from 1998 to 2007 due to inadequate data for longer time trend.

(q) The annual change and percent change over period have been calculated from 2001 to 2007 due to inadequate data for longer time trend.

(r) The annual change and percent change over period have been calculated from 1999 to 2011 due to inadequate data for longer time trend.

(s) The annual change and percent change over period have been calculated from 2001 to 2011 due to inadequate data for longer time trend.

(t) The annual change and percent change over period have been calculated from 1999 to 2005 due to inadequate data for longer time trend.

(u) The annual change and percent change over period have been calculated from 1999 to 2009 due to inadequate data for longer time trend.

(v) The annual change and percent change over period have been calculated from 2003 to 2009 due to inadequate data for longer time trend.

(w) The annual change and percent change over period have been calculated from 1999 to 2006 due to inadequate data for longer time trend.

(x) The annual change and percent change over period have been calculated from 2006 to 2009 due to inadequate data for longer time trend.

(y) The annual change and percent change over period have been calculated from 2003 to 2012 due to inadequate data for longer time trend.

(z) The annual change and percent change over period have been calculated from 1998 to 2004 due to inadequate data for longer time trend.

(aa) The annual change and percent change over period have been calculated from 2003 to 2012 due to inadequate data for longer time trend.

(bb) The annual change and percent change over period have been calculated from 1999 to 2005 due to inadequate data for longer time trend.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.18.27: Intentional self-harm mortality rates by Indigenous status and jurisdiction, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)

																Long term 1998–2012		Medium term 2001–2012		Medium term 1998–2006		Short term 2006–2012	
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Annual change(i)	% change over period(j)	Annual change(i)	% change over period(j)	Annual change(i)	% change over period(j)	Annual change(i)	% change over period(j)
Indigenous age-standardised rate (per 100,000)(k)(l)																							
NSW	n.p.	n.p.	n.p.	n.p.	17.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	14.4	n.p.	10.7	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Qld(g)	32.4	17.8	14.6	29.9	28.5	19.5	13.5	15.5	19.4	21.6	16.3	19.3	17.6	21.8	16.2	–0.5	–30.1	–0.7	–31.1	–1.2	–36.7	–0.3	–8.6
WA	23.7	n.p.	34.4	n.p.	n.p.	n.p.	n.p.	n.p.	47.2	n.p.	32.0	26.6	36.1	44.6	35.8	–0.6	–30.7	n.p.	n.p.	n.p.	n.p.	–0.6	–9.8
SA	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
NT	n.p.	n.p.	n.p.	n.p.	50.0	30.7	33.3	27.4	23.9	35.1	n.p.	n.p.	32.1	32.2	35.2	n.p.	n.p.	–0.5(m)	–13.6(m)	–5.6(n)	–50.3(n)	1.1	22.5
NSW, Qld, WA, SA & NT	**22.6**	**13.3**	**17.7**	**20.4**	**24.4**	**15.4**	**16.1**	**17.6**	**19.3**	**18.2**	**17.8**	**17.7**	**21.1**	**23.9**	**19.6**	**0.1**	**10.5**	**0.1**	**7.0**	**–0.1**	**–5.9**	**0.6**	**18.6**
Non-Indigenous age-standardised rate (per 100,000)(k)(l)																							
NSW	13.0	12.6	11.0	11.7	9.9	9.2	8.6	8.0	8.4	8.7	8.6	8.5	9.0	8.1	9.3	–0.3*	–34.6*	–0.1	–16.6	–0.7*	–40.8*	0.1	4.8
Qld(g)	16.2	13.7	15.3	13.3	14.1	12.2	11.6	11.4	11.7	11.8	12.5	11.3	12.4	12.1	13.0	–0.2*	–20.9*	–0.1	–5.5	–0.6*	–28.7*	0.2	8.1
WA	15.1	12.2	12.3	13.7	11.5	11.4	8.7	9.6	10.1	11.8	12.2	10.9	11.7	11.1	13.3	–0.1	–11.7	0.1	5.1	–0.6*	–35.2*	0.3	15.3
SA	16.0	12.7	12.5	12.6	10.4	11.4	10.2	13.0	10.4	12.3	10.3	10.7	11.5	12.3	11.4	–0.2	–17.5	—	0.3	–0.5*	–26.1*	0.2	8.3
NT	22.7	n.p.	17.6	18.0	16.9	19.1	19.0	17.7	n.p.	23.7	n.p.	n.p.	12.7	n.p.	11.1	–0.5	–35.8	–0.6	–31.6	–0.4(o)	–14.9(o)	n.p.	n.p.
NSW, Qld, WA, SA & NT	**14.5**	**12.8**	**12.5**	**12.5**	**11.3**	**10.6**	**9.7**	**9.8**	**9.8**	**10.5**	**10.4**	**9.9**	**10.7**	**10.1**	**11.2**	**–0.2***	**–24.4***	**–0.1**	**–7.3**	**–0.6***	**–34.0***	**0.1**	**7.9**

(continued)

Table 1.18.27 (continued): Intentional self-harm mortality rates by Indigenous status and jurisdiction, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level.

(a) Intentional self-harm ICD-10 codes X60–X84, Y87.0.

(b) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(c) Care needs to be taken in interpreting figures relating to suicide. See Cause of Death, Australia, 2012 (cat. No. 3303.0) Explanatory Notes 92–94 for further information.

(d) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(f) These data exclude 710 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Annual change determined using linear regression analysis.

(j) Per cent change based on the annual change over the period.

(k) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(l) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(m) The annual change and percent change over period have been calculated from 2002 to 2012 due to inadequate data for longer time trend.

(n) The annual change and percent change over period have been calculated from 2002 to 2006 due to inadequate data for longer time trend.

(o) The annual change and percent change over period have been calculated from 1998 to 2005 due to inadequate data for longer time trend.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Data quality issues

National Aboriginal and Torres Strait Islander Social Survey

The NATSISS is conducted in all states and territories and includes *Remote* and *Non-remote* areas. The 2008 survey was undertaken between August 2008 and April 2009, with a sample size of 13,300 persons (5,500 aged 0–14 and 7,800 aged 15 and over) in 6,900 households, and a response rate of 82% of households. Up to 3 randomly selected Indigenous Australians were chosen from selected households to participate in the survey. Trained ABS interviewers conducted the survey using face-to-face interviews. In *Non-remote* areas interviewers used a notebook computer to record responses, while in *Remote* areas a paper questionnaire was used. Interviewers obtained the consent of a parent or guardian before interviewing those aged 15–17. Indigenous persons usually resident in non-private dwellings, such as hotels, motels, hostels, hospitals, short-stay caravan parks, prisons and other correctional facilities were excluded.

The NATSISS uses the standard Indigenous status question. The NATSISS sample was specifically designed to select a representative sample of Indigenous Australians.

As with other surveys, the NATSISS is subject to sampling and non-sampling errors.

Care has been taken to ensure that the results of this survey are as accurate as possible. Trained ABS officers conducted all interviews. However, some factors may affect the reliability of the data.

Information recorded in this survey is 'as reported' by respondents, and therefore may differ from information available from other sources or collected using different methodologies.

Data on health-related indicators have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the states and territories and the Indigenous and non-Indigenous population.

Time series comparisons for the 2008 survey are available through the 1994 National Aboriginal and Torres Strait Islander Survey and the 2002 NATSISS. However not all data elements align across the 3 (1994, 2001 and 2008) NATSISS surveys, hence care is required when reviewing results across the 3 surveys.

There are no strictly comparable non-Indigenous results available for the 2008 NATSISS. Where possible, the ABS has provided recommendations for non-Indigenous data comparisons (such as the 2007–08 National Health Survey) and these have been adopted in this report.

The 2008 NATSISS had a relatively large level of under-coverage when compared with other ABS surveys. There was also an increase in under-coverage compared to previous ABS Indigenous surveys. For example, the estimated under-coverage in the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) was 42%. The overall under-coverage rate for the 2008 NATSISS was approximately 53% of the in-scope population at the national level. This rate varied across the states and territories (ABS 2010).

Further information on NATSISS data quality issues can be found in the *National Aboriginal and Torres Strait Islander Social Survey: User's guide, 2008* (ABS 2010).

Australian Aboriginal and Torres Strait Islander Health Survey

The 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) included a sample of 12,000 Indigenous Australians for the core sample and sub-samples for various components of the survey such as voluntary biomedical data for adults. The AATSIHS sample was specifically designed to select a representative sample of Indigenous Australians and therefore overcome the problem inherent in most national surveys (that is, small and unrepresentative Indigenous samples).

Survey results are subject to sampling errors as only a small proportion of the population is used to produce estimates that represent the whole population. Non-sampling errors may occur where there is non-response to the survey or questions in the survey, misunderstanding of questions or errors in recording, coding or processing the survey. Information recorded in this survey is 'as reported' by respondents. Responses may be affected by imperfect recall or individual interpretation of survey questions. Any data that are self-reported are also likely to under-estimate circumstances about which the respondent is unaware, or may be reluctant to report (for example, certain health conditions, weight, drug use).

Selected non-Indigenous comparisons are available from the 2011–13 Australian Health Survey (AHS). The AHS was conducted in *Major cities*, *Regional* and *Remote areas*, but *Very remote* areas were excluded from the sample.

Further information on AATSIHS data quality issues can be found in the user guide for the survey (ABS 2013a). Time series comparisons for some indicators are available from the 2004–05 NATSIHS, 2008 NATSISS, 2002 NATSISS, 2001 NHS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Australian Health Survey

The Australian Health Survey (AHS) combines the existing ABS National Health Survey (NHS) and the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) together with 2 new elements: a National Nutrition and Physical Activity Survey (NNPAS) and a National Health Measures Survey (NHMS).

For more information see:

- National Health Survey <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4363.0.55.001Main+Features1 2011-13?OpenDocument>.
- National Aboriginal and Torres Strait Islander Health Survey <http://www.abs.gov.au/ausstats/abs@.nsf/mf/4715.0/>.
- National Nutrition and Physical Activity Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.007~2011-12~Main%20Features~About%20the%20National%20Nutrition%20and%20Physical%20Activity%20Survey~731>.
- National Health Measures Survey <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4364.0.55.005Chapter1102011-12>.

Western Australian Aboriginal Child Health Survey

The Western Australian Aboriginal Child Health Survey (WAACHS) was a large-scale investigation into the health, wellbeing and development of Western Australian Aboriginal and Torres Strait Islander children. It was undertaken in 2001 and 2002 by the Telethon Institute for Child Health Research, and collected information from more than 5,000 children.

Survey data are subject to sampling and non-sampling errors. Confidence intervals are published with the data to provide a guide to the reliability of the estimates. Non-sampling errors can occur in surveys owing to questionnaire design problems, respondent difficulty recalling information, lack of appropriate records, and errors made in the recording and processing of the data. Every effort was made to minimise non-sample errors in this survey.

Bettering the Evaluation and Care of Health survey

The Bettering the Evaluation and Care of Health (BEACH) survey collects information about encounters with general practitioners (GPs), including: GP and patient characteristics; patient reasons for the visit; problems managed; and treatments provided. The survey has been conducted annually since April 1998. Information is collected from a random sample of approximately 1,000 GPs from across Australia each year. Each participating GP provides details of 100 consecutive patient encounters. Although the questionnaire contains an Indigenous identifier, it is unknown whether all GPs ask their patients this question.

In a sub-study of approximately 9,000 patients, Supplementary Analysis of Nominated Data, it was found that if the question on Indigenous status was asked within the context of a series of questions about origin and cultural background, 1.3% identified as Aboriginal and Torres Strait Islander. This is twice the rate routinely recorded in BEACH, indicating that BEACH may under-estimate the number of encounters with Indigenous Australians.

Under the National Indigenous Reform Agreement, governments have agreed to the implementation of *National best practice guidelines for collecting Indigenous status in health data sets* (AIHW 2010a), which include recommended strategies for local service providers such as GPs and practice nurses to improve Indigenous identification data. General practices and Aboriginal and Torres Strait Islander health services that meet accreditation requirements are eligible for financial incentives when they do the following activities: sign on to the Practice Incentives Program—Indigenous Health Incentive (PIP IHI); obtain consent from their Indigenous clients to be registered for chronic disease management through the IHI; and provide a targeted level of care for each registered patient. Participation in the PIP IHI also provides eligibility for other initiatives under Medicare.

A Voluntary Indigenous Identifier was introduced into the Medicare database from November 2002. By July 2014, 415,730 people had identified as Aboriginal, Torres Strait Islander, or both.

National Hospital Morbidity Database

The scope of the NMDS is episodes of care for admitted patients in essentially all hospitals in Australia, including public and private acute and psychiatric hospitals, free-standing day hospital facilities, alcohol and drug treatment hospitals and dental hospitals. Hospitals operated by the Australian Defence Force, corrections authorities and in Australia’s off-shore territories are not included. Hospitals specialising in ophthalmic aids and other specialised acute medical or surgical care are included. The NHMD does not include episodes of non-admitted patient care provided in outpatient clinics or emergency departments.

For 2012–13, almost all public hospitals provided data for the NHMD. The exception was a mothercraft hospital in the ACT. The great majority of private hospitals also provided data, the exceptions being the private free-standing day hospital facilities in the ACT, the single private free-standing day hospital in the Northern Territory, and a private free-standing day hospital in Victoria.

Hospitalisations

Data are a count of hospital separations (episodes of admitted patient care, which can be a total hospital stay or a portion of a hospital stay that begins or ends in a change of type of care) and not patients. Patients who separated from hospital more than once in the year will be counted more than once in the data set.

The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery.

Records for newborn episodes that did not include qualified days, and records for hospital boarders and posthumous organ procurement have been excluded as these activities are not considered to be admitted patient care.

Indigenous status information

Approximately 2% of hospital records have Indigenous status of ‘not stated’, though this proportion varies across the jurisdictions (see Table 1.02.1). These records are excluded from analyses of hospital data in this report. Note that for hospitals in Western Australia, records with an unknown status are reported as non-Indigenous.

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Indigenous Australians.

The AIHW completed an assessment of the level of Indigenous under-identification in selected public hospitals in all states and territories in 2007–08. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory had adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW 2010b). The study estimated that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08.

In 2011–12, the AIHW completed a second study to reassess the level of under-identification in public hospitals data, and found that all jurisdictions had sufficient quality Indigenous identification for reporting from 2010–11 (AIHW 2013). The study estimated that 88% of Indigenous patients were correctly identified in Australian public hospital admission records in 2011–12, and a correction factor of 1.09 is used at the national level to adjust for under-identification in hospital data. Interpretation of results should take into account the relative quality of the data from the jurisdictions.

Time series analysis may be affected by changes in the quality of Indigenous identification over time. The second AIHW study found no statistically significant change in identification rates at the national level, although there were some changes at the jurisdictional level. Time series presentations in this report include data from both public and private hospitals across several jurisdictions, so the overall effect of changes in Indigenous identification over time is unclear. This should be taken into account when interpreting the results of time series analysis.

Change in coding and coding practices

Between 2009–10 and 2010–11, there were significant changes in the coding of diagnoses for diabetes, obstetrics, and imaging procedures. There were also significant changes made to coding practices for diabetes and related conditions for the 2012–13 year, resulting in increased counts for these conditions. Caution should be used in comparing 2011–12 and 2012–13 data with data from previous Health Performance Framework reports.

For more information about the quality of the NHMD and emergency department care data, please refer to Database quality statement summaries in the report *Australian Hospital Statistics 2012–13*, available at <http://www.aihw.gov.au/publication-detail/?id=60129546922>.

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013b). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013c).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the 2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see
<http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes
†	estimate has a relative standard error between 25% and 50% and should be used with caution
‡	estimate has a relative standard error greater than 50% and is considered too unreliable for general use

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Aboriginal and Torres Strait Islander
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2014 report

Measure 19 of 68

Detailed analyses

1.19 Life expectancy at birth

This measure reports on the life expectancy at birth for Aboriginal and Torres Strait Islander males and females

Introduction

This is no. 19 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data source

Life expectancy estimates are from the ABS, and are based on:

- Population estimates from the 2011 Census of Population and Housing
- National Mortality Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Life expectancy refers to the average number of years a person of a given age and sex can expect to live, if current age- and sex-specific death rates continue to apply throughout his or her lifetime.

Estimates of life expectancy are drawn from life tables. To construct a life table, data on total population, births and deaths are needed, and the accuracy of the life table depends on the completeness of these data. These life expectancies should only be used as an indicative summary measure of life expectancy of the Indigenous population.

Data are available at the national level and for New South Wales, Queensland, Western Australia and the Northern Territory only.

For more information related to life expectancy see 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Life expectancy at birth, see Table 1.19.1.

Life expectancy at birth

Current period

In the period 2010–2012:

- The life expectancy at birth for Indigenous Australians was estimated to be 69.1 years for males and 73.7 years for females. By comparison, the life expectancy at birth for non-Indigenous Australians was 79.7 years for males and 83.1 years for females.
  - This represents a gap of 10.6 years for males and 9.5 years for females (Table 1.19.1, Figure 1.19.1).
- There are 4 jurisdictions that have populations of sufficient size to calculate Indigenous Australian life expectancy (New South Wales, Queensland, Western Australia and the Northern Territory). Of these, the Northern Territory had the lowest life expectancy estimates for both males and females (63.4 and 68.7 years respectively), and New South Wales had the highest (70.5 and 74.6 years) (Table 1.19.1).

Trend

The ABS has published trend data for the first time by revising the 2005–2007 estimate to provide comparable data with 2010–2012. Between 2005–2007 and 2010–2012:

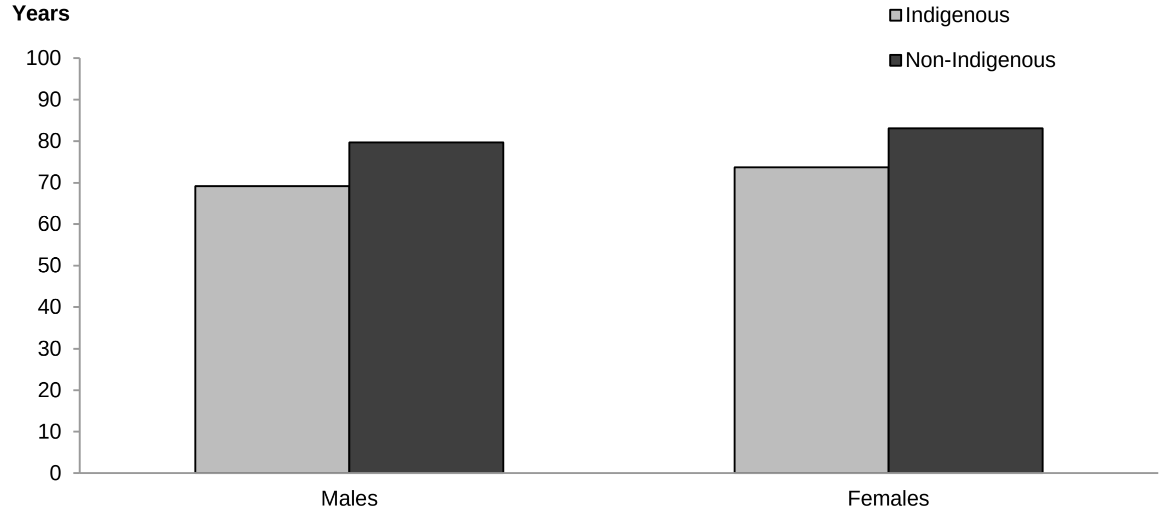
- The life expectancy at birth for Indigenous males increased from 67.5 to 69.1 years. For Indigenous females it increased from 73.1 to 73.7 years.

- The gap decreased from 11.4 to 10.6 years for males, and from 9.6 to 9.5 years for females (Table 1.19.1, Figures 1.19.1–2).

International comparisons

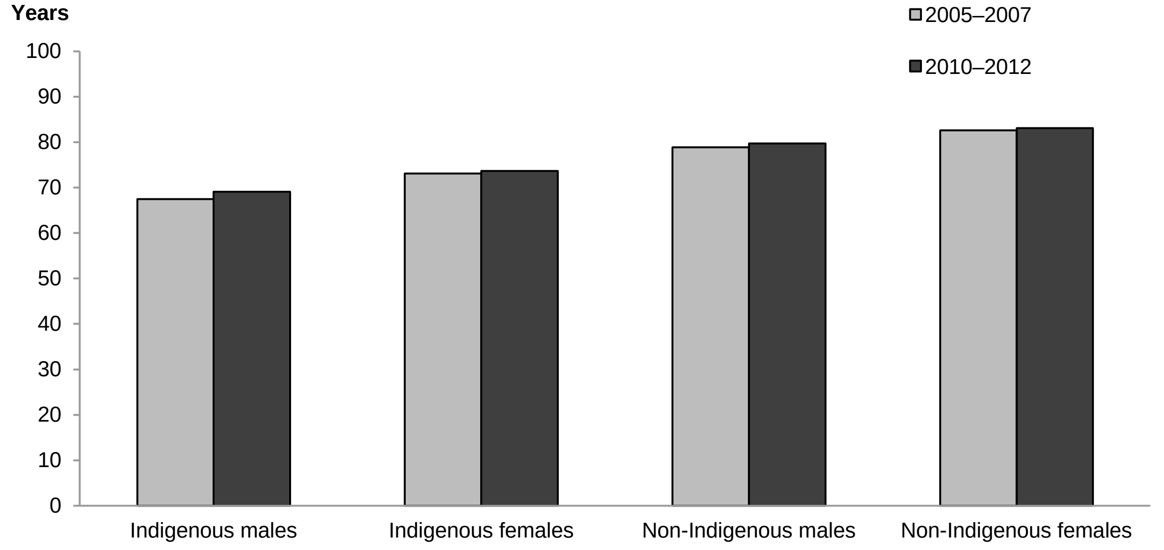
Current period

- In 2011, life expectancy at birth averaged 80.1 years in OECD countries (OECD 2013). Compared with the OECD average, non-Indigenous males had a similar life expectancy (79.7 years) and non-Indigenous females had a slightly higher life expectancy (83.1 years). However, life expectancy for Indigenous males and females (69.1 and 73.7 years, respectively) was much lower than the OECD average.
- In the period 2010–12 in New Zealand, there was a life expectancy gap between Maori and non-Maori of 7.4 years for males and 7.2 years for females (Statistics NZ 2013). This is less than the gap between Indigenous and non-Indigenous males and females in Australia (10.6 and 9.5 years respectively).



Source: Table 1.19.1.

Figure 1.19.1: Life expectancy at birth, by Indigenous status and sex, Australia, 2010–2012



Source: Table 1.19.1.

Figure 1.19.2: Life expectancy at birth, by Indigenous status and sex, Australia, 2005–2007 (revised) and 2010–2012 (life expectancy in years)

Table 1.19.1: Life expectancy at birth, by Indigenous status, sex and state/territory, 2005–2007 (revised[(a)]) and 2010–2012 (life expectancy in years)

	Indigenous		Non-Indigenous		Difference (years)	
	Males	**Females**	**Males**	**Females**	**Males**	**Females**
			2005–2007 (revised[(a)])			
NSW	68.3	74.0	78.8	82.6	10.5	8.6
Qld	67.1	72.7	78.8	82.7	11.8	10.0
WA	64.5	70.0	79.2	82.9	14.7	12.9
NT	61.5	69.4	75.5	81.0	14.0	11.6
Australia[(b)(c)]	**67.5**	**73.1**	**78.9**	**82.6**	**11.4**	**9.6**
			2010–2012			
NSW	70.5	74.6	79.8	83.1	9.3	8.5
Qld	68.7	74.4	79.4	83.0	10.8	8.6
WA	65.0	70.2	80.1	83.7	15.1	13.5
NT	63.4	68.7	77.8	83.1	14.4	14.4
Australia[(b)(c)]	**69.1**	**73.7**	**79.7**	**83.1**	**10.6**	**9.5**

(a) Revised to enable comparisons of change over time.

(b) Estimates for Australia are calculated using an improved methodology that could not be applied at the jurisdictional level. These data should not be compared with the estimates for the states and territories.

(c) Includes all states and territories.

Source: ABS 2013a.

Data sources and quality

Calculating life expectancy

Estimates of life expectancy are drawn from life tables published by the ABS. To construct a life table, data on total population size, births and deaths are needed, and the accuracy of the life table depends on the completeness of these data.

Any major downward revision to population estimates will have an effect on estimates of life expectancy. For the 2011 Census, the ABS made a major methodological change to the Census Post Enumeration Survey (PES), to better estimate the level of undercount in Census counts. This new methodology, Automated Data Linking, resulted in a better, but also considerably lower, estimate of undercount. As part of the process of rebasing for life expectancy estimates, the ABS also undertook an additional process (referred to as 'recasting'), whereby downward revisions to historical population estimates were made back to September 1991. The recasting process coupled with rebasing have effects on life expectancy at birth estimates. The largest revision during rebasing and recasting occurred in Queensland, and the largest implication is also expected (ABS 2013a).

These experimental life expectancies, therefore, should only be used as an indicative summary measure of life expectancy of the Indigenous population.

Population

Indigenous population estimates are calculated from the Census of Population and Housing. The Census uses the National health data dictionary standard Indigenous status question and it is asked for each household member. Measures that are drawn from Census data are subject to broad data concerns relating to the unexplained growth in the Indigenous Australian population since the 1991 Census, and the limitations of self-identification. Other Census data issues relate to the accuracy of the Census count itself, for example, whether people are counted more than once, or are undercounted (ABS 1996). Estimates for the Indigenous population of Australia and the states and territories for the periods 30 June 1996 to June 2000 as well as 2001 to 2011 based on 2011 Census data have been produced by the ABS using a cohort-component method. Population estimates for the Northern Territory at 30 June 2011 are based on age-heaping adjusted data. For more information, please see the ABS publication *Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 2001 to 2026* released in May 2014 (ABS 2014a).

Births

All jurisdictions comply with the standard wording for the Indigenous status question and categories for their birth registration forms. However, the proportion of Indigenous births attributed to Indigenous mothers and or Indigenous fathers differs considerably between the states and territories (ABS 2014a).

Almost all births and deaths in Australia are registered. However, the Indigenous status of the person is not always recorded or not recorded correctly. The incompleteness of Indigenous identification means the number of births registered as Indigenous is an underestimate of births occurring in the Indigenous Australian population.

Deaths

All jurisdictions comply with the standard wording for the Indigenous status question and categories for their death registration forms. Although it is considered likely that most deaths of Indigenous Australians are registered, a proportion of these deaths are not registered as Indigenous. Information about the deceased is supplied by a relative or other person acquainted with the deceased, or by an official of the institution where the death occurred and may differ from the self-identified Indigenous origin of the deceased.

At present, there is considerable variation across the states and territories in the completeness of mortality data for Indigenous Australians. Information concerning the number of deaths of Indigenous Australians is limited by the accuracy with which Indigenous persons are identified in death records. Problems associated with identification result in an underestimation of deaths of Indigenous Australians and in the gap in mortality between Indigenous and non-Indigenous Australians.

Mortality data for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory are considered to have sufficient coverage to produce reliable statistics on Indigenous Australian deaths for the period 1998 onwards.

The quality of the time series data is also influenced by the late inclusion of a 'not stated' category for Indigenous status in 1998. Before this time, the 'not stated' responses were probably included with the non-Indigenous.

Note that different causes of death may have levels of under-identification that differ from the all-cause coverage estimates. Note also that the quality of the cause of death data depends on every step of the process of recording and registering deaths (including the documentation available at each step of the process) from certification to coding of cause of death.

Consistency of numerator and denominator

To calculate life expectancy estimates using a direct demographic method, it is important to ensure that the classification of records as Indigenous is consistent in both the numerator and denominator (ABS 2008a). However, because the numerator (deaths) and denominator (population) are based on different collections and different collection methods, there is an inconsistency of Indigenous identification between the 2. The Census Data Enhancement (CDE) Indigenous Mortality Study (see below) linked Census records with death registration records to examine these inconsistencies, and a method was developed to adjust death registration data by identification rates obtained through this study, to ensure consistency in the Indigenous identification of records across collections. This data linkage technique enables the direct calculation of identification rates with no assumptions necessary (ABS 2013b).

Linking 2011–12 death registration records to the 2011 Census presented a unique opportunity to identify deaths of Indigenous Australians who were not identified as such on their original death registration. However, the net undercount determined by the 2011 Post Enumeration Survey was 17.2% for Indigenous Australians. This means that there will not necessarily be a Census record for every death registration record. To produce indicative linkage rates that take account of death registrations for which there was no equivalent Census record, a Census undercount factor was applied to death registrations (ABS 2013b).

Indigenous Mortality Study

The ABS conducted the Indigenous Mortality Study as part of the Census Data Enhancement (CDE) project. The CDE project includes a number of studies using data from the 2011 Census of Population and Housing and other specified data sets. The CDE Indigenous Mortality Study involved linking Census records with death registration records to examine differences in the reporting of Indigenous status across the 2 data sets. The study especially linked 2011 Census records with all registered deaths that occurred from 10 August 2011 to 27 September 2012 (ABS 2013c).

Death registrations were provided to the ABS by state and territory Registrars of Births, Deaths and Marriages. The study used information from deaths that were registered during the Census processing period 2011–12 when Census name and address were available as linking variables. Probabilistic linking methods were used to bring the dataset together and identify the best match. The linking process involved comparing numerous variables common to both files and generated a single numerical measure of how well 2 particular records match (ABS 2013b).

At the completion of the linkage, 93% of death registrations had been linked to a Census record. The raw linkage rate for Indigenous Australian deaths was 80%, a considerable improvement over the corresponding figure of 74% in the 2006 study. After applying an adjustment factor to account for people who were missing from the Census, the linkage rate for Indigenous Australians rose to about 90% compared with an adjusted linkage rate of 96% for non-Indigenous deaths (ABS 2013b).

International comparisons

International Indigenous data are available for New Zealand, the United States and Canada, however only data for New Zealand are reported in this measure.

In New Zealand, research has been undertaken that attempts to adjust for under-counting of indigenous New Zealanders by a process of probabilistic record linkage of death registration data with census data. This research has produced estimates of the considerable extent of the under-counting of Maori deaths. This adjusted data could not be used in international comparisons unless the data in the other countries were also adjusted (Bramley et al. 2004).

In Canada the national mortality database that Statistics Canada administers does not contain ethnicity data. The regional offices of Health Canada collect mortality data for the indigenous, on-reserve, First Nations population. Via a series of partnerships with each provincial vital statistics registrar, First Nations-specific death certificate information is sent to the regional First Nations and Inuit Health Branch regional office. However, in a number of areas no such relationships exist (for example, the Atlantic, Ontario, and Quebec regions), and therefore data are obtained directly from the local communities, or not at all. The availability of indigenous mortality data in Canada is further limited by the lack of information for off-reserve, or non-status, indigenous Canadians.

The varying degrees of completeness and accuracy of the indigenous mortality databases that exist within the 4 countries are likely to affect comparisons between them.

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional ‘Unknown’ response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013d). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013b).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008b). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008b: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008b). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the 2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014b).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 20 of 68

Detailed analyses

1.20 Infant and child mortality

This measure reports on the mortality rates of Aboriginal and Torres Strait Islander infants and children aged 0–4, by cause of death (including SIDS) and over time

Introduction

This is no. 20 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data Source

- National Mortality Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Analyses of child mortality rates include those aged 0–4 years and, where specified, those aged 1–4 years. Analyses of infant mortality rates only include those children aged less than 12 months.

Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates.

For more information relating to infant and child mortality, see measures 1.01 and 1.21. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Child mortality rates, see tables 1.20.1–3
- Infant mortality rates, see tables 1.20.4–13
- Causes of infant and child mortality, see tables 1.20.14–17.

Child mortality rates

Current period

In 2009–2013 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There were 621 deaths of Indigenous children aged 0–4, a rate of 169 per 100,000. This was almost twice (1.9 times) as high as the rate for non-Indigenous children. The rate difference was 80 per 100,000 (Table 1.20.1).

Trend

Between 1998 and 2013, in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The mortality rate among Indigenous children aged 0–4 decreased significantly by 31%, and there was a significant 35% decrease in the gap between Indigenous and non-Indigenous child mortality rates (Table 1.20.3, Figure 1.20.1).

Between 2008 and 2013, in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There was no significant change in the mortality rate among Indigenous children aged 0–4 and no significant change in the gap (Table 1.20.3).

Infant mortality rates

Current period

In New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- In 2009–2013, there were 502 deaths among Indigenous infants, a rate of 6 per 1,000 live births. This was almost twice (1.7 times) as high as the rate for non-Indigenous infants. The gap was 2.6 per 1,000 live births (Table 1.20.4).
- In 2008–2012, there were 493 deaths among Indigenous infants, a rate of 6 per 1,000 live births. This was almost twice (1.7 times) as high as the rate for non-Indigenous infants. The gap was 2.5 per 1,000 live births (Table 1.20.5).
- In 2008–2012, there were 46 deaths of Indigenous infants caused by Sudden Infant Death Syndrome (SIDS), a rate of 0.6 per 1,000 live births. This was 2.4 times as high as the rate for non-Indigenous infants. The gap was 0.3 per 1,000 live births (Table 1.20.7).

Trend

Between 1998 and 2012, in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There was a significant (64%) decrease in the mortality rate for Indigenous infants, and a significant (83%) decrease in the gap between Indigenous and non-Indigenous infant mortality rates (Table 1.20.9, Figure 1.20.2).
- There was a significant (92%) decrease in the SIDS mortality rate for Indigenous infants and a significant decrease in the gap between Indigenous and non-Indigenous rates (Table 1.20.12, Figure 1.20.3).

Between 2008 and 2012, in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There was no significant change in mortality rate for Indigenous infants and no significant change in the gap (Table 1.20.9).
- There was no significant change in the SIDS mortality rate for Indigenous infants and no significant change in the gap (Table 1.20.12).

Causes of infant and child mortality

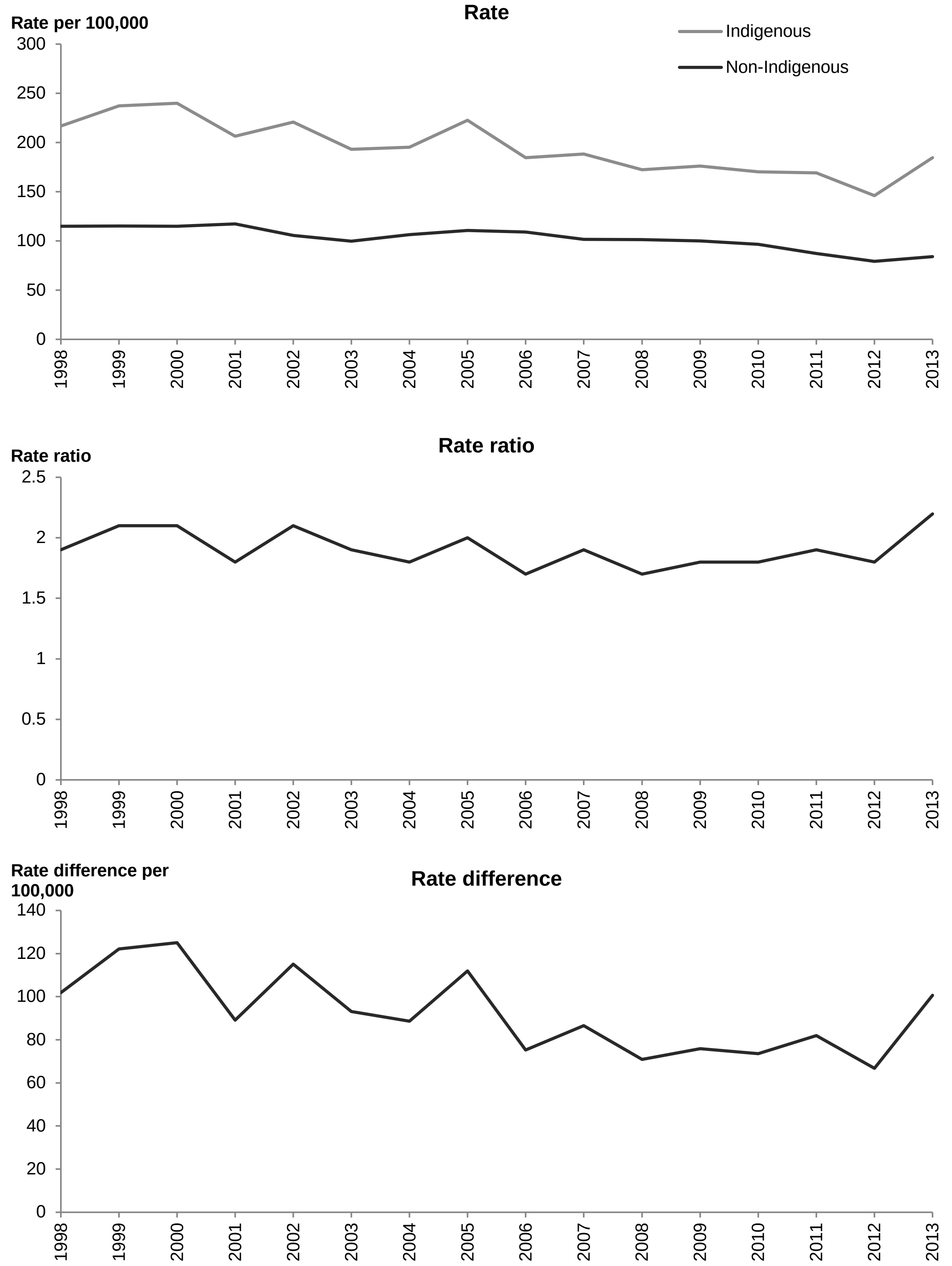
Current period

In 2008–2012, in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The leading cause of death among Indigenous children aged 0–4 was conditions originating in the perinatal period (239 children or 39%). Almost all of these deaths occurred in infants. The mortality rate for conditions originating in the perinatal period in Indigenous children (65 per 100,000) was 1.7 times as high as for non-Indigenous children. The gap was 26 per 100,000, which represented 35% of the mortality gap among children aged 0–4 (Table 1.20.17).
- The leading cause of death among Indigenous children aged 1–4 was injury and poisoning (62 children or 53%). The Indigenous mortality rate for injury and poisoning

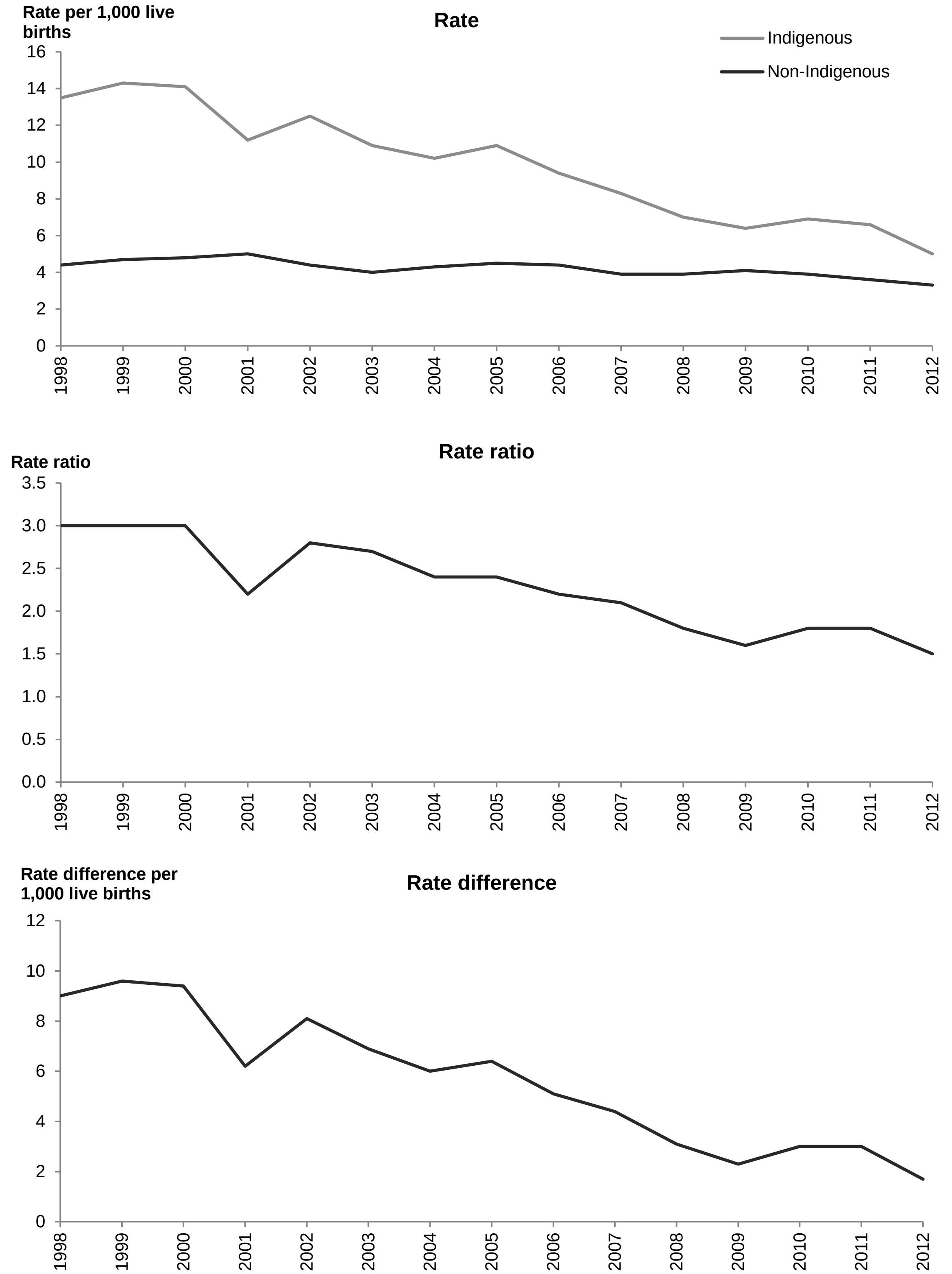
(21 per 100,000) was 3.3 times as high as the non-Indigenous rate. The gap was 15 per 100,000, which represented 66% of the mortality gap among children aged 1–4 (Table 1.20.16).

- The leading cause of death among Indigenous infants was conditions originating in the perinatal period (237 infants or 48%), followed by signs, symptoms and ill-defined conditions (including SIDS) (96 infants or 19%), and congenital malformations (74 infants or 15%). The Indigenous infant mortality rate for conditions originating in the perinatal period (3 per 1,000 live births) was 1.6 times as high as the non-Indigenous rate. The gap was 1.1 per 1,000 live births, which represented 45% of the mortality gap among infants (Table 1.20.15).



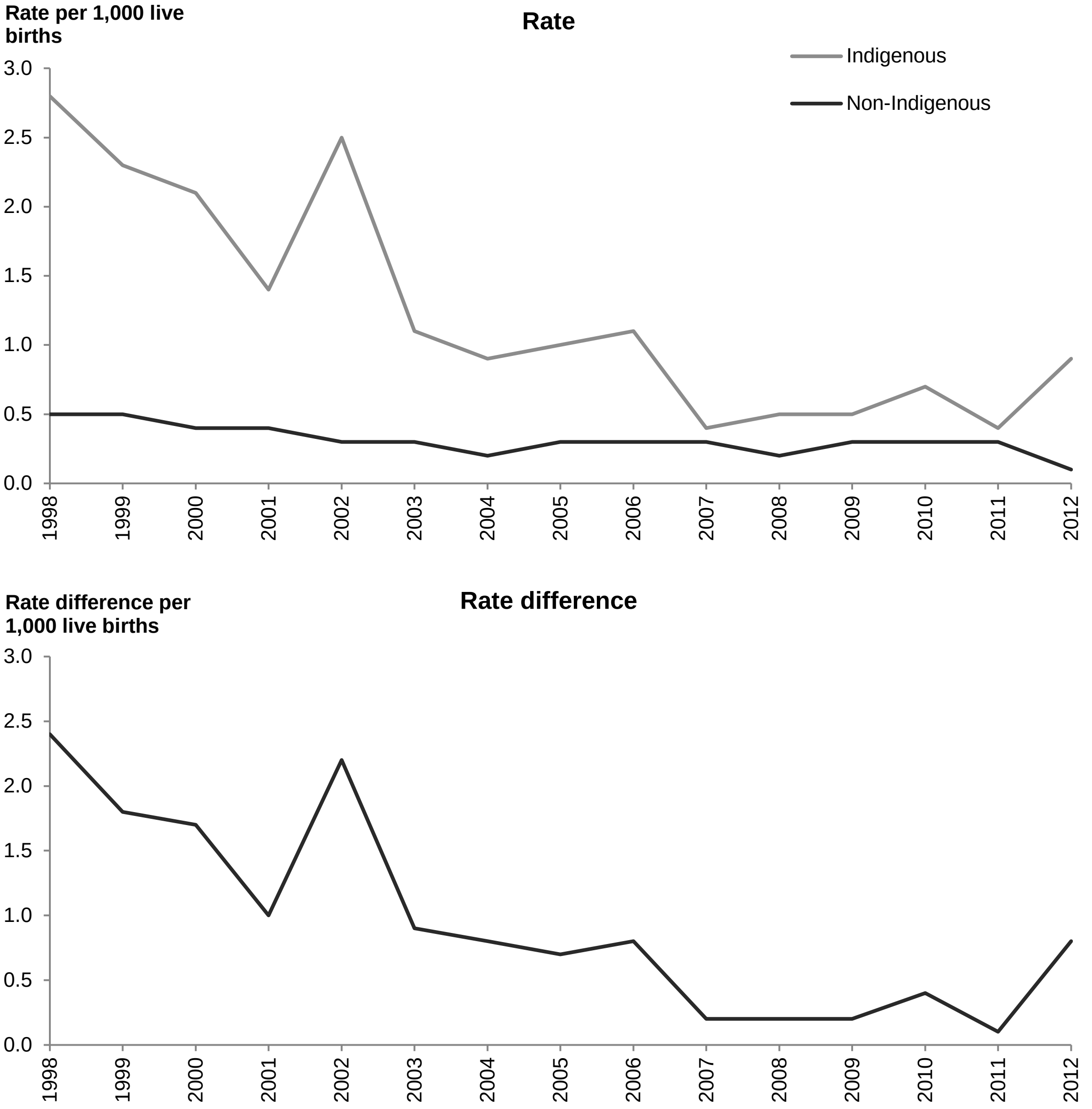
Source Table: 1.20.3.

Figure 1.20.1: Mortality rates, rate ratios and rate differences for children aged 0–4, by Indigenous status, NSW, Qld, WA, SA and NT, 1998–2013



Source Table: 1.20.9.

Figure 1.20.2: Infant mortality rates, rate differences and rate ratios, by Indigenous status, NSW, Qld, WA, SA and NT, 1998–2012



Source Table: 1.20.12.

Figure 1.20.3: SIDS mortality rates and rate differences for infants, by Indigenous status, NSW, Qld, WA, SA and NT, 1998–2012

Table 1.20.1: Child (0–4) mortality rates per 100,000, by Indigenous status, by jurisdiction, NSW, Qld, WA, SA and NT, 2009–2013(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Indigenous		Non-Indigenous			
	Deaths	Rate per 100,000(j)	Deaths	Rate per 100,000(j)	Rate ratio(k)	Rate difference(l)
NSW	134	102.9	1,976	88.0	1.2	14.9
Qld(f)	227	182.5	1,506	106.9	1.7*	75.6*
WA(i)	98	186.5	479	65.0	2.9*	121.6*
SA	38	169.8	365	78.1	2.2*	91.7*
NT	124	330.2	58	103.5	3.2*	226.6*
NSW, Qld, WA, SA and NT(a)	**621**	**169.2**	**4,384**	**89.2**	**1.9***	**79.9***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the average of the 2009–2013 population.

(d) Registered deaths where Indigenous status was not stated over the period 2009–2013 were excluded.

(e) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous infant mortality rates because of these data quality issues.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(h) ‘Child’ includes persons with an age at death of under 5 years.

(i) WA Indigenous deaths for 2009 corrected for over-reporting.

(j) Crude rates per 100,000 population.

(k) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(l) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.2: Child (0–4) mortality rates per 100,000, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g][h][i][j]

	Indigenous			Non-Indigenous				
	Deaths	**Rate per 100,000[k]**	**Variability band [l]**	**Deaths**	**Rate per 100,000[k]**	**Variability band [l]**	**Rate ratio[m]**	**Rate difference[n]**
Males	341	182.7	43.2	2,536	102.5	8.9	1.8*	80.3*
Females	269	149.9	39.9	1,930	82.3	8.2	1.8*	67.6*
Total children (0–4)	**610**	**166.6**	**29.5**	**4,466**	**92.6**	**6.1**	**1.8***	**74.0***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) These data exclude 140 registered deaths of 0–4 year olds where the Indigenous status was not stated over the period 2008–2012.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(g) ‘Child’ includes persons with an age at death of under 5 years.

(h) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) The average of the five years of population data has been used as the denominator for child mortality rates.

(k) Crude rates per 100,000 population.

(l) Variability bands can be used for comparisons within jurisdictions (for cause of death or over time), but not between jurisdictions or between jurisdictions and totals. See data quality statement for more information.

(m) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(n) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.3a: Deaths of children aged 0–4, NSW, Qld, WA, SA and NT, 1998–2013[(a)(b)(c)(d)(e)(f)(g)(h)]

		Indigenous deaths			Non-Indigenous deaths				
	Year	Males	Females	Persons(i)	Males	Females	Persons(i)	Indigenous 3-year average pop.	Non-Indigenous 3-year average pop.
	1998	87	59	146	n.p.	n.p.	980	67,357	852,617
	1999	90	72	162	n.p.	n.p.	977	68,295	849,028
	2000	89	76	165	n.p.	n.p.	974	68,900	847,006
	2001	85	58	143	n.p.	n.p.	992	69,249	844,986
	2002	78	75	153	n.p.	n.p.	891	69,433	844,268
	2003	78	56	134	n.p.	n.p.	843	69,530	843,515
	2004	85	51	136	n.p.	n.p.	900	69,778	845,402
	2005	95	61	156	n.p.	n.p.	941	70,273	850,863
	2006	75	56	131	n.p.	n.p.	946	70,999	866,208
	2007	80	55	135	n.p.	n.p.	906	71,803	891,135
	2008	62	63	125	n.p.	n.p.	935	72,654	922,793
	2009	81	48	129	n.p.	n.p.	952	73,316	950,917
	2010	73	52	125	n.p.	n.p.	936	73,493	968,670
	2011	67	57	124	n.p.	n.p.	855	73,340	980,787
	2012	58	49	107	n.p.	n.p.	788	73,281	995,283
	2013	n.a.	n.a.	136	n.p.	n.p.	853	n.a.	n.a.
Long term 1998–2013(k)	Annual change(j)	–1.8*	–1.3*	–2.5*	n.p.	n.p.	–7.7*	n.a.	n.a.
	% change over period(l)	–26.9*	–25.9*	–24.2*	n.p.	n.p.	–11.9*	n.a.	n.a.
Medium term 2001–2013(k)	Annual change(j)	–1.9*	–1.0	–2.2*	n.p.	n.p.	–6.5	n.a.	n.a.
	% change over period(l)	–24.1*	–18.4	–18.3*	n.p.	n.p.	–8.3	n.a.	n.a.

(continued)

Table 1.20.3a (continued): Deaths of children aged 0–4, NSW, Qld, WA, SA and NT, 1998–2013[a][b][c][d][e][f][g][h]

		Indigenous deaths			Non-Indigenous deaths				
		Males	Females	Persons[i]	Males	Females	Persons[i]	Indigenous 3-year average pop.	Non-Indigenous 3-year average pop.
Medium term 1998–2008	Annual change[j]	–1.6*	–1.1	–2.8*	n.p.	n.p.	–7.7*	n.a.	n.a.
	% change over period[l]	–18.1*	–16.9	–17.6*	n.p.	n.p.	–11.9*	n.a.	n.a.
Short term 2008–2013[k]	Annual change[j]	–2.2	–1.9	–0.4	n.p.	n.p.	–28.1*	n.a.	n.a.
	% change over period[l]	–12.1	–13.2	–1.5	n.p.	n.p.	–14.7*	n.a.	n.a.

* Represents results with statistically significant increases or decreases at the $p < 0.05$ level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous child mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous child mortality rates.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) These data exclude 566 registered child deaths where the Indigenous status was not stated over the period 1998–2013.

(g) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Persons data includes sex not stated and indeterminate.

(j) Annual change determined using linear regression analysis.

(k) Period up to 2012 for males rows and females rows.

(l) Per cent change based on the annual change over the period.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.3b: Mortality rates for children aged 0–4, NSW, Qld, WA, SA and NT, 1998–2013[a][b][c][d][e][f][g][h]

		Indigenous rate (per 100,000)[i]				Non-Indigenous rate (per 100,000)[i]			
	Year	Males	Females	Persons[j]	Persons variability band[k]	Males	Females	Persons[j]	Persons variability band[k]
	1998	251.0	180.5	216.8	35.0	128.7	100.4	114.9	7.2
	1999	256.4	217.0	237.2	36.4	129.5	99.9	115.1	7.2
	2000	252.8	226.4	240.0	36.4	126.4	103.0	115.0	7.2
	2001	239.8	171.6	206.5	33.7	130.6	103.5	117.4	7.3
	2002	220.1	221.4	220.7	34.8	115.7	94.9	105.6	6.9
	2003	220.4	164.5	193.0	32.5	106.9	92.6	99.9	6.7
	2004	239.3	149.2	195.1	32.6	118.4	93.9	106.5	6.9
	2005	265.9	177.4	222.5	34.7	117.1	103.7	110.6	7.1
	2006	207.2	160.9	184.5	31.5	121.7	96.0	109.2	6.9
	2007	219.1	156.1	188.2	31.6	111.6	91.2	101.7	6.6
	2008	167.8	176.9	172.3	30.1	115.1	86.7	101.3	6.5
	2009	216.8	133.5	176.0	30.3	109.9	89.8	100.1	6.3
	2010	195.0	144.3	170.2	29.7	113.8	78.5	96.6	6.2
	2011	179.1	158.7	169.1	29.7	90.8	83.4	87.2	5.8
	2012	155.0	136.6	146.0	27.6	84.2	73.9	79.2	5.5
	2013	n.a.	n.a.	184.7	30.9	n.a.	n.a.	84.1	5.6
Long term 1998–2013[m]	Annual change[l]	–6.1*	–4.9*	–4.8*	n.a.	–2.4*	–1.7*	–2.2*	n.a.
	% change over period[n]	–32.6*	–33.0*	–31.0*	n.a.	–25.8*	–23.2*	–27.2*	n.a.
Medium term 2001–2013[m]	Annual change[l]	–6.6*	–4.1*	–4.3*	n.a.	–2.6*	–2.1*	–2.4*	n.a.
	% change over period[n]	–29.2*	–24.4*	–24.2*	n.a.	–22.8*	–22.7*	–25.4*	n.a.

(continued)

Table 1.20.3b (continued): Mortality rates for children aged 0–4, NSW, Qld, WA, SA and NT, 1998–2013(a)(b)(c)(d)(e)(f)(g)(h)

		Indigenous rate (per 100,000)(i)				Non-Indigenous rate (per 100,000)(i)			
		Males	**Females**	**Persons(j)**	**Persons variability band(k)**	**Males**	**Females**	**Persons(j)**	**Persons variability band(k)**
Medium term 1998–2008	Annual change(l)	–5.7*	–4.7	–5.3*	n.a.	–1.6*	–1.1*	–1.4*	n.a.
	% change over period(n)	–22.1*	–22.9	–22.5*	n.a.	–12.6*	–11.1*	–11.9*	n.a.
Short term 2008–2013(m)	Annual change(l)	–6.3	–5.5	–0.8	n.a.	–8.1*	–3.2	–4.5*	n.a.
	% change over period(n)	–13.0	–13.8	–2.4	n.a.	–27.2*	–14.4	–22.0*	n.a.

* Represents results with statistically significant increases or decreases at the $p < 0.05$ level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous child mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous child mortality rates.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) These data exclude 566 registered child deaths where the Indigenous status was not stated over the period 1998–2013.

(g) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Crude rates per 100,000 population. For rate calculations, the numerator is the number of deaths and the denominator is the average of three years population data centred around the reporting year.

(j) Persons data includes sex not stated and indeterminate.

(k) Variability bands can be used for the purpose of comparisons over time. See data quality statements for a full explanation of variability bands methodology.

(l) Annual change determined using linear regression analysis.

(m) Period up to 2012 for males rows and females rows.

(n) Per cent change based on the annual change over the period.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.3c: Mortality rate ratios and rate differences for children aged 0–4, NSW, Qld, WA, SA and NT, 1998–2013[(a)(b)(c)(d)(e)(f)(g)(h)]

	Year	Rate ratio[(i)]			Rate difference[(j)]		
		Males	Females	Persons[(k)]	Males	Females	Persons[(k)]
	1998	1.9	1.8	1.9	122.3	80.0	101.8
	1999	2.0	2.2	2.1	126.8	117.1	122.1
	2000	2.0	2.2	2.1	126.4	123.4	125.0
	2001	1.8	1.7	1.8	109.2	68.0	89.1
	2002	1.9	2.3	2.1	104.4	126.5	115.1
	2003	2.1	1.8	1.9	113.5	71.9	93.1
	2004	2.0	1.6	1.8	120.9	55.3	88.6
	2005	2.3	1.7	2.0	148.8	73.7	111.9
	2006	1.7	1.7	1.7	85.5	64.9	75.3
	2007	2.0	1.7	1.9	107.5	64.9	86.5
	2008	1.5	2.0	1.7	52.7	90.1	70.9
	2009	2.0	1.5	1.8	106.9	43.7	75.8
	2010	1.7	1.8	1.8	81.2	65.8	73.5
	2011	2.0	1.9	1.9	88.3	75.3	81.9
	2012	1.8	1.8	1.8	70.8	62.7	66.8
	2013	n.a.	n.a.	2.2	n.a.	n.a.	100.6
Long term 1998–2013[(m)]	Annual change[(l)]	n.a.	n.a.	n.a.	–3.7*	–3.1*	–2.6*
	% change over period[(n)]	n.a.	n.a.	n.a.	–39.6*	–43.3*	–35.1*
Medium term 2001–2013[(m)]	Annual change[(l)]	n.a.	n.a.	n.a.	–4.0	–2.0	–1.9
	% change over period[(n)]	n.a.	n.a.	n.a.	–35.9	–26.5	–22.8
Medium term 1998–2008	Annual change[(l)]	n.a.	n.a.	n.a.	–4.1	–3.6	–3.9*
	% change over period[(n)]	n.a.	n.a.	n.a.	–31.3	–34.8	–33.0*
Short term 2008–2013[(m)]	Annual change[(l)]	n.a.	n.a.	n.a.	1.8	–2.3	3.7
	% change over period[(n)]	n.a.	n.a.	n.a.	9.2	–12.9	26.9

(continued)

Table 1.20.3c (continued): Mortality rate ratios and rate differences for children aged 0–4, NSW, Qld, WA, SA and NT, 1998–2013(a)(b)(c)(d)(e)(f)(g)(h)

* Represents results with statistically significant increases or decreases at the $p < 0.05$ level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous child mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous child mortality rates.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) These data exclude 566 registered child deaths where the Indigenous status was not stated over the period 1998–2013.

(g) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(j) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(k) Persons data includes sex not stated and indeterminate.

(l) Annual change determined using linear regression analysis.

(m) Period up to 2012 for males rows and females rows.

(n) Per cent change based on the annual change over the period.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.4: Infant mortality rates per 1,000 live births, by Indigenous status, by jurisdiction, NSW, Qld, WA, SA and NT, 2009–2013[(a)(b)(c)(d)(e)(f)(g)(h)]

	Indigenous		Non-Indigenous			
	Number of deaths	**No. per 1,000**(i)	**Number of deaths**	**No. per 1,000**(i)	**Rate ratio**(j)	**Rate difference**(k)
NSW	109	3.9	1,697	3.6	1.1	0.2
Qld(g)	189	7.2	1,300	4.5	1.6*	2.7*
WA	72	5.7	378	2.6	2.2*	3.1*
SA	32	6.8	291	3.1	2.2*	3.6*
NT	100	13.0	48	4.0	3.2*	9.0*
NSW, Qld, WA, SA & NT(a)	**502**	**6.3**	**3,714**	**3.7**	**1.7***	**2.6***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the average of the 2009–2013 population.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous infant mortality rates because of these data quality issues.

(f) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010. For more information: see Births, Australia, 2012 (cat. no. 3301.0).

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) ‘Infant’ includes persons with an age at death of under 1 year.

(i) Rates are crude rates per 1,000 live births.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians. Rate ratios are calculated with unrounded figures.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians. Rate differences are calculated with unrounded figures.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.5: Infant mortality rates per 1,000 live births, by Indigenous status, by jurisdiction, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g][h][i]

	Indigenous			Non-Indigenous				
	Deaths	**Rate per 1,000**[i]	**Variability band**[j]	**Deaths**	**Rate per 1,000**[i]	**Variability band**[j]	**Rate ratio**[k]	**Rate difference**[l]
NSW	103	3.6	0.7	1,745	3.7	0.2	1.0	0.0
Qld[g]	182	6.9	1.0	1,320	4.5	0.2	1.5*	2.4*
WA	85	7.3	1.5	396	2.8	0.3	2.6*	4.4*
SA	26	5.5	2.1	290	3.1	0.4	1.8*	2.4*
NT	97	12.5	2.5	45	3.8	1.1	3.2*	8.6*
NSW, Qld, WA, SA and NT[a]	**493**	**6.2**	**0.5**	**3,796**	**3.7**	**0.1**	**1.7***	**2.5***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) These data exclude 119 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(d) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous infant mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010. For more information: see Births, Australia, 2012 (cat. no. 3301.0).

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) ‘Infant’ includes persons with an age at death of under 1 year.

(i) Crude rates per 1,000 live births.

(j) Variability bands can be used for comparisons within jurisdictions (for cause of death or over time), but not between jurisdictions or between jurisdictions and totals. See data quality statement for more information.

(k) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians. Rate ratios are calculated with unrounded figures.

(l) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians. Rate differences are calculated with unrounded figures.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.6: Infant mortality rates per 1,000 live births, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Indigenous			Non-Indigenous				
	Deaths	**Rate per 1,000**(j)	**Variability band** (k)	**Deaths**	**Rate per 1,000**(j)	**Variability band** (k)	**Rate ratio**(l)	**Rate difference**(m)
Males	284	6.9	0.8	2,159	4.1	0.2	1.7*	2.8*
Females	209	5.5	0.7	1,637	3.3	0.0	1.7*	2.2*
Total infants	**493**	**6.2**	**0.5**	**3,796**	**3.7**	**0.1**	**1.7***	**2.5***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) For rates, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) These data exclude 117 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) ‘Infant’ includes persons with an age at death of under 1 year.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(j) Crude rates per 1,000 live births.

(k) Variability bands can be used for comparisons within jurisdictions (for cause of death or over time), but not between jurisdictions or between jurisdictions and totals. See data quality statement for more information.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.7: SIDS mortality rates per 1,000 live births, by Indigenous status, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

	Indigenous				Non-Indigenous					
	Deaths	**Rate per 1,000(g)**	**95% LCL(h)**	**95% UCL(i)**	**Deaths**	**Rate per 1,000(g)**	**95% LCL(h)**	**95% UCL(i)**	**Rate ratio(j)**	**Rate difference(k)**
NSW(l)	9	0.3	–0.1	0.8	103	0.2	0.1	0.3	1.5	0.1
Qld(m)	26	1.0	0.1	1.8	123	0.4	0.3	0.6	2.3*	0.6*
WA	1	n.p.	n.p.	n.p.	10	0.1	—	0.2	n.p.	n.p.
SA	4	n.p.	n.p.	n.p.	7	0.1	—	0.2	n.p.	n.p.
NT	8	1.0	–0.6	2.6	4	n.p.	n.p.	n.p.	n.p.	n.p.
NSW, Qld, WA, SA and NT(b)	**46**	**0.6**	**0.2**	**1.0**	**245**	**0.2**	**0.2**	**0.3**	**2.4***	**0.3***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) SIDS—Sudden Infant Death Syndrome, ICD-10 code: R95. SIDS data in this table is for deaths under 1 year of age.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Although most deaths of Indigenous infants are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 8 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), and 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Crude rates per 1,000 live births.

(h) LCL = lower confidence limit.

(i) UCL = upper confidence limit.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(l) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010. For more information: see Births, Australia, 2012 (cat. no. 3301.0).

(m) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.8: SIDS mortality rates per 1,000 live births, by age in months and Indigenous status, NSW, Qld, WA, SA and NT, 2003–2012(a)(b)(c)(d)(e)(f)(g)(h)

Age in months	Indigenous rate(i)	Non-Indigenous rate(i)	Total(d)
<1	0.08	—	—
1	0.20	0.06	0.07
2	0.10	0.05	0.05
3	0.08	—	—
4	0.07	—	—
5	—	—	—
6	0.06	—	—
7	n.p.	—	—
8	n.p.	—	—
9	n.p.	—	—
10	n.p.	—	—
11	n.p.	n.p.	n.p.

(a) SIDS—Sudden Infant Death Syndrome, ICD-10 code: R95. SIDS data in this table is for deaths under 1 year of age.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Although most deaths of Indigenous infants are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 21 registered deaths where the Indigenous status was not stated over the period 2003–2012.

(e) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010. For more information: see ABS 2012a.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised), and 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia (ABS 2012b).

(h) Data are presented in a 10-year grouping because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period (in this table, the average of the population for the 2007 and 2008 population years).

(i) Crude rates per 1,000 live births.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.9a: Infant mortality rates per 1,000 live births, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

		Indigenous number			Indigenous rate (no. per 1,000 live births)			Non-Indigenous(f) rate (no. per 1,000 live births)		
	Year	Males	Females	Persons(j)	Males	Females	Persons(j)	Males	Females	Persons(j)
	1998	75	53	128	15.4	11.4	13.5	4.9	3.9	4.4
	1999	76	62	138	15.7	12.9	14.3	5.4	4.0	4.7
	2000	76	66	142	14.9	13.3	14.1	5.2	4.3	4.8
	2001	70	46	116	13.1	9.2	11.2	5.5	4.5	5.0
	2002	65	65	130	12.2	12.9	12.5	4.7	4.1	4.4
	2003	68	47	115	12.7	9.0	10.9	4.2	3.8	4.0
	2004	72	39	111	12.8	7.5	10.2	4.7	3.8	4.3
	2005	78	46	124	13.3	8.3	10.9	4.7	4.3	4.5
	2006	63	49	112	10.5	8.4	9.4	5.0	3.7	4.4
	2007	66	48	114	9.3	7.2	8.3	4.1	3.7	3.9
	2008	52	49	101	7.0	6.9	7.0	4.4	3.4	3.9
	2009	64	33	97	8.1	4.5	6.4	4.5	3.6	4.1
	2010(f)	68	41	109	8.3	5.4	6.9	4.6	3.2	3.9
	2011	56	49	105	7.0	6.3	6.6	3.8	3.4	3.6
	2012	44	37	81	5.3	4.7	5.0	3.4	3.1	3.3
Long term 1998–2012	Annual change(k)	–1.6*	–1.4*	–3.1*	–0.7*	–0.6*	–0.7*	–0.1*	–0.1*	–0.1*
	% change over period(l)	–29.2*	–34.3*	–31.4*	–62.5*	–65.3*	–63.7*	–26.3*	–24.0*	–24.9*
Medium term 2001–2012	Annual change(k)	–1.7*	–1.1	–2.8*	–0.7*	–0.5*	–0.6*	–0.1*	–0.1*	–0.1*
	% change over period(l)	–25.4*	–22.9	–24.3*	–57.1*	–56.6*	–56.8*	–23.7*	–26.6*	–24.6*
Medium term 1998–2008	Annual change(k)	–1.6*	–1.4	–2.9*	–0.7*	–0.6*	–0.7*	–0.1*	–0.1	–0.1*
	% change over period(l)	–20.2*	–23.7	–21.7*	–45.1*	–47.8*	–46.2*	–17.1*	–13.3	–15.3*
Short term 2008–2012	Annual change(k)	–2.4	–0.8	–3.2	–0.5	–0.3	–0.4	–0.3	–0.1	–0.2
	% change over period(l)	–15.6	–7.4	–12.2	–22.4	–17.1	–21.3	–23.1	–9.1	–16.6

(continued)

Table 1.20.9a (continued): Infant mortality rates per 1,000 live births, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

* Represents results with statistically significant increases or decreases at the $p < 0.05$ level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous infants are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous infant deaths and, depending on the under-identification in births, may either underestimate or overestimate the rates.

(c) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the infant mortality rates for Indigenous and Other Australians because of these data quality issues.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) ‘Infant’ includes persons with an age at death of under 1 year. For rate calculations, the numerator is the number of infant deaths and the denominator is the number of births.

(h) These data exclude 448 registered infant deaths where the Indigenous status was not stated over the period 1998–2012.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) Persons data includes sex not stated and indeterminate.

(k) Annual change determined using linear regression analysis.

(l) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.9b: Infant mortality rates per 1,000 live births, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

		Rate ratio(j)			Rate difference(k)		
	Year	Males	Females	Persons(l)	Males	Females	Persons(l)
	1998	3.1	2.9	3.0	10.5	7.5	9.0
	1999	2.9	3.2	3.0	10.4	8.9	9.6
	2000	2.9	3.1	3.0	9.7	9.0	9.4
	2001	2.4	2.1	2.2	7.6	4.7	6.2
	2002	2.6	3.1	2.8	7.5	8.8	8.1
	2003	3.0	2.4	2.7	8.5	5.2	6.9
	2004	2.7	2.0	2.4	8.0	3.7	6.0
	2005	2.8	1.9	2.4	8.6	4.0	6.4
	2006	2.1	2.2	2.2	5.5	4.6	5.1
	2007	2.3	2.0	2.1	5.2	3.5	4.4
	2008	1.6	2.1	1.8	2.6	3.6	3.1
	2009	1.8	1.2	1.6	3.7	0.9	2.3
	2010(f)	1.8	1.7	1.8	3.6	2.2	3.0
	2011	1.8	1.9	1.8	3.1	2.9	3.0
	2012	1.5	1.5	1.5	1.8	1.6	1.7
Long term 1998–2012	Annual change(m)	n.a.	n.a.	n.a.	–0.6*	–0.5*	–0.6*
	% change over period(n)	n.a.	n.a.	n.a.	–80.9*	–86.5*	–83.0*
Medium term 2001–2012	Annual change(m)	n.a.	n.a.	n.a.	–0.6*	–0.4*	–0.5*
	% change over period(n)	n.a.	n.a.	n.a.	–76.8*	–77.2*	–76.8*
Medium term 1998–2008	Annual change(m)	n.a.	n.a.	n.a.	–0.6*	–0.6*	–0.6*
	% change over period(n)	n.a.	n.a.	n.a.	–59.0*	–64.7*	–60.9*
Short term 2008–2012	Annual change(m)	n.a.	n.a.	n.a.	–0.2	–0.2	–0.2
	% change over period(n)	n.a.	n.a.	n.a.	–25.9	–30.3	–27.6

(continued)

Table 1.20.9b (continued): Infant mortality rates per 1,000 live births, NSW, Qld, WA, SA and NT, 1998–2012[a][b][c][d][e][f][g][h][i]

* Represents results with statistically significant increases or decreases at the $p < 0.05$ level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous infants are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous infant deaths and, depending on the under-identification in births, may either underestimate or overestimate the rates.

(c) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the infant mortality rates for Indigenous and Other Australians because of these data quality issues.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) 'Infant' includes persons with an age at death of under 1 year. For rate calculations, the numerator is the number of infant deaths and the denominator is the number of births.

(h) These data exclude 448 registered infant deaths where the Indigenous status was not stated over the period 1998–2012.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for other Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for other Australians.

(l) Persons data includes sex not stated and indeterminate.

(m) Annual change determined using linear regression analysis.

(n) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.10: Infant (<1) mortality rates per 1,000 live births, by Indigenous status, NSW, Qld, SA, WA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

		Indigenous			Non-Indigenous			
Year		**Deaths**	**Crude rate 1,000 live births(h)**	**Variability bands(i)**	**Deaths**	**Crude rate per 1,000 live births(h)**	**Variability bands(i)**	**Rate difference per 1,000 live births(j)**
1998		128	13.5	2.3	753	4.4	0.3	9.0
1999		138	14.3	2.4	796	4.7	0.3	9.6
2000		142	14.1	2.3	805	4.8	0.3	9.4
2001		116	11.2	2	823	5.0	0.3	6.2
2002		130	12.5	2.2	734	4.4	0.3	8.1
2003		115	10.9	2	670	4.0	0.3	6.9
2004		111	10.2	1.9	716	4.3	0.3	6.0
2005		124	10.9	1.9	795	4.5	0.3	6.4
2006		112	9.4	1.7	790	4.4	0.3	5.1
2007		114	8.3	1.5	758	3.9	0.3	4.4
2008		101	7.0	1.4	791	3.9	0.3	3.1
2009		97	6.4	1.3	817	4.1	0.3	2.3
2010		109	6.9	1.3	799	3.9	0.3	3.0(f)
2011		105	6.6	1.3	725	3.6	0.3	3.0
2012		81	5.0	1.1	664	3.3	0.2	1.7
Long term 1998–2012	**Annual change(k)**	**–3.1***	**–0.7***	**. .**	**–2.4**	**–0.1***	**. .**	**–0.6***
	Per cent change over period(l)	**–31.4***	**–63.7***	**. .**	**–4.4**	**–24.9***	**. .**	**–83.0***
Medium term 2001–2012	**Annual change(k)**	**–2.8***	**–0.6***	**. .**	**–1.6**	**–0.1***	**. .**	**–0.5***
	Per cent change over period(l)	**–24.3***	**–56.8***	**. .**	**–2.3**	**–24.6***	**. .**	**–76.8***

(continued)

Table 1.20.10 (continued): Infant (<1) mortality rates per 1,000 live births, by Indigenous status, NSW, Qld, SA, WA and NT, 1998–2012[(a)(b)(c)(d)(e)(f)(g)]

		Indigenous			Non-Indigenous			
Year		**Deaths**	**Crude rate 1,000 live births[(h)]**	**Variability bands[(i)]**	**Deaths**	**Crude rate per 1,000 live births[(h)]**	**Variability bands[(i)]**	**Rate difference per 1,000 live births[(j)]**
	Annual change[(k)]	**–3.2**	**–0.4**	. .	**–34.6**	**–0.2**	. .	**–0.2**
Short term 2008–2012	**Per cent change over period[(l)]**	**–12.2**	**–21.3**	. .	**–16.7**	**–16.6**	. .	**–27.6**

* Represents results with statistically significant increases or declines at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) These data exclude 448 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010. For more information: see Births, Australia, 2012 (cat. no. 3301.0).

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators. See data quality statements for a more detailed explanation.

(g) 'Infant' includes persons with an age at death of under 1 year.

(h) Rates are crude rates per 1,000 live births.

(i) Variability bands can be used for the purpose of comparisons over time. See data quality statements for a full explanation of variability bands methodology.

(j) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians. Rate differences are calculated with unrounded figures.

(k) Annual change determined using linear regression analysis.

(l) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.11: Infant mortality rates per 1,000 live births, by Indigenous status, NSW, Qld, WA, SA and NT selected time periods(a)(b)(c)(d)(e)(f)(g)(h)

	Indigenous			Non-Indigenous Australians(i)				
	Deaths	Rate per 1,000(j)	Variability band(k)	Deaths	Rate per 1,000(j)	Variability band(k)	Rate ratio(l)	Rate difference(m)
				1998–2000				
NSW	107	11.7	2.2	1099	4.4	0.3	2.7*	7.3*
Qld	115	12.9	2.4	740	5.8	0.4	2.2*	7.1*
WA	80	17.1	3.8	262	3.8	0.5	4.6*	13.4*
SA	15	7.8	4	214	4.1	0.6	1.9*	3.7
NT	91	21.4	4.4	39	6.2	1.9	3.5*	15.2*
				2001–2003				
NSW	83	8.3	1.8	1075	4.3	0.3	1.9*	4.0*
Qld	113	11.2	2.1	665	5.1	0.4	2.2*	6.1*
WA	76	17.1	3.8	234	3.6	0.5	4.8*	13.5*
SA	17	8.3	4	211	4.3	0.6	2.0*	4.1*
NT	72	15.6	3.6	42	6.4	1.9	2.4*	9.2*
				2004–2006				
NSW	76	6.7	1.5	1147	4.4	0.3	1.5*	2.3*
Qld	117	10.7	1.9	668	4.7	0.4	2.3*	6.0*
WA	64	12.1	3	275	4	0.5	3.0*	8.1*
SA	14	6.5	3.4	181	3.6	0.5	1.8*	2.9
NT	76	17	3.8	30	4.6	1.6	3.7*	12.4*
				2007–2009				
NSW	80	5.3	1.2	1091	3.8	0.2	1.4*	1.4*
Qld	107	8.1	1.5	828	4.7	0.3	1.7*	3.4*
WA	50	6.7	1.9	223	2.7	0.4	2.5*	4.0*
SA	18	6.1	2.8	197	3.5	0.5	1.8*	2.7
NT	57	12.2	3.2	27	3.8	1.4	3.2*	8.4*
				2010–2012				
NSW	64	3.8	0.9	997	3.6	0.2	1.1	0.2
Qld	100	6.3	1.2	766	4.4	0.3	1.4*	1.9*
WA	49	6.5	1.8	229	2.7	0.3	2.4*	3.8*
SA	18	6.4	2.9	169	3	0.5	2.1*	3.3*
NT	64	13.8	3.4	27	3.7	1.4	3.7*	10.1*

(continued)

Table 1.20.11 (continued): Infant mortality rates per 1,000 live births, by Indigenous status, NSW, Qld, WA, SA and NT selected time periods(a)(b)(c)(d)(e)(f)(g)(h)

* Represents results with statistically significant differences in individual jurisdictions over time at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 3-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths for the time period and the denominator is the total number of births for the mid-year of the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate.

(d) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the Indigenous and other infant mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(h) ‘Infant’ includes persons with an age at death of under 1 year.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) Crude rates per 1,000 live births.

(k) Variability bands can be used for comparisons within jurisdictions (for cause of death or over time), but not between jurisdictions or between jurisdictions and totals. See data quality statement for more information.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

Note: Records with not stated age at death were excluded.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.12: SIDS mortality rates, rate ratios and rate differences per 1,000 live births, by Indigenous status, NSW, Qld, WA, SA and NT, 1998 to 2012(a)(b)(c)(d)(e)(f)(g)(h)

		Deaths		Rate per 1,000(i)			
Year		**Indigenous**	**Non-Indigenous(j)**	**Indigenous**	**Non-Indigenous(j)**	**Rate ratio(k)**	**Rate difference(l)**
1998		27	80	2.8	0.5	6.0	2.4
1999		22	88	2.3	0.5	4.4	1.8
2000		21	74	2.1	0.4	4.8	1.7
2001		14	63	1.4	0.4	3.5	1.0
2002		26	58	2.5	0.3	7.2	2.2
2003		12	42	1.1	0.3	4.5	0.9
2004		10	28	0.9	0.2	5.5	0.8
2005		11	49	1.0	0.3	3.5	0.7
2006		13	53	1.1	0.3	3.7	0.8
2007		6	55	0.4	0.3	1.5	0.2
2008		7	50	0.5	0.2	2.0	0.2
2009		7	60	0.5	0.3	1.5	0.2
2010		11	58	0.7	0.3	2.4	0.4
2011		6	52	0.4	0.3	1.5	0.1
2012		15	25	0.9	0.1	7.5	0.8
Long term 1998–2012	**Annual change(m)**	**–1.2***	**–2.4***	**–0.2***	**–0.02***	**n.a.**	**–0.1***
	% change over period(n)	**–73.7***	**–46.0***	**–92.3***	**–57.8***	**n.a.**	**–100.8***
Medium term 2001–2012	**Annual change(m)**	**–0.7**	**–0.7**	**–0.1***	**–0.01**	**n.a.**	**–0.1***
	% change over period(n)	**–52.0**	**–14.1**	**–77.7***	**–35.6**	**n.a.**	**–90.5***
Medium term 1998–2008	**Annual change(m)**	**–1.9***	**–3.7***	**–0.2***	**–0.03***	**n.a.**	**–0.2***
	% change over period(n)	**–76.6***	**–47.9***	**–86.4***	**–56.3***	**n.a.**	**–93.1***
Short term 2008–2012	**Annual change(m)**	**1.5**	**–5.8**	**0.1**	**–0.02**	**n.a.**	**0.1**
	% change over period(n)	**96.8***	**–38.3**	**60.9**	**–28.6**	**n.a.**	**366.7**

(continued)

Table 1.20.12 (continued): SIDS mortality rates, rate ratios and rate differences per 1,000 live births, by Indigenous status, NSW, Qld, WA, SA and NT, 1998 to 2012(a)(b)(c)(d)(e)(f)(g)(h)

* Represents results with statistically significant differences at the p < 0.05 level over the specified periods.

(a) SIDS—Sudden Infant Death Syndrome, ICD-10 code: R95; SIDS data in this table is for deaths under 1 year of age.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Although most deaths of Indigenous infants are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised), and 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) These data exclude 40 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(h) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(i) Crude rates per 1,000 live births.

(j) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(k) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(l) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(m) Annual change determined using linear regression analysis.

(n) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.13: Infant mortality rates per 1,000 live births, by Indigenous status, Australia (1998–2012), New Zealand (1998–2011), United States (1998–2009)

	Australia		New Zealand		United States	
Year	Indigenous	Non-Indigenous	New Zealand Maoris	New Zealand Other	American Indian & Alaskan Native	United States all races
1998	13.5	4.4	8.2	4.6	9.3	7.2
1999	14.3	4.7	8.7	4.7	9.3	7.0
2000	14.1	4.8	8.5	5.4	8.3	6.9
2001	11.2	5.0	8.6	4.4	9.7	6.8
2002	12.5	4.4	8.9	5.2	8.6	6.9
2003	10.9	4.0	7.5	4.5	8.7	6.8
2004	10.2	4.3	7.4	5.3	8.5	6.8
2005	10.9	4.5	6.7	4.3	8.1	6.9
2006	9.4	4.4	7.2	4.2	8.3	6.7
2007	8.3	3.9	6.5	4.1	9.2	6.8
2008	7.0	3.9	6.9	4.1	8.4	6.6
2009	6.4	4.1	6.9	3.9	8.5	6.4
2010	6.9	3.9	6.1	4.4	n.a.	n.a.
2011	6.6	3.6	7.4	3.9	n.a.	n.a.
2012	5.0	3.3	n.a.	n.a.	n.a.	n.a.
Annual change	**–0.7***	**–0.1***	**–0.2***(a)	**–0.1***(a)	**–0.1**(b)	**–0.05***(b)
% change over period	**–63.7***	**–24.9***	**–25.8***(a)	**–20.8***(a)	**–8.2**(b)	**–7.4***(b)

* Represents statistically significant differences at the $p < 0.05$ level over the reporting period.

(a) Percent change and annual change calculated over the period 1998–2011.

(b) Percent change and annual change calculated over the period 1998–2009.

Notes

1. 'Infant' includes persons with an age at death of under 1 year.
2. Australia, New Zealand and the United States use distinctly different methods for identification and definition of indigenous people, and how statistics are adjusted to allow for known data issues. As such, caution should be used when drawing comparisons between countries.
3. Although most Australian deaths of Indigenous infants are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous infant deaths and, depending on the under-identification in births, may either underestimate or overestimate the rates.
4. Data are reported for New South Wales, Queensland, South Australia, Western Australia and the Northern Territory only. These five states and territories are currently considered to have adequate levels of Indigenous identification in mortality data for these periods. Data for these five jurisdictions over-represent Indigenous populations in less urbanised and more remote locations. Mortality data for the five jurisdictions should not be assumed to represent the experience in the other jurisdictions.
5. Infant mortality in Canada from 2004–2008 was 5.2 for all Canadians and 14.9 in regions which were predominantly inhabited by Inuit.
6. Australian deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.
7. Because of changes in the level of accuracy of Indigenous identification in Australian births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the infant mortality rates for Indigenous and Other Australians because of these data quality issues.
8. Annual change and % change over time determined by linear regression.

Sources: Australia—ABS and AIHW analysis of National Mortality Database; New Zealand – Statistics New Zealand; United States—United States Department of Health and Human Services 2013.

Table 1.20.14: Underlying and associated causes of death for Indigenous infants, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g][h]

	Underlying cause of death									
Associated cause of death	Conditions originating in perinatal period	Signs, symptoms & ill-defined conditions (excluding SIDS)	Congenital malformations	SIDS	Disease of respiratory system	External causes (Injury & poisoning)	Infectious & parasitic diseases	Disease of circulatory system	Other conditions[i]	Total
	Per cent									
Reported alone (no associated causes)	31.6	98.0	21.6	93.5	75.0	0.0	47.4	n.p.	28.6	43.4
Conditions originating in perinatal period (P00–P96)	. .	n.p.	54.1	n.p.	n.p.	0.0	n.p.	n.p.	28.6	59.0
Congenital malformations (Q00–Q99)	n.p.	0.0	. .	0.0	0.0	0.0	0.0	n.p.	n.p.	17.0
Diseases of the respiratory system (J00–J99)	0.0	0.0	8.1	0.0	. .	0.0	26.3	n.p.	23.8	7.9
External causes (Injury and poisoning)(V01–Y98)	0.0	0.0	6.8	0.0	0.0	. .	n.p.	n.p.	0.0	4.9
Infectious and parasitic diseases (A00–B99)	n.p.	0.0	n.p.	0.0	n.p.	0.0	. .	n.p.	n.p.	5.9
Signs, symptoms and ill-defined conditions (R00–R99)	0.0	. .	n.p.	. .	n.p.	n.p.	n.p.	n.p.	23.8	22.9
Circulatory diseases (I00–I99)	0.0	0.0	6.8	0.0	n.p.	0.0	n.p.	. .	n.p.	4.1
Other conditions[i]	2.1	0.0	8.1	n.p.	n.p.	0.0	n.p.	n.p.	. .	7.9
Total deaths[j]	**237**	**50**	**74**	**46**	**20**	**17**	**19**	**9**	**21**	**493**

(continued)

Table 1.20.14 (continued): Underlying and associated causes of death for Indigenous infants, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Data are presented in 5-year groupings because of small numbers each year.

(d) Although most deaths of Indigenous infants are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous infant deaths and, depending on the under-identification in births, may either underestimate or overestimate the rates. Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

(e) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous infant mortality rates because of these data quality issues.

(f) ‘Infant’ includes persons with an age at death of under 1 year.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Other conditions include: neoplasms; diseases of blood and blood-forming organs; endocrine, nutritional and metabolic diseases; mental and behavioural disorders; diseases of the nervous system; diseases of the eye and adnexa; diseases of the ear and mastoid process; diseases of the digestive system; diseases of the musculoskeletal system and connective tissues; diseases of the genitourinary system; and diseases of the skin and subcutaneous tissue.

(j) Raw count of total deaths by underlying cause of death.

Notes

1. Sum of components may exceed 100% as more than one associated cause of death can be reported for each death.
2. Associated causes which were also the underlying cause were counted in this table. This differs from other mortality tables in the HPF.

Source: ABS and AIHW analysis of National Mortality Database.

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Table 1.20.15: Causes of infant death, by Indigenous status, NSW, Qld, WA, SA and NT, 2003–2007 and 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)(k)(l)

	Deaths		Rate per 1,000(m)				
Cause of death	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Rate ratio(n)**	**Rate difference(o)**	**Rate difference %(p)**
			2003–2007(i)				
Certain conditions originating in the perinatal period (P00–P96)	264	1,858	4.6	2.1	2.2*	2.5*	43.0
Signs, symptoms and ill-defined conditions (R00–R99)	113	360	2.0	0.4	4.9*	1.6*	26.8
SIDS (R95)(q)	*52*	*227*	*0.9*	*0.3*	*3.6**	*0.7**	*11.1*
Congenital malformations (Q00–Q99)	73	911	1.3	1.0	1.2	0.3	4.3
Diseases of the respiratory system (J00–J99)	39	94	0.7	0.1	6.4*	0.6*	9.8
Injury and poisoning (V01–Y99)	29	115	0.5	0.1	3.9*	0.4*	6.4
Infectious and parasitic diseases (A00–B99)	12	52	0.2	0.1	3.6*	0.2*	2.6
Diseases of the circulatory system (I00–I99)	14	67	0.2	0.1	3.2*	0.2*	2.9
Other conditions(r)	32	272	0.6	0.3	1.8*	0.3*	4.3
All causes	**576**	**3,729**	**10.1**	**4.2**	**2.4***	**5.9***	**100.0**
			2008–2012(h)(i)				
Certain conditions originating in the perinatal period (P00–P96)	237	1,893	3.0	1.9	1.6*	1.1*	45.4
Signs, symptoms and ill-defined conditions (R00–R99)	96	368	1.2	0.4	3.3*	0.9*	34.1
SIDS (R95)(q)	*46*	*245*	*0.6*	*0.2*	*2.4**	*0.3**	*13.6*
Congenital malformations (Q00–Q99)	74	992	0.9	1.0	1.0	0.0	–1.7
Diseases of the respiratory system (J00–J99)	20	69	0.3	0.1	3.7*	0.2*	7.4
Injury and poisoning (V01–Y99)	17	104	0.2	0.1	2.1*	0.1*	4.5
Infectious and parasitic diseases (A00–B99)	19	51	0.2	0.1	4.8*	0.2*	7.6
Diseases of the circulatory system (I00–I99)	9	72	0.1	0.1	1.6	0.0	1.7
Other conditions(r)	21	247	0.3	0.2	1.1	0.0	0.9
All causes	**493**	**3,796**	**6.2**	**3.7**	**1.7***	**2.5***	**100.0**

(continued)

Table 1.20.15 (continued): Causes of infant death, by Indigenous status, NSW, Qld, WA, SA and NT, 2003–2007 and 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)(k)(l)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous infants are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous infant deaths and, depending on the under-identification in births, may either underestimate or overestimate the rates. Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is births for the mid-point year for the time period.

(d) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous infant mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(g) ‘Infant’ includes persons with an age at death of under 1 year.

(h) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(k) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(l) These data exclude 242 registered deaths where the Indigenous status was not stated over the period 2003–2012.

(m) Crude rates per 1,000 live births.

(n) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(o) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(p) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all causes.

(q) Data presented for SIDS are a subset of data presented for signs, symptoms and ill-defined conditions presented in this table.

(r) Other conditions include: neoplasms; diseases of blood and blood-forming organs; endocrine, nutritional and metabolic diseases; mental and behavioural disorders; diseases of the nervous system; diseases of the eye and adnexa; diseases of the ear and mastoid process; diseases of the digestive system; diseases of the musculoskeletal system and connective tissues; diseases of the genitourinary system; and diseases of the skin and subcutaneous tissue.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.16: Causes of death among children aged 1–4, by Indigenous status, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)]

	Deaths			Rate per 100,000[(k)]				
Cause of death	Indigenous	Non-Indigenous	% of deaths - Indigenous	Indigenous	Non-Indigenous	Rate ratio[(l)]	Rate difference[(m)]	Rate difference %[(n)]
Certain conditions originating in the perinatal period (P00–P96)	3	14	n.p.	n.p.	0.4	n.p.	n.p.	n.p.
Signs, symptoms and ill–defined conditions (R00–R99)	7	34	6.0	2.4	0.9	2.7*	1.5	6.7
Congenital malformations (Q00–Q99)	7	71	6.0	2.4	1.9	1.3	0.5	2.4
Injury and poisoning (V01–Y98)	62	244	53.0	21.2	6.4	3.3*	14.8*	65.9
Diseases of the respiratory system (J00–J99)	8	40	6.8	2.7	1.0	2.6*	1.7	7.5
Diseases of the nervous system (G00–G99)	5	63	4.3	1.7	1.6	1.0	0.1	0.3
Infectious and parasitic diseases (A00–B99)	5	38	4.3	1.7	1.0	1.7	0.7	3.2
Diseases of the circulatory system (I00–I99)	11	32	9.4	3.8	0.8	4.5*	2.9*	13.0
Other conditions[(o)]	10	134	8.5	3.4	3.5	1.0	–0.1	–0.4
Total	**117**	**670**	**100.0**	**39.9**	**17.5**	**2.3***	**22.5***	**100.0**

(continued)

Table 1.20.16 (continued): Causes of death among children aged 1–4 by Indigenous status, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous child mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

(c) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous child mortality rates because of these data quality issues.

(d) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the average of the population for the time period.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(g) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(h) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(i) Includes all deaths of children aged 1–4 years.

(j) These data exclude 23 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(k) Crude rates per 100,000 population.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all causes.

(o) Other conditions include: neoplasms; diseases of blood and blood-forming organs; endocrine, nutritional and metabolic diseases; mental and behavioural disorders; diseases of the eye and adnexa; diseases of the ear and mastoid process; diseases of the digestive system; diseases of the musculoskeletal system and connective tissues; diseases of the genitourinary system; and diseases of the skin and subcutaneous tissue.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.20.17: Causes of death among children aged 0–4 by Indigenous status, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)]

	Deaths			Rate per 100,000[(k)]				
Cause of death	**Indigenous**	**Non-Indigenous**	**% of deaths Indigenous**	**Indigenous**	**Non-Indigenous**	**Rate ratio[(l)]**	**Rate difference[(m)]**	**Rate difference %[(n)]**
Certain conditions originating in the perinatal period (P00–P96)	239	1,907	39.2	65.3	39.6	1.7*	25.7*	34.8
Congenital malformations (Q00–Q99)	81	1,063	13.3	22.1	22.0	1.0	0.1	0.1
Signs, symptoms and ill–defined conditions (R00–R99)	103	402	16.9	28.1	8.3	3.4*	19.8*	26.8
Injury and poisoning (V01–Y99)	79	348	13.0	21.6	7.2	3.0*	14.4*	19.4
Diseases of the respiratory system (J00–J99)	28	109	4.6	7.6	2.3	3.4*	5.4*	7.3
Diseases of the circulatory system (I00–I99)	20	104	3.3	5.5	2.2	2.5*	3.3*	4.5
Diseases of the nervous system (G00–G99)	15	158	2.5	4.1	3.3	1.2	0.8	1.1
Infectious and parasitic diseases (A00–B99)	24	89	3.9	6.6	1.8	3.6*	4.7*	6.4
Other conditions[(o)]	21	286	3.4	5.7	5.9	1.0	–0.2	–0.3
All causes	**610**	**4,466**	**100.0**	**166.6**	**92.6**	**1.8***	**73.9***	**100.0**

(continued)

Table 1.20.17 (continued): Causes of death among children aged 0–4 by Indigenous status, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the average of 2008–2012 population.

(c) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous child deaths and, depending on the under-identification in births, may either underestimate or overestimate the rates. Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

(d) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous child mortality rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous child mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Causes of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(g) Includes all deaths of children aged 0–4 years.

(h) These data exclude 140 registered deaths where the Indigenous status was not stated over the period 2008–2012

(i) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(j) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(k) Crude rates per 100,000 population.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all causes.

(o) Other conditions include: neoplasms; diseases of blood and blood-forming organs; endocrine, nutritional and metabolic diseases; mental and behavioural disorders; diseases of the eye and adnexa; diseases of the ear and mastoid process; diseases of the digestive system; diseases of the musculoskeletal system and connective tissues; diseases of the genitourinary system; and diseases of the skin and subcutaneous tissue.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Data quality issues

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013a). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013b).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: ‘While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records’.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the

2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 21 of 68

Detailed analyses

1.21 Perinatal mortality

This measure reports on the number of Aboriginal and Torres Strait Islander babies who die in the perinatal period, expressed as a rate (per 1,000 births)

Introduction

This is no. 21 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 1.21.4

3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data source

National Mortality Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Perinatal mortality is defined as all fetal deaths (stillbirths of at least 20 weeks gestation or at least 400 grams birthweight) plus all neonatal deaths (those occurring in live births up to 27 completed days after birth).

Data are presented on fetal, neonatal and perinatal mortality in Indigenous and non-Indigenous Australian infants for the 5 states and territories that have been determined to have adequate levels of Indigenous identification for reporting purposes: New South Wales, Queensland, Western Australia, South Australia and the Northern Territory.

'Current period' data are presented in 5 year groupings due to the small number of perinatal deaths each year.

For more information about perinatal mortality, see measures 1.01, 2.21 and 3.01. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Perinatal death rates—see tables 1.21.1–5
- Causes of perinatal mortality—see Table 1.21.6.

International comparisons

International data are available for New Zealand, the United States and Canada using the World Health Organization (WHO) definition of perinatal mortality. However, the WHO definition differs significantly from the Australian definition of the perinatal period. Australian data include babies of at least 400 grams (or at least 20 weeks if birthweight is unavailable) whereas the WHO definition starts at 500 grams (22 weeks if birthweight is unavailable). In addition, the WHO defines perinatal deaths as less than 7 days whereas Australia includes deaths up to 28 days. Perinatal mortality rates of Aboriginal and Torres Strait Islander babies are therefore not comparable to rates for Indigenous populations in the other countries. Therefore, international comparisons have not been presented here.

Perinatal death rates

Current period

In 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There were 749 perinatal deaths of Indigenous babies. Of these, 449 or 60% of the perinatal deaths were fetal deaths (stillbirths). For non-Indigenous babies fetal deaths account for 67% of perinatal deaths (Table 1.21.2).

- The perinatal mortality rate for Indigenous babies was 9.6 per 1,000 births compared with 8.1 per 1,000 births for non-Indigenous babies. There was a significant gap of 1.5 perinatal deaths per 1,000 births (Table 1.21.1).
- The gap in the perinatal mortality rate between Indigenous and non-Indigenous babies varied between jurisdictions. The largest gap was 11.2 per 1,000 in the Northern Territory. In New South Wales and South Australia, perinatal mortality rates were lower for Indigenous than non-Indigenous Australians (Table 1.21.2).

Trend

Between 1998 and 2012:

- The perinatal mortality rate for Indigenous babies decreased by around 52%, an average yearly decline of 0.7 deaths per 1,000 births. The gap in the perinatal mortality rate between Indigenous and non-Indigenous babies narrowed significantly, by 93% (Table 1.21.3, Figure 1.21.1).
- The Indigenous fetal mortality rate declined significantly (from 8.1 to 5.0 per 1,000 births) whereas the non-Indigenous rate was relatively stable, leading to a significant decrease in the gap (Table 1.21.4).
- There was a significant (87%) decrease in the neonatal mortality rate gap (Table 1.21.4).

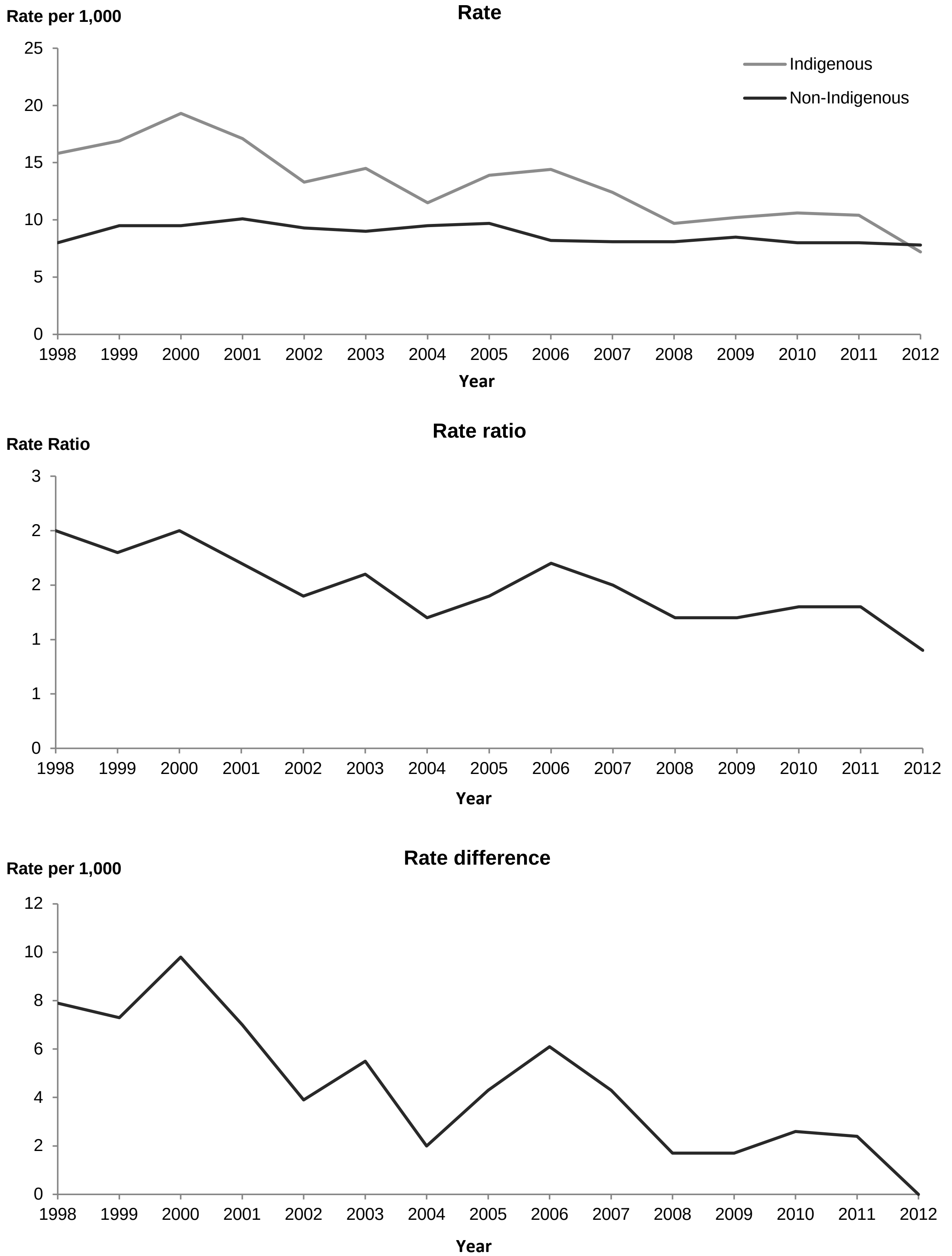
Causes of perinatal mortality

Note that perinatal cause of death data should be used with caution as the level of Indigenous identification by cause is unknown and may not be suitable for the calculation of rates.

Current period

In 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- Disorders related to the length of gestation and fetal growth (premature birth/inadequate fetal growth) caused 36% of deaths for Indigenous babies, and 31% for non-Indigenous babies. Congenital malformations, deformations and chromosomal abnormalities was another common cause of perinatal mortality, causing 15% of perinatal deaths for Indigenous babies and 20% for non-Indigenous babies (Table 1.21.6).
- The 2 main types of conditions in the mother that led to perinatal deaths were complications of pregnancy; and complications of the placenta, cord and membranes. Together, these caused 27% of perinatal deaths for both Indigenous and non-Indigenous babies (Table 1.21.6).



Source: Table.1.21.3.

Figure 1.21.1: Perinatal mortality rates, rate ratios and rate differences, Indigenous and non-Indigenous babies, NSW, Qld, WA, SA and NT, 1998–2012

Table 1.21.1: Perinatal mortality rates per 1,000 births, by Indigenous status and sex, NSW, Qld, WA, SA and NT combined, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

	Indigenous		Non-Indigenous			
	Deaths	**Rate per 1,000 births(k)**	**Deaths**	**Rate per 1,000 births(k)**	**Rate ratio(l)**	**Rate difference(m)**
Males(n)	430	10.7	4,403	8.4	1.3*	2.3*
Females	319	8.4	3,797	7.7	1.1	0.7
Persons	749	9.6	8,200	8.1	1.2*	1.5*

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the total number of deaths and the denominator is the total population for the time period.

(d) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous perinatal mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous perinatal mortality rates because of these data quality issues.

(e) These data exclude 373 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(i) Perinatal deaths are all fetal deaths (at least 20 weeks gestation or at least 400 grams birthweight) plus all neonatal deaths.

(j) The published neonatal count in this table differs from that previously published for 2011. The total neonatal death count for 2011 has had a net reduction of nine deaths, bringing the total of neonatal deaths down to 805 (compared to the previously published figure of 814). This also affects the total number of perinatal deaths for 2011. See Explanatory Note 99 in Causes of Death, Australia, 2012 (cat. no. 3303.0) for further details.

(k) Perinatal death rates are calculated per 1,000 all births for the calendar year.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Male deaths include those perinatal deaths of sex indeterminate.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.21.2: Fetal, neonatal and perinatal mortality rates per 1,000 births, by Indigenous status, NSW, Qld, WA, SA and NT combined, 2008–2012[(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)]

	Number	No. per 1,000[(k)]	LCL 95%[(l)]	UCL 95%[(m)]	Rate ratio[(n)]	Rate difference[(o)]
			Fetal deaths[(p)]			
NSW[(g)]						
Indigenous	86	3.2	2.5	3.8	0.7*	–1.7*
Non-Indigenous	2,298	4.9	4.7	5.1	. .	. .
Qld						
Indigenous	166	6.4	5.4	7.4	1.0	–0.2
Non-Indigenous	1,935	6.6	6.3	6.8	. .	. .
WA[(i)]						
Indigenous	100	8.0	6.4	9.6	1.4*	2.2*
Non-Indigenous	826	5.8	5.4	6.2	. .	. .
SA						
Indigenous	6	1.3	0.3	2.3	0.3*	–2.9*
Non-Indigenous	399	4.2	3.8	4.6	. .	. .
NT						
Indigenous	91	11.6	9.2	14.0	2.4*	6.8*
Non-Indigenous	57	4.8	3.5	6.0	. .	. .
NSW, Qld, WA, SA and NT[(a)(b)]						
Indigenous	449	5.7	5.2	6.3	1.1	0.3
Non-Indigenous	5,515	5.4	5.3	5.6	. .	. .
			Neonatal deaths[(q)]			
NSW[(g)]						
Indigenous	72	2.7	2.0	3.3	1.0	–0.1
Non-Indigenous	1,304	2.8	2.6	2.9	. .	. .
Qld						
Indigenous	122	4.7	3.9	5.6	1.5*	1.6*
Non-Indigenous	923	3.1	2.9	3.3	. .	. .
WA[(i)]						
Indigenous	43	3.5	2.4	4.5	2.0*	1.8*
Non-Indigenous	241	1.7	1.5	1.9	. .	. .
SA						
Indigenous	11	2.4	1.0	3.8	1.2	0.3
Non-Indigenous	190	2.0	1.7	2.3	. .	. .
NT						
Indigenous	52	6.7	4.9	8.5	3.0*	4.4*
Non-Indigenous	27	2.3	1.4	3.1	. .	. .

(continued)

Table 1.21.2 (continued): Fetal, neonatal and perinatal mortality rates per 1,000 births, by Indigenous status, NSW, Qld, SA and NT combined, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

	Number	No. per 1,000(k)	LCL 95%(l)	UCL 95%(m)	Rate ratio(n)	Rate difference(o)
			Perinatal deaths(r)			
NSW, Qld, WA, SA and NT(a)(b)						
Indigenous	300	3.9	3.4	4.3	1.5*	1.2*
Non-Indigenous	2,685	2.7	2.6	2.8	. .	. .
NSW(g)						
Indigenous	158	5.8	4.9	6.7	0.8*	–1.8*
Non-Indigenous	3,602	7.6	7.4	7.9	. .	. .
Qld						
Indigenous	288	11.1	9.8	12.4	1.1	1.4*
Non-Indigenous	2,858	9.7	9.3	10.0	. .	. .
WA(i)						
Indigenous	143	11.4	9.6	13.3	1.5*	4.0*
Non-Indigenous	1,067	7.5	7.0	7.9	. .	. .
SA						
Indigenous	17	3.7	1.9	5.4	0.6*	–2.6*
Non-Indigenous	589	6.2	5.7	6.8	. .	. .
NT						
Indigenous	143	18.2	15.2	21.2	2.6*	11.2*
Non-Indigenous	84	7.0	5.5	8.5	. .	. .
NSW, Qld, WA, SA and NT(a)(b)						
Indigenous	749	9.6	8.9	10.3	1.2*	1.5*
Non-Indigenous	8,200	8.1	7.9	8.2	. .	. .

(continued)

Table 1.21.2 (continued): Fetal, neonatal and perinatal mortality rates per 1,000 births, by Indigenous status, NSW, Qld, SA and NT combined, 2008–2012[a][b][c][d][e][f][g][h][i][j]

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the total number of deaths and the denominator is the total population for the time period.

(c) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous perinatal mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous perinatal mortality rates because of these data quality issues.

(d) Deaths from 2007 onwards are by reference year and state/territory of usual residence.

(e) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(f) These data exclude 373 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(g) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(h) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(k) Fetal death rates and perinatal death rates are calculated per 1,000 all births for the calendar year. Neonatal death rates are calculated per 1,000 live births for the calendar year.

(l) LCL = lower confidence limit.

(m) UCL = upper confidence limit.

(n) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(o) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(p) Fetal deaths of at least 20 weeks gestation or with a birthweight of at least 400 grams.

(q) Neonatal death is death of a live born baby within 28 days of birth.

(r) Perinatal deaths are all fetal deaths (at least 20 weeks gestation or at least 400 grams birthweight) plus all neonatal deaths.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.21.3: Perinatal mortality rates, rate ratios and rate differences, NSW, Qld, SA, WA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)(k)

		Indigenous		Non-Indigenous			
Year		Number	Rate per 1,000 births	Number	Rate per 1,000 births	Rate ratio(l)	Rate difference(m)
1998		152	15.8	1,359	8.0	2.0	7.9
1999		164	16.9	1,621	9.5	1.8	7.3
2000		196	19.3	1,609	9.5	2.0	9.8
2001		179	17.1	1,671	10.1	1.7	7.0
2002		139	13.3	1,567	9.3	1.4	3.9
2003		154	14.5	1,505	9.0	1.6	5.5
2004		125	11.5	1,599	9.5	1.2	2.0
2005		160	13.9	1,721	9.7	1.4	4.3
2006		172	14.4	1,500	8.2	1.7	6.1
2007		172	12.4	1,586	8.1	1.5	4.3
2008		142	9.7	1,641	8.1	1.2	1.7
2009		156	10.2	1,714	8.5	1.2	1.7
2010		168	10.6	1,629	8.0	1.3	2.6
2011		166	10.4	1,620	8.0	1.3	2.4
2012		117	7.2	1,596	7.8	0.9	–0.7
Long term	**Annual change**(n)	–1.3	–0.7*	7.9	–0.1*	n.a.	–0.5*
1998–2012	**% change over period**(o)	–11.2	–51.5*	7.2	–16.3*	n.a.	–92.7*
Medium term	**Annual change**(n)	–0.8	–0.6*	3.3	–0.2*	n.a.	–0.5*
2001–2012	**% change over period**(o)	–5.8	–45.1*	2.3	–21.3*	n.a.	–84.6*
Medium term	**Annual change**(n)	–1.3	–0.6*	9.8	–0.1	n.a.	–0.6*
1998–2008	**% change over period**(o)	–7.8	–36.7*	6.4	–9.2	n.a.	–67.8*
Short term	**Annual change**(n)	–4.0	–0.5	–18.4	–0.1	n.a.	–0.4
2008–2012	**% change over period**(o)	–10.1	–18.1	–4.4	–5.3	n.a.	–69.5

(continued)

Table 1.21.3 (continued): Perinatal mortality rates, rate ratios and rate differences, NSW, Qld, SA, WA and NT, 1998–2012[a][b][c][d][e][f][g][h][i][j][k]

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 1998–2012.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous perinatal mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and other perinatal mortality rates because of these data quality issues.

(e) These data exclude 581 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(f) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Perinatal deaths are all fetal deaths (at least 20 weeks gestation or at least 400 grams birthweight) plus all neonatal deaths (death of a live born baby up to 28 days after birth).

(j) Perinatal death rates are calculated per 1,000 all births for the calendar year.

(k) The published neonatal count in this table differs from that previously published for 2011. The total neonatal death count for 2011 has had a net reduction of nine deaths, bringing the total of neonatal deaths down to 805 (compared to the previously published figure of 814). This also affects the total number of perinatal deaths for 2011. See Explanatory Note 99 in Causes of Death, Australia, 2012 (cat. no. 3303.0) for further details.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Annual change determined using linear regression analysis.

(o) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.21.4a: Fetal and neonatal deaths by Indigenous status, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

		Fetal deaths(j)		Neonatal deaths(k)	
Year		Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
1998		78	838	74	521
1999		79	1,046	85	575
2000		114	1,051	82	558
2001		113	1,067	66	604
2002		80	1,028	59	539
2003		91	1,020	63	485
2004		69	1,085	56	514
2005		89	1,135	71	586
2006		103	958	69	542
2007		101	1,045	71	541
2008		80	1,084	62	557
2009		97	1,130	59	584
2010		91	1,073	77	556
2011		100	1,104	66	516
2012		81	1,124	36	472
Long term 1998–2012	Annual change(l)	0.1	10.0*	–1.4*	–2.1
	% change over period(m)	1.2	14.3*	–25.9*	–5.3
Medium term 2001 – 2012	Annual change(l)	–0.2	6.4	–0.6	–3.1
	% change over period(m)	–2.5	6.8	–10.4	–6.2
Medium term 1998–2008	Annual change(l)	0.1	10.4	–1.3	–0.6
	% change over period(m)	0.6	10.6	–17.8	–1.1
Short term 2008–2012	Annual change(l)	0.5	5.4	–4.5	–23.8
	% change over period(m)	2.3	2.0	–26.1	–16.3

(continued)

Table 1.21.4a (continued): Fetal and neonatal deaths by Indigenous status, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous perinatal mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous perinatal mortality rates because of these data quality issues.

(e) These data exclude 581 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(f) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) The published neonatal count in this table differs from that previously published for 2011. The total neonatal death count for 2011 has had a net reduction of nine deaths, bringing the total of neonatal deaths down to 805 (compared to the previously published figure of 814). This also affects the total number of perinatal deaths for 2011. See Explanatory Note 99 in Causes of Death, Australia, 2012 (cat. no. 3303.0) for further details.

(j) Fetal deaths of at least 20 weeks gestation or with a birthweight of at least 400 grams.

(k) Neonatal death is death of a live born baby within 28 days of birth.

(l) Annual change determined using linear regression analysis.

(m) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.21.4b: Fetal and neonatal mortality rates, rate ratios and rate differences by Indigenous status, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

		Fetal mortality rate per 1,000 births (live and stillborn)(j)(k)				Neonatal mortality rate per 1,000 live births(l)(k)			
Year		Indigenous	Non-Indigenous	Rate ratio(m)	Rate difference(n)	Indigenous	Non-Indigenous	Rate ratio(m)	Rate difference(n)
1998		8.1	4.9	1.7	3.2	7.8	3.1	2.5	4.7
1999		8.1	6.2	1.3	2.0	8.8	3.4	2.6	5.4
2000		11.2	6.2	1.8	5.0	8.2	3.3	2.5	4.8
2001		10.8	6.5	1.7	4.3	6.4	3.7	1.7	2.7
2002		7.6	6.1	1.2	1.5	5.7	3.2	1.8	2.4
2003		8.5	6.1	1.4	2.5	6.0	2.9	2.1	3.1
2004		6.3	6.4	1.0	–0.1	5.2	3.1	1.7	2.1
2005		7.7	6.4	1.2	1.4	6.2	3.3	1.9	2.9
2006		8.6	5.3	1.6	3.3	5.8	3.0	1.9	2.8
2007		7.3	5.3	1.4	1.9	5.1	2.8	1.9	2.4
2008		5.5	5.3	1.0	0.2	4.3	2.8	1.6	1.5
2009		6.3	5.6	1.1	0.7	3.9	2.9	1.3	1.0
2010		5.7	5.3	1.1	0.5	4.9	2.7	1.8	2.1
2011		6.3	5.5	1.1	0.8	4.2	2.6	1.6	1.6
2012		5.0	5.5	0.9	–0.5	2.2	2.3	1.0	–0.1
Long term 1998–2012	Annual change(o)	–0.3*	0.0	n.a.	–0.3*	–0.4*	–0.1*	n.a.	–0.3*
	% change over period(p)	–43.8*	–10.8	n.a.	–100.3*	–60.8*	–26.2*	n.a.	–86.5*
Medium term 2001–2012	Annual change(o)	–0.4*	–0.1*	n.a.	–0.3*	–0.3*	–0.1*	n.a.	–0.2*
	% change over period(p)	–43.5*	–17.8*	n.a.	–101.8*	–47.3*	–28.0*	n.a.	–68.3*
Medium term 1998–2008	Annual change(o)	–0.3	0.0	n.a.	–0.3	–0.4*	–0.1*	n.a.	–0.3*
	% change over period(p)	–29.9	–6.3	n.a.	–71.3	–45.0*	–15.2*	n.a.	–65.5*
Short term 2008–2012	Annual change(o)	–0.1	0.0	n.a.	–0.1	–0.4	–0.1*	n.a.	–0.3
	% change over period(p)	–6.7	2.2	n.a.	–86.7	–33.3	–17.8*	n.a.	–59.8

(continued)

Table 1.21.4b (continued): Fetal and neonatal mortality rates, rate ratios and rate differences by Indigenous status, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous perinatal mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous perinatal mortality rates because of these data quality issues.

(e) These data exclude 581 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(f) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) The published neonatal count in this table differs from that previously published for 2011. The total neonatal death count for 2011 has had a net reduction of nine deaths, bringing the total of neonatal deaths down to 805 (compared to the previously published figure of 814). This also affects the total number of perinatal deaths for 2011. See Explanatory Note 99 in Causes of Death, Australia, 2012 (cat. no. 3303.0) for further details.

(j) Fetal deaths of at least 20 weeks gestation or with a birthweight of at least 400 grams.

(k) Fetal death rates are calculated per 1,000 all births for the calendar year. Neonatal death rates are calculated per 1,000 live births for the calendar year.

(l) Neonatal death is death of a live-born baby within 28 days of birth.

(m) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(n) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(o) Annual change determined using linear regression analysis.

(p) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.21.5: Fetal, neonatal and perinatal mortality rates per 1,000 births, by Indigenous status, NSW, Qld, WA, SA and NT, 2003–2007 to 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

	2003–2007						2008–2012						Rate difference 2003–2007 to 2008–2012
	Deaths	Rate per 1,000(k)	LCL 95%(l)	UCL 95%(m)	Rate ratio(n)	Rate difference(o)	Deaths	Rate per 1,000(k)	LCL 95%(l)	UCL 95%(m)	Rate ratio(n)	Rate difference(o)	
							Fetal deaths(p)						
NSW(g)													
Indigenous	89	4.5	3.6	5.5	0.9	–0.7	86	3.2	2.5	3.8	0.7*	–1.7*	–1.3*
Non-Indigenous	2,281	5.3	5.0	5.5	. .	. .	2,298	4.9	4.7	5.1	. .	. .	–0.4*
Qld													
Indigenous	155	8.3	7.0	9.6	1.2*	1.6*	166	6.4	5.4	7.4	1.0	–0.2	–1.9*
Non-Indigenous	1,653	6.8	6.5	7.1	. .	. .	1,935	6.6	6.3	6.8	. .	. .	–0.2
WA(i)													
Indigenous	76	8.2	6.4	10.0	1.3*	2.0*	100	8.0	6.4	9.6	1.4*	2.2*	–0.2
Non-Indigenous	728	6.2	5.7	6.6	. .	. .	826	5.8	5.4	6.2	. .	. .	–0.4
SA													
Indigenous	25	7.1	4.3	9.9	1.2	1.2	6	1.3	0.3	2.3	0.3*	–2.9*	–5.8*
Non-Indigenous	505	5.9	5.4	6.4	. .	. .	399	4.2	3.8	4.6	. .	. .	–1.7*
NT													
Indigenous	108	13.7	11.1	16.3	2.0*	6.7*	91	11.6	9.2	14.0	2.4*	6.8*	–2.1
Non-Indigenous	76	7.0	5.4	8.6	. .	. .	57	4.8	3.5	6.0	. .	. .	–2.2*
NSW, Qld, WA, SA and NT(a)(b)													
Indigenous	453	7.7	7.0	8.4	1.3*	1.8*	449	5.7	5.2	6.3	1.1	0.3	–2.0*
Non-Indigenous	5,243	5.9	5.7	6.0	. .	. .	5,515	5.4	5.3	5.6	. .	. .	–0.5*

(continued)

Table 1.21.5 (continued): Fetal, neonatal and perinatal mortality rates per 1,000 births, by Indigenous status, NSW, Qld, WA, SA and NT, 2003–2007 to 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

	2003–2007						2008–2012						Rate difference 2003–2007 to 2008–2012
	Deaths	Rate per 1,000(k)	LCL 95%(l)	UCL 95%(m)	Rate ratio(n)	Rate difference(o)	Deaths	Rate per 1,000(k)	LCL 95%(l)	UCL 95%(m)	Rate ratio(n)	Rate difference(o)	
							Neonatal deaths(q)						
NSW(g)													
Indigenous	82	4.2	3.3	5.1	1.3*	1.1*	72	2.7	2.0	3.3	1.0	–0.1	–1.5*
Non-Indigenous	1,346	3.1	3.0	3.3	. .	. .	1,304	2.8	2.6	2.9	. .	. .	–0.3*
Qld													
Indigenous	111	6.0	4.9	7.1	1.8*	2.6*	122	4.7	3.9	5.6	1.5*	1.6*	–1.3
Non-Indigenous	816	3.4	3.1	3.6	. .	. .	923	3.1	2.9	3.3	. .	. .	–0.3
WA(i)													
Indigenous	47	5.1	3.6	6.6	2.2*	2.8*	43	3.5	2.4	4.5	2.0*	1.8*	–1.6
Non-Indigenous	271	2.3	2.0	2.6	. .	. .	241	1.7	1.5	1.9	. .	. .	–0.6*
SA													
Indigenous	16	4.6	2.3	6.8	1.9*	2.2	11	2.4	1.0	3.8	1.2	0.3	–2.2
Non-Indigenous	205	2.4	2.1	2.7	. .	. .	190	2.0	1.7	2.3	. .	. .	–0.4
NT													
Indigenous	74	9.5	7.3	11.7	3.4*	6.7*	52	6.7	4.9	8.5	3.0*	4.4*	–2.8
Non-Indigenous	30	2.8	1.8	3.8	. .	. .	27	2.3	1.4	3.1	. .	. .	–0.5
NSW, Qld, WA, SA and NT(a)(b)													
Indigenous	330	5.6	5.0	6.3	1.9*	2.6*	300	3.9	3.4	4.3	1.5*	1.2*	–1.7*
Non-Indigenous	2,668	3.0	2.9	3.1	. .	. .	2,685	2.7	2.6	2.8	. .	. .	–0.3*

(continued)

Table 1.21.5 (continued): Fetal, neonatal and perinatal mortality rates per 1,000 births, by Indigenous status, NSW, Qld, WA, SA and NT, 2003–2007 to 2008–2012[a][b][c][d][e][f][g][h][i][j]

	2003–2007						2008–2012						Rate difference 2003–2007 to 2008–2012
	Deaths	Rate per 1,000[k]	LCL 95%[l]	UCL 95%[m]	Rate ratio[n]	Rate difference[o]	Deaths	Rate per 1,000[k]	LCL 95%[l]	UCL 95%[m]	Rate ratio[n]	Rate difference[o]	
							Perinatal deaths[r]						
NSW[g]													
Indigenous	171	8.7	7.4	10.0	1.0	0.4	158	5.8	4.9	6.7	0.8*	–1.8*	–2.9*
Non-Indigenous	3,627	8.4	8.1	8.6	. .	. .	3,602	7.6	7.4	7.9	. .	. .	–0.8*
Qld													
Indigenous	266	14.3	12.6	16.0	1.4*	4.2*	288	11.1	9.8	12.4	1.1	1.4*	–3.2*
Non-Indigenous	2,469	10.1	9.7	10.5	. .	. .	2,858	9.7	9.3	10.0	. .	. .	–0.4
WA[i]													
Indigenous	123	13.3	10.9	15.6	1.6*	4.8*	143	11.4	9.6	13.3	1.5*	4.0*	–1.9
Non-Indigenous	999	8.5	7.9	9.0	. .	. .	1,067	7.5	7.0	7.9	. .	. .	–1.0*
SA													
Indigenous	41	11.7	8.1	15.2	1.4*	3.4	17	3.7	1.9	5.4	0.6*	–2.6*	–8.0*
Non-Indigenous	710	8.3	7.7	8.9	. .	. .	589	6.2	5.7	6.8	. .	. .	–2.1*
NT													
Indigenous	182	23.1	19.7	26.4	2.4*	13.3*	143	18.2	15.2	21.2	2.6*	11.2*	–4.9*
Non-Indigenous	106	9.8	7.9	11.6	. .	. .	84	7.0	5.5	8.5	. .	. .	–2.8*
NSW, Qld, WA, SA and NT[a][b]													
Indigenous	783	13.3	12.4	14.2	1.5*	4.4*	749	9.6	8.9	10.3	1.2*	1.5*	–3.7*
Non-Indigenous	7,911	8.9	8.7	9.1	. .	. .	8,200	8.1	7.9	8.2	. .	. .	–0.8*

(continued)

Table 1.21.5 (continued): Fetal, neonatal and perinatal mortality rates per 1,000 births, by Indigenous status, NSW, Qld, WA, SA and NT, 2003–2007 to 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the p < 0.05 level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the total number of deaths and the denominator is the total population for the time period.

(c) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous perinatal mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous perinatal mortality rates because of these data quality issues.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(f) These data exclude 557 registered deaths where the Indigenous status was not stated over the period 2003–2012.

(g) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(h) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(k) Fetal death rates and perinatal death rates are calculated per 1,000 all births for the calendar year. Neonatal death rates are calculated per 1,000 live births for the calendar year.

(l) LCL = lower confidence limit.

(m) UCL = upper confidence limit.

(n) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(o) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(p) Fetal deaths of at least 20 weeks gestation or with a birthweight of at least 400 grams.

(q) Neonatal death is death of a live born baby within 28 days of birth.

(r) Perinatal deaths are all fetal deaths (at least 20 weeks gestation or at least 400 grams birthweight) plus all neonatal deaths.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.21.6: Death by main condition for perinatal babies, by Indigenous status, NSW, Qld, WA, SA, and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Fetal deaths(j)						Neonatal deaths(k)(l)						Perinatal deaths(m)					
	Number		Per cent				Number		Per cent				Number		Per cent			
Cause of death	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Rate ratio(n)**	**Rate diff.(o)**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Rate ratio(n)**	**Rate diff.(o)**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Rate ratio(n)**	**Rate diff.(o)**
Main condition in the fetus/infant																		
Disorders related to length of gestation and fetal growth (P05–P08)	158	1,671	35.2	30.3	1.2	4.9	109	827	36.3	30.8	1.2	5.5	267	2,498	35.6	30.5	1.2*	5.2*
Respiratory and cardiovascular disorders specific to the perinatal period (P20–P29)	15	231	3.3	4.2	0.8	–0.8	47	302	15.7	11.2	1.4*	4.4	62	533	8.3	6.5	1.3	1.8
Infections specific to the perinatal period (P35–P39)	2	41	n.p.	0.7	n.p.	n.p.	15	100	5.0	3.7	1.3	1.3	18	141	2.4	1.7	1.4	0.7
Other conditions originating in the perinatal period (P10–P15 and P50–P96)	217	2,650	48.3	48.1	1.0	0.3	55	558	18.3	20.8	0.9	–2.4	272	3,208	36.3	39.1	0.9	–2.8
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	56	892	12.5	16.2	0.8	–3.7*	57	742	19.0	27.6	0.7*	–8.6*	113	1,634	15.1	19.9	0.8*	–4.8*
Other conditions(p)	0	30	0.0	0.5	0.0	–0.5	17	156	5.7	5.8	1.0	–0.1	17	186	2.3	2.3	1.0	0.0
Total deaths	**449**	**5,515**	**100.0**	**100.0**	. .	. .	**300**	**2,685**	**100.0**	**100.0**	. .	. .	**749**	**8,200**	**100.0**	**100.0**	. .	. .
Main condition in the mother																		
Fetus and newborn affected by complications of placental, cord and membranes (P02)	59	819	13.1	14.9	0.9	–1.7	38	319	12.7	11.9	1.1	0.8	97	1,138	13.0	13.9	0.9	–0.9
Fetus and newborn affected by maternal complications of pregnancy (P01)	48	558	10.7	10.1	1.1	0.6	56	523	18.7	19.5	1.0	–0.8	104	1,081	13.9	13.2	1.1	0.7
Fetus and newborn affected by maternal conditions that may be unrelated to present pregnancy (P00)	44	293	9.8	5.3	1.8*	4.5*	16	152	5.3	5.7	0.9	–0.3	60	445	8.0	5.4	1.5*	2.6*
Fetus and newborn affect by other complications of labour and delivery and noxious influences transmitted via placenta or breast milk (P03–P04)	26	313	5.8	5.7	1.0	0.1	14	219	4.7	8.2	0.6*	–3.5*	40	532	5.3	6.5	0.8	–1.1
Total deaths	**449**	**5,515**	**100.0**	**100.0**	. .	. .	**300**	**2,685**	**100.0**	**100.0**	. .	. .	**749**	**8,200**	**100.0**	**100.0**	. .	. .

(continued)

Table 1.21.6 (continued): Death by main condition for perinatal babies, by Indigenous status, NSW, Qld, WA, SA, and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.
(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.
(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.
(d) Although most deaths of Indigenous children are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate Indigenous perinatal mortality and, depending on the under-identification in births, may either underestimate or overestimate the rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous perinatal mortality rates because of these data quality issues.
(e) These data exclude 373 registered deaths where the Indigenous status was not stated over the period 2008–2012.
(f) Cells with small values have been randomly assigned to protect the confidentiality of individuals, so some totals will not equal the sum of their components. Cells with a zero value have not been affected.
(g) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.
(h) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.
(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.
(j) Fetal deaths of at least 20 weeks gestation or with a birthweight of at least 400 grams.
(k) Neonatal death is death of a live-born baby within 28 days of birth.
(l) The published neonatal count in this table differs from that previously published for 2011. The total neonatal death count for 2011 has had a net reduction of nine deaths, bringing the total of neonatal deaths down to 805 (compared to the previously published figure of 814). This also affects the total number of perinatal deaths for 2011. See Explanatory Note 99 in Causes of Death, Australia, 2012 (cat. no. 3303.0) for further details.
(m) Perinatal deaths are all fetal deaths (at least 20 weeks gestation or at least 400 grams birthweight) plus all neonatal deaths.
(n) Rate ratio is the proportion for Indigenous Australians divided by the proportion for non-Indigenous Australians.
(o) Rate difference is the proportion for Indigenous Australians minus the proportion for non-Indigenous Australians.
(p) Includes all other causes of death not already included in the table.

Source: ABS and AIHW analysis of National Mortality Database.

Data sources and quality

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013a). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013b).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the 2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5

years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see
<http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

List of symbols used in tables

n.a.	not available
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 22 of 68

Detailed analyses

1.22 All causes age-standardised death rates

This measure reports on the number of Aboriginal and Torres Strait Islander deaths, expressed as a rate by age group, age-standardised rate, rate ratio and rate difference

Introduction

This is no. 22 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data source

National Mortality Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Mortality rates are a useful measure to compare the overall health status of different populations and to monitor changes in overall health status of populations over time.

Closing the gap in life expectancy between Aboriginal and Torres Strait Islander Australians and other Australians within a generation has been adopted as a target by COAG.

Age-standardised rates and ratios have been used as a measure of mortality in the Indigenous population relative to non-Indigenous Australians. Ratios of this type illustrate differences between the rates of mortality among Indigenous people and those of non-Indigenous Australians, taking into account differences in age distributions. Rate differences have been used to describe the gap between Indigenous and non-Indigenous mortality rates.

Data are presented for 5 jurisdictions that have been determined to have adequate levels of Indigenous identification: Queensland, Western Australia, South Australia, Tasmania and the Northern Territory.

The following data are presented for this measure:

- All-cause mortality rates—see tables 1.22.1–8
- Potential years of life lost—see tables 1.22.9–10.

For more information about death rates, see 'Other related information' at the end of this measure.

All causes mortality rates

Current period

In 2009–2013 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The age-standardised mortality rate for Indigenous Australians was 985 per 100,000, compared with 585 per 100,000 for non-Indigenous Australians.
- The mortality rate for Indigenous Australians was 1.7 times as high as that of non–Indigenous Australians. The gap (rate difference) was 400 per 100,000.
- The rate ratio was highest for the 35–44 years age group where the Indigenous mortality rate was 4.2 times as high as the non-Indigenous rate (Table 1.22.3).

International comparisons

Caution must be used in comparing Australian data with data for other countries due to variations in data quality, methods applied for addressing data quality issues and definitions for identifying indigenous peoples.

In 2012:

- In New Zealand the age-standardised mortality rate for the Maori population was 922 per 100,000, around 50% higher than the rate for other New Zealanders (615 per 100,000). The gap was 307 per 100,000 (Table 1.22.8).
- In the United States, the mortality rate for American Indians/Alaskan Natives was 50% higher than for non-Hispanic whites during the period 1999–2009 (Espey et al. 2014).

Trend

- From 1998 to 2013 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined, the crude all-cause mortality rate for Indigenous Australians decreased significantly by 7%. The age-standardised rate decreased by 16% (Table 1.22.6).
- There was also a significant decrease (15%) in the gap in age-standardised mortality rates between Indigenous and non-Indigenous Australians (from 479 per 100,000 to 427 per 100,000) (Table 1.22.6).
- From 2006 to 2013 in the five jurisdictions combined, there was no significant change in the gap between the Indigenous and non-Indigenous age-standardised mortality rates (Table 1.22.6).

International comparisons

From 1998 to 2012, after age-standardising to the 2001 Australian standard population:

- The mortality rate for Maori and other New Zealanders population decreased significantly:
  - by 31% for Maori (from 1,250 per 100,000 to 922 per 100,000);
  - by 18% for other New Zealanders (from 717 per 100,000 to 615 per 100,000) (Table 1.22.8).

Potential years of life lost

Potential years of life lost (PYLL) is a measure of premature or untimely death. It represents the total number of years of life lost before a given age (for example, 75 years). If dying before the age of 75 is considered premature then a person dying at age 65 would have lost 10 years of potential life.

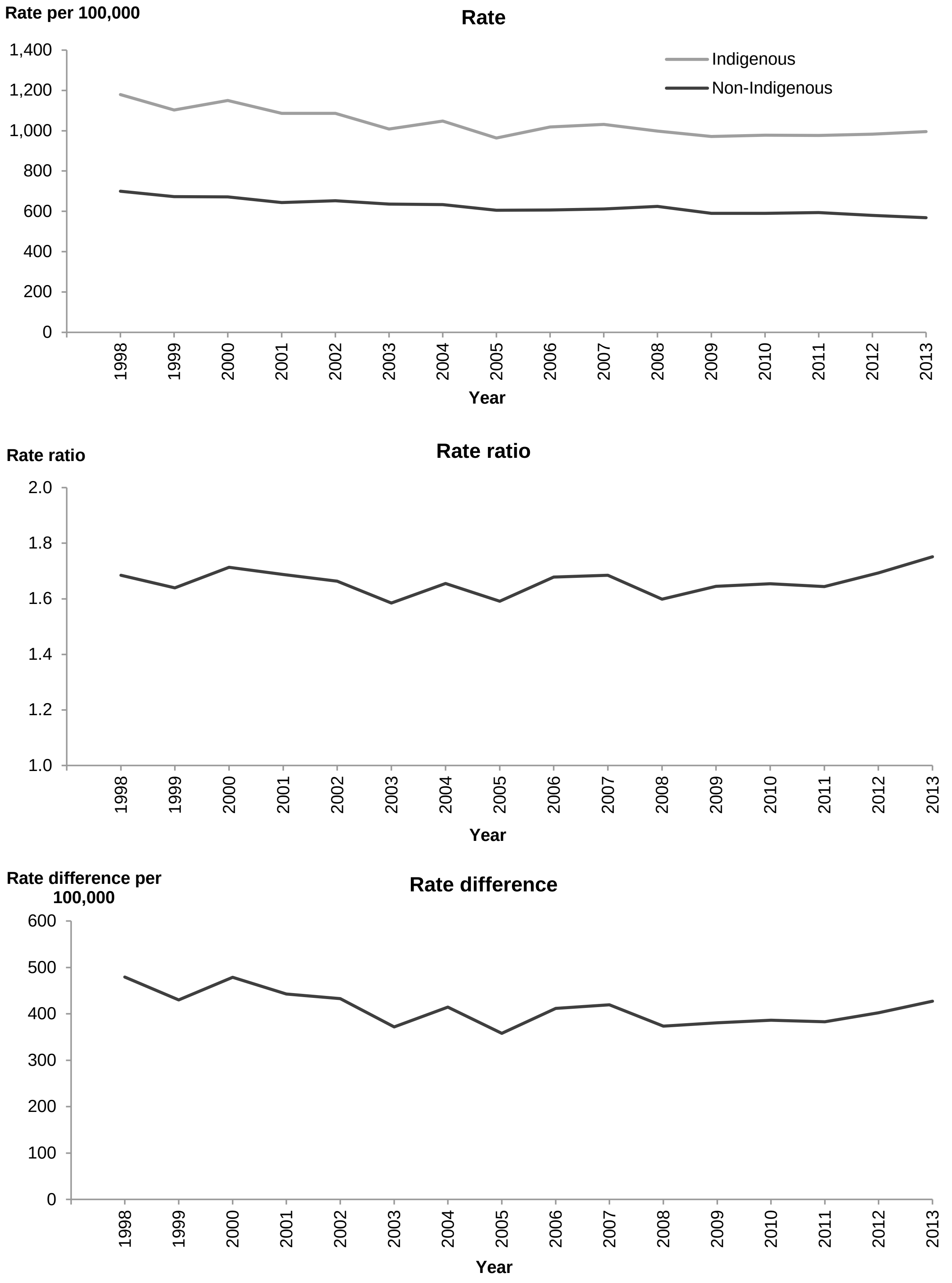
Current period

In 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The potential years of life lost (PYLL) before the age of 75 was higher for the Indigenous population than the non-Indigenous population:
  - 454 PYLL per 1,000 population for Indigenous Australians
  - 203 PYLL per 1,000 population for non-Indigenous Australians
  - The gap between Indigenous and non-Indigenous Australians was 251 PYLL per 1,000 population.
- For Indigenous Australians, the PYLL rate was highest for the 55–59 and 60–64 year age groups (1,074 and 1,070 per 1,000, respectively). For non-Indigenous Australians it was

highest for the 60–64 and 65–69 age groups (403 and 405 per 1,000, respectively). The gap was highest for people aged 55–59 (rate difference of 712 per 1,000).

- The PYLL rate was higher for Indigenous males than females (543 per 1,000 compared with 365 per 1,000). The gap was higher for males (rate difference of 288 per 1,000 for males and 216 per 1,000 for females) (Table 1.22.9).



Source: Table 1.22.6.

Figure 1.22.1: Age-standardised mortality rates, rate ratios and rate differences between Indigenous and non-Indigenous Australians, NSW, Qld, WA, SA and NT, 1998–2013

Table 1.22.1: Number and percentage of deaths by age group, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)

	Number of deaths				**Percentage of deaths**			
	Indigenous		**Non-Indigenous**		**Indigenous**		**Non-Indigenous**	
	Males	**Females**	**Males**	**Females**	**Males**	**Females**	**Males**	**Females**
<1	284	209	2,159	1,637	4.5	4.0	0.8	0.7
1–4	57	60	377	293	0.9	1.1	0.1	0.1
0–4	*341*	*269*	*2,536*	*1,930*	*5.4*	*5.1*	*1.0*	*0.8*
5–9	29	29	234	188	0.5	0.6	0.1	0.1
10–14	31	33	257	181	0.5	0.6	0.1	0.1
1–14	*117*	*122*	*868*	*662*	*1.8*	*2.3*	*0.3*	*0.3*
15–19	180	76	1,098	500	2.8	1.4	0.4	0.2
20–24	218	100	1,638	631	3.4	1.9	0.6	0.3
25–29	220	122	1,982	748	3.5	2.3	0.8	0.3
30–34	264	125	2,319	969	4.2	2.4	0.9	0.4
35–39	367	260	2,935	1,474	5.8	5.0	1.2	0.6
40–44	485	321	3,910	2,219	7.6	6.1	1.5	0.9
45–49	557	363	5,795	3,605	8.8	6.9	2.3	1.5
50–54	584	441	8,550	5,151	9.2	8.4	3.4	2.1
55–59	593	482	11,703	6,889	9.3	9.2	4.6	2.9
60–64	575	455	16,545	9,782	9.0	8.7	6.5	4.1
65–69	519	435	20,587	12,131	8.2	8.3	8.1	5.0
70–74	477	486	26,084	16,541	7.5	9.3	10.2	6.9
75–79	378	438	34,148	24,025	5.9	8.3	13.4	10.0
80–85	277	351	44,609	39,730	4.4	6.7	17.5	16.5
85+	263	464	69,970	114,155	4.1	8.8	27.4	47.4
Total(f)	**6,358**	**5,250**	**254,900**	**240,849**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators. See data quality statements for a more detailed explanation.

(f) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(g) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(h) These data exclude 37 registered deaths where age at death was unknown over the period 2008–2012.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.22.2: All causes age-specific mortality rates per 100,000, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Males				Females				Persons			
	Indig. rate(h)	**Non-Indig. rate(h)**	**Rate ratio(i)**	**Rate diff.(j)**	**Indig. rate(h)**	**Non-Indig. rate(h)**	**Rate ratio(i)**	**Rate diff.(j)**	**Indig. rate(h)**	**Non-Indig. rate(h)**	**Rate ratio(i)**	**Rate diff.(j)**
Less than 1	689.2	414.9	1.7*	274.2*	550.9	330.5	1.7*	220.4*	622.9	373.8	1.7*	249.2*
1–4	37.9	19.0	2.0*	18.9*	41.4	15.5	2.7*	25.9*	39.6	17.3	2.3*	22.3*
0–4 years	181.3	101.4	1.8*	79.9*	148.9	81.4	1.8*	67.4*	165.4	91.7	1.8*	73.7*
5–14	16.9	10.4	1.6*	6.6*	18.3	8.2	2.2*	10.0*	17.6	9.3	1.9*	8.3*
1–14 years	*23.2*	*12.9*	*1.8**	*10.3**	*25.2*	*10.4*	*2.4**	*14.8**	*24.2*	*11.7*	*2.1**	*12.5**
15–24	137.1	51.9	2.6*	85.2*	63.2	22.6	2.8*	40.6*	100.9	37.6	2.7*	63.3*
25–34	248.1	79.9	3.1*	168.1*	124.8	32.5	3.8*	92.2*	186.0	56.5	3.3*	129.5*
35–44	492.2	127.5	3.9*	364.7*	309.2	68.3	4.5*	240.9*	397.0	97.8	4.1*	299.2*
45–54	870.1	274.7	3.2*	595.4*	573.1	165.7	3.5*	407.4*	716.6	219.9	3.3*	496.7*
55–64	1,600.4	642.3	2.5*	958.1*	1,172.9	379.5	3.1*	793.4*	1,377.0	511.0	2.7*	866.0*
65–74	3,379.0	1,658.4	2.0*	1720.6*	2,615.5	1,000.2	2.6*	1615.3*	2,963.5	1,326.3	2.2*	1637.2*
75 and over	7,962.1	7,425.4	1.1*	536.8*	7,082.4	6,356.3	1.1*	726.1*	7,429.9	6,802.3	1.1*	627.6*
Total (crude)	**439.7**	**676.4**	**0.7***	**–236.6***	**360.2**	**635.7**	**0.6***	**–275.5***	**399.8**	**656.0**	**0.6***	**–256.2***
Total (age-standardised)(k)	**1,120.0**	**686.4**	**1.6***	**433.7***	**871.9**	**517.7**	**1.7***	**354.2***	**985.6**	**596.7**	**1.7***	**388.9***

(continued)

Table 1.22.2 (continued): All causes age-specific mortality rates per 100,000, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Age-specific death rates per 100,000 using the midpoint populations for the relevant years.

(i) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(j) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(k) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+. Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.22.3: All causes age-specific mortality rates per 100,000, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2009–2013[a][b][c][d][e][f]

	Males				Females				Persons			
	Indig. rate[g]	Non-Indig. rate[g]	Rate ratio[h]	Rate difference[i]	Indig. rate[g]	Non-Indig. rate[g]	Rate ratio[h]	Rate difference[i]	Indig. rate[g]	Non-Indig. rate[g]	Rate ratio[h]	Rate difference[i]
Less than 1[j]	726.3	406.1	1.8	320.2	536.9	332.5	1.6	204.4	632.9	370.3	1.7	262.6
1–4	42.5	18.3	2.3	24.2	38.2	15.9	2.4	22.3	40.4	17.1	2.4	23.3
0–4	191.0	98.1	1.9	93.0	147.8	81.0	1.8	66.8	169.9	89.8	1.9	80.1
5–14	18.8	10.1	1.9	8.7	19.0	8.2	2.3	10.8	18.9	9.2	2.1	9.7
1–14	*25.9*	*12.5*	*2.1*	*13.3*	*24.7*	*10.5*	*2.4*	*14.2*	*25.3*	*11.5*	*2.2*	*13.7*
15–24	127.7	50.9	2.5	76.8	63.1	22.7	2.8	40.4	96.2	37.2	2.6	59.0
25–34	234.2	77.1	3.0	157.2	118.8	32.2	3.7	86.6	176.0	54.9	3.2	121.1
35–44	503.2	125.1	4.0	378.1	313.9	68.9	4.6	245.0	404.7	96.9	4.2	307.9
45–54	904.1	271.2	3.3	633.0	583.1	165.5	3.5	417.5	737.6	218.0	3.4	519.6
55–64	1,577.2	629.7	2.5	947.5	1,156.8	373.9	3.1	782.8	1,358.2	501.6	2.7	856.5
65–74	3,366.2	1,616.0	2.1	1,750.2	2,616.6	973.0	2.7	1,643.6	2,958.9	1,292.4	2.3	1,666.5
75 and over	7,874.2	7,276.0	1.1	598.2	7,118.2	6,239.0	1.1	879.2	7,415.7	6,673.8	1.1	741.9
Total (crude)	**446.9**	**672.0**	**0.7**	**–225.1**	**366.9**	**629.4**	**0.6**	**–262.5**	**406.7**	**650.6**	**0.6**	**–243.9**
Total (age-standardised)[k]	**1,116.8**	**671.8**	**1.7**	**445.0**	**872.9**	**508.6**	**1.7**	**364.3**	**985.0**	**585.2**	**1.7**	**399.8**

(continued)

Table 1.22.3 (continued): All causes age-specific mortality rates per 100,000, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2009–2013[(a)(b)(c)(d)(e)(f)]

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(g) Age-specific death rates per 100,000 using the midpoint populations for the relevant years.

(h) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(i) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(j) For infant deaths (less than one year), the rates represent the number of deaths per 100,000 live births.

(k) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+. Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.22.4: Mortality rates per 100,000, by Indigenous status, by jurisdiction, NSW, Qld, WA, SA and NT, 2009–2013[(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)]

	Indigenous			Non-Indigenous				
	Deaths	Age-standardised rate per 100,000[(i)]	Variability band[(k)]	Deaths	Age-standardised rate per 100,000[(i)]	Variability band[(k)]	Rate ratio[(l)]	Rate difference[(m)]
NSW	3,327	804.0	72.3	240,265	584.9	5.2	1.4*	219.1*
Qld	3,652	964.4	91.0	130,702	589.6	7.2	1.6*	374.8*
WA	2,229	1,232.4	144.1	61,941	552.1	9.8	2.2*	680.3*
SA	776	818.0	150.3	63,088	611.0	10.7	1.3*	207.0*
NT	2,343	1,461.3	163.9	2,676	611.6	59.7	2.4*	849.7*
NSW, Qld, WA, SA and NT[(a)]	**12,327**	**985.0**	**48.1**	**498,672**	**585.2**	**3.6**	**1.7***	**399.8***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) Registered deaths where Indigenous status was not stated over the period 2009–2013 were excluded.

(e) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous infant mortality rates because of these data quality issues.

(f) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(i) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(j) WA Indigenous deaths for 2009 corrected for over-reporting.

(k) Variability bands can be used for comparisons within jurisdictions (for cause of death or over time), but not between jurisdictions or between jurisdictions and totals. See data quality statement for more information.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.22.5: All causes age-specific mortality rates, rate ratios and rate differences, remote areas 2001–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Year	Less than 1(j)	*1–4*	0–4	5–14	*1–14*	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total Indig. rate (crude)	Total Indig. rate (age-std.)(k)	Total non-Indig. rate (age-std.)(k)	Rate ratio(l)	Rate diff.(m)
	2001	16.4	104.3	404.6	29.5	51.8	195.9	420.5	771.6	1,208.7	2,616.7	3,838.9	6,105.5	680.8	1,271.2	687.3	1.8	583.9
	2002	20.5	76.7	437.5	26.5	41.9	238.0	514.2	772.6	1,652.3	2,557.5	3,764.8	5,768.8	735.5	1,326.5	668.7	2.0	657.8
	2003	16.1	79.9	355.6	36.5	50.1	264.0	389.7	801.7	1,347.5	2,019.0	4,343.9	5,618.5	677.9	1,245.0	664.2	1.9	580.8
	2004	14.5	61.9	283.9	43.4	49.3	198.7	438.2	879.0	1,257.7	2,344.9	4,498.7	7,019.5	704.6	1,354.6	679.8	2.0	674.9
	2005	14.6	146.5	359.2	43.0	75.9	205.4	370.6	949.8	1,179.1	2,299.3	4,116.1	5,717.5	676.9	1,253.0	683.2	1.8	569.8
	2006	17.8	53.1	329.5	49.2	50.5	188.4	468.9	848.1	1,207.5	2,100.6	4,184.0	7,467.4	696.2	1,338.0	653.1	2.0	684.9
	2007	13.1	59.6	287.0	45.0	49.6	194.1	373.2	704.5	1,228.0	2,341.1	4,346.6	6,523.6	660.8	1,284.2	626.3	2.1	657.9
	2008	11.5	81.4	286.5	27.1	44.2	187.8	396.7	560.1	1,154.9	2,266.7	4,528.4	7,522.1	647.4	1,326.3	626.3	2.1	700.0
	2009	11.0	81.6	291.7	33.3	48.3	162.4	298.1	688.5	1,113.1	1,698.5	4,164.1	6,590.9	592.3	1,190.5	608.6	2.0	581.9
	2010(f)	9.9	30.0	240.0	36.0	34.1	167.7	300.0	682.7	1,036.2	2,188.6	3,992.8	7,262.2	611.9	1,249.8	606.5	2.1	643.3
	2011	10.8	38.1	267.1	54.1	49.4	223.1	310.6	585.2	1,141.2	1,887.7	3,238.6	7,531.9	601.7	1,191.3	587.2	2.0	604.1
	2012	9.3	63.0	252.0	44.6	49.9	212.1	315.0	660.9	1,122.1	2,036.4	4,107.7	9,975.5	666.5	1,418.4	565.6	2.5	852.9
Medium term 2001–2012	**Annual change(n)**	–0.8*	–4.3	–14.8*	1.1	–0.6	–3.0	–15.2*	–21.0*	–29.7*	–50.0*	–15.8	252.7*	–8.8*	–0.8	–10.6*	n.a.	9.8
	Per cent change over period(o)	–50.1*	–49.3	–41.0*	35.9	–12.1	–15.0	–35.8*	–26.9*	–23.6*	–22.3*	–4.1	50.2*	–13.6*	–0.7	–16.7*	n.a.	18.2
To baseline 2001–2006	**Annual change(n)**	–0.3	–1.8	–19.5	4.4*	2.7	–5.7	–4.0	28.3	–43.3	–86.5	83.8	230.2	–2.1	6.4	–3.2	n.a.	9.6
	Per cent change over period(o)	–9.8	–10.1	–23.7	82.1*	29.1	–12.5	–4.5	18.5	–15.3	–17.0	10.7	20.2	–1.5	2.5	–2.3	n.a.	8.0
Since baseline 2006–2012	**Annual change(n)**	–1.1*	–2.3	–11.4*	0.5	–0.4	3.9	–24.4*	–24.2	–19.6	–42.1	–106.4	331.5	–8.7	–0.8	–12.9*	n.a.	12.1
	Per cent change over period(o)	–44.4*	–21.3	–21.8*	7.1	–5.5	13.0	–34.5*	–19.4	–9.8	–11.5	–14.5	30.3	–7.8	–0.4	–11.9*	n.a.	11.4

(continued)

Table 1.22.5 (continued): All causes age-specific mortality rates, rate ratios and rate differences, remote areas 2001–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

* Represents results with statistically significant increases or declines at the p < 0.05 level.

(a) Data are reported for Australia-level remoteness areas as a breakdown of remoteness areas by state/territory is not available for Aboriginal and Torres Strait Islander population estimates or projections.

(b) Remote areas include very remote and remote areas of Australia.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 26,693 registered deaths where the Indigenous status was not stated over the period 2001–2012.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(h) Age-specific death rates per 100,000 using the midpoint populations for the relevant years.

(i) Remoteness area births and deaths data for the period 2001 to 2010 used in this table will be slightly different to data previously published due to changes in the geographical concordance used to derive the data.

(j) Mortality rates for those aged less than 1 are calculated as infant mortality rates, using the number of births as the denominator. They are presented in this table as rates per 1,000 live births.

(k) Rates per 100,000 directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Annual change determined using linear regression analysis.

(o) Per cent change based on the annual change over the period.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.22.6: Age-standardised mortality rates, rate ratios and rate differences, NSW, Qld, WA, SA and NT, 1998–2013[a][b][c][d][e][f][g]

		Indigenous deaths			Indigenous rate per 100,000 (crude)		
	Year	**Males**	**Females**	**Persons**	**Males**	**Females**	**Persons**
	1998	1,158	817	1,975	527.0	370.6	448.7
	1999	1,053	776	1,829	467.3	342.8	404.9
	2000	1,112	897	2,009	481.3	386.2	433.6
	2001	1,153	792	1,945	486.8	332.4	409.4
	2002	1,126	920	2,046	464.1	376.9	420.4
	2003	1,177	787	1,964	474.0	314.9	394.2
	2004	1,160	889	2,049	456.8	347.8	402.1
	2005	1,154	874	2,028	444.1	334.0	388.9
	2006	1,213	920	2,133	456.1	343.5	399.6
	2007	1,227	1,016	2,243	451.4	371.0	411.0
	2008	1,208	1,007	2,215	435.2	359.9	397.4
	2009	1,194	1,036	2,230	421.2	362.6	391.7
	2010	1,296	1,015	2,311	447.9	348.1	397.8
	2011	1,312	1,075	2,387	445.1	361.7	403.2
	2012	1,351	1,118	2,469	448.6	368.9	408.6
	2013	n.a.	n.a.	2,641	n.a.	n.a.	n.a.
Long term 1998–2013[l]	**Annual change**[m]	15.7*	22.2*	42.6*	–4.4*	0.3	–2.1*
	Per cent change over period[n]	20.3*	40.2*	34.9*	–12.7*	1.3	–6.9*
Medium term 2001–2013[l]	**Annual change**[m]	17.6*	27.3*	50.9*	–3.4*	2.4	–0.5
	Per cent change over period[n]	17.3*	37.3*	32.1*	–8.0*	7.7	–1.5
To baseline 1998–2006	**Annual change**[m]	10.7	11.4	22.1*	–6.9*	–3.8	–5.4*
	Per cent change over period[n]	7.8	11.3	9.3*	–11.1*	–8.4	–9.9*
Since baseline 2006–2013[l]	**Annual change**[m]	24.0*	25.7*	62.9*	–0.8	1.6	0.4
	Per cent change over period[n]	12.1*	16.2*	20.9*	–1.1	2.8	0.6

(continued)

Table 1.22.6 (continued): Age-standardised mortality rates, rate ratios and rate differences, NSW, Qld, WA, SA and NT, 1998–2013[(a)(b)(c)(d)(e)(f)(g)]

		Indigenous rate per 100,000 (age-standardised)[(h)]			
	Year	Males	Females	Persons	Persons variability band[(k)]
	1998	1,285.4	1,084.9	1,179.8	68.3
	1999	1,182.9	1,031.4	1,103.1	65.6
	2000	1,240.3	1,064.2	1,149.8	64.1
	2001	1,291.6	905.7	1,086.3	61.3
	2002	1,217.9	968.6	1,086.0	59.4
	2003	1,215.0	827.2	1,008.3	56.1
	2004	1,196.8	918.8	1,047.8	56.6
	2005	1,078.6	855.0	963.6	52.5
	2006	1,186.6	875.5	1,018.6	53.4
	2007	1,152.3	926.0	1,031.7	52.3
	2008	1,129.4	886.3	998.0	51.0
	2009	1,046.1	900.8	971.2	49.4
	2010	1,111.9	856.2	977.2	48.7
	2011	1,151.9	838.9	977.0	48.2
	2012	1,117.4	868.6	982.6	47.3
	2013	1,095.6	904.1	995.7	46.2
Long term 1998–2013[(l)]	**Annual change**[(m)]	–11.7*	–11.6*	–11.9*	. .
	Per cent change over period[(n)]	–13.9*	–17.3*	–15.8*	. .
Medium term 2001–2013[(l)]	**Annual change**[(m)]	–12.7*	–3.0	–7.7*	. .
	Per cent change over period[(n)]	–12.4*	–4.0	–8.7*	. .
To baseline 1998–2006	**Annual change**[(m)]	–14.5	–28.9*	–22.4*	. .
	Per cent change over period[(n)]	–9.2	–21.8*	–15.4*	. .
Since baseline 2006–2013[(l)]	**Annual change**[(m)]	–8.1	–3.3	–5.5	. .
	Per cent change over period[(n)]	–4.9	–2.6	–3.8	. .

(continued)

Table 1.22.6 (continued): Age-standardised mortality rates, rate ratios and rate differences, NSW, Qld, WA, SA and NT, 1998–2013(a)(b)(c)(d)(e)(f)(g)

		Non-Indigenous deaths			Non-Indigenous rate per 100,000 (age-standardised)(h)			
	Year	Males	Females	Persons	Males	Females	Persons	Persons variability band(k)
	1998	46,008	40,366	86,374	858.0	571.5	700.4	4.7
	1999	45,187	40,211	85,398	817.8	552.8	672.8	4.5
	2000	45,963	41,700	87,663	808.3	556.9	671.1	4.4
	2001	45,462	41,300	86,762	772.3	535.6	643.6	4.3
	2002	46,779	43,488	90,267	774.4	550.7	652.9	4.3
	2003	46,642	43,455	90,097	751.4	538.3	636.3	4.2
	2004	47,489	44,125	91,614	746.2	536.0	633.0	4.1
	2005	46,509	43,215	89,724	711.1	514.3	605.5	4.0
	2006	47,405	44,492	91,897	708.2	519.0	606.8	3.9
	2007	49,097	45,975	95,072	712.8	524.8	612.2	3.9
	2008	50,917	48,198	99,115	722.3	538.4	624.3	3.9
	2009	49,389	46,347	95,736	682.4	509.5	590.3	3.7
	2010	50,437	47,676	98,113	678.7	512.7	590.6	3.7
	2011	52,106	49,157	101,263	681.6	516.9	594.1	3.7
	2012	52,073	49,482	101,555	660.3	508.8	580.3	3.6
	2013	n.a.	n.a.	101,974	649.5	495.9	568.5	3.5
Long term 1998–2013(l)	**Annual change(m)**	497.5*	668.2*	1164.3*	–12.2*	–3.9*	–7.4*	. .
	Per cent change over period(n)	15.6*	23.4*	20.7*	–22.2*	–10.5*	–16.4*	. .
Medium term 2001–2013(l)	**Annual change(m)**	600.2*	692.7*	1269.9*	–10.1*	–3.3*	–6.2*	. .
	Per cent change over period(n)	14.5*	18.2*	17.5*	–15.6*	–7.2*	–11.4*	. .
To baseline 1998–2006	**Annual change(m)**	229.8*	542.0*	771.8*	–17.7*	–6.1*	–11.0*	. .
	Per cent change over period(n)	4.0*	10.8*	7.2*	–16.8*	–8.6*	–12.7*	. .
Since baseline 2006–2013(l)	**Annual change(m)**	697.9*	743.3*	1330.7*	–9.5*	–3.6	–6.2*	. .
	Per cent change over period(n)	8.7*	9.9*	10.0*	–9.2*	–4.8	–7.0*	. .

(continued)

Table 1.22.6 (continued): Age-standardised mortality rates, rate ratios and rate differences, NSW, Qld, WA, SA and NT, 1998–2013(a)(b)(c)(d)(e)(f)(g)

		Rate ratio(i)			Rate difference(j)		
	Year	**Males**	**Females**	**Persons**	**Males**	**Females**	**Persons**
	1998	1.5	1.9	1.7	427.4	513.4	479.4
	1999	1.4	1.9	1.6	365.1	478.6	430.3
	2000	1.5	1.9	1.7	431.9	507.3	478.7
	2001	1.7	1.7	1.7	519.4	370.0	442.7
	2002	1.6	1.8	1.7	443.6	417.9	433.1
	2003	1.6	1.5	1.6	463.6	289.0	371.9
	2004	1.6	1.7	1.7	450.6	382.8	414.8
	2005	1.5	1.7	1.6	367.6	340.7	358.0
	2006	1.7	1.7	1.7	478.4	356.5	411.8
	2007	1.6	1.8	1.7	439.5	401.2	419.5
	2008	1.6	1.6	1.6	407.1	348.0	373.7
	2009	1.5	1.8	1.6	363.7	391.3	380.9
	2010	1.6	1.7	1.7	433.1	343.6	386.6
	2011	1.7	1.6	1.6	470.3	322.0	382.8
	2012	1.7	1.7	1.7	457.1	359.9	402.3
	2013	1.7	1.8	1.8	n.a.	n.a.	427.2
Long term 1998–2013(l)	**Annual change(m)**	n.a.	n.a.	n.a.	0.3	–9.9*	–4.4*
	Per cent change over period(n)	n.a.	n.a.	n.a.	1.1	–30.2*	–14.8*
Medium term 2001–2013(l)	**Annual change(m)**	n.a.	n.a.	n.a.	–3.5	–1.7	–1.5
	Per cent change over period(n)	n.a.	n.a.	n.a.	–8.5	–5.0	–4.5
To baseline 1998–2006	**Annual change(m)**	n.a.	n.a.	n.a.	3.2	–22.9*	–11.4*
	Per cent change over period(n)	n.a.	n.a.	n.a.	6.0	–36.7*	–19.4*
Since baseline 2006–2013(l)	**Annual change(m)**	n.a.	n.a.	n.a.	0.8	–5.5	0.7
	Per cent change over period(n)	n.a.	n.a.	n.a.	1.2	–8.7	1.2

(continued)

Table 1.22.6 (continued): Age-standardised mortality rates, rate ratios and rate differences, NSW, Qld, WA, SA and NT, 1998–2013(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(c) These data exclude 23,161 registered deaths where the Indigenous status was not stated over the period 1998–2013.

(d) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(e) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(f) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+. Records with not stated age at death were pro-rated across all age groups.

(i) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(j) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(k) Variability bands can be used for the purpose of comparisons over time. See data quality statements for a full explanation of variability bands methodology.

(l) Period up to 2012 where 2013 data not available.

(m) Annual change determined using linear regression analysis.

(n) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.22.7: Age-standardised mortality rates, rate ratios and rate differences, by jurisdiction, 1998–2013[a][b][c][d][e][f][g]

	Year	Indigenous deaths	Non-Indigenous deaths	Indigenous rate per 100,000 (age-standardised)[h]	Non-Indigenous rate per 100,000 (age-standardised)[h]	Rate ratio[i]	Rate difference[j]
				NSW			
	1998	462	42,340	794.4	687.1	1.2	107.3
	1999	435	41,415	750.0	653.5	1.1	96.5
	2000	473	43,914	777.8	674.3	1.2	103.5
	2001	481	42,598	851.5	635.4	1.3	216.1
	2002	516	44,386	832.2	648.4	1.3	183.8
	2003	485	44,509	753.6	638.2	1.2	115.4
	2004	490	45,603	749.0	643.0	1.2	106.0
	2005	507	43,956	774.6	608.7	1.3	165.9
	2006	530	45,048	751.0	613.4	1.2	137.6
	2007	601	45,937	807.0	610.5	1.3	196.5
	2008	559	47,698	764.4	621.0	1.2	143.4
	2009	591	46,010	767.7	587.5	1.3	180.2
	2010	622	47,039	775.6	586.3	1.3	189.2
	2011	726	49,642	886.4	603.8	1.5	282.6
	2012	635	48,240	736.2	574.2	1.3	161.9
	2013	n.a.	n.a.	832.0	574.4	1.4	257.6
Long term 1998–2013[k]	**Annual change**[l]	16.2*	472.0*	1.0	–6.7*	n.a.	7.6*
	Per cent change over period[m]	53.2*	15.8*	1.8	–14.9*	n.a.	106.0*
Since baseline 2006–2013[k]	**Annual change**[l]	22.4*	583.1*	7.0	–6.0*	n.a.	13.0
	Per cent change over period[m]	24.8*	7.7*	6.4	–6.8*	n.a.	61.6

(continued)

Table 1.22.7 (continued): Age-standardised mortality rates, rate ratios and rate differences, by jurisdiction, 1998–2013[a][b][c][d][e][f][g]

	Year	Indigenous deaths	Non-Indigenous deaths	Indigenous rate per 100,000 (age-standardised)[h]	Non-Indigenous rate per 100,000 (age-standardised)[h]	Rate ratio[i]	Rate difference[j]
				Qld			
	1998	593	21,722	1,225.0	723.9	1.7	501.1
	1999	529	22,304	1,151.8	721.5	1.6	430.3
	2000	535	21,730	1,157.5	680.8	1.7	476.7
	2001	565	22,003	1,047.6	664.3	1.6	383.3
	2002	590	23,030	1,105.7	672.4	1.6	433.3
	2003	569	22,570	1,057.0	636.5	1.7	420.5
	2004	579	23,568	1,025.8	644.7	1.6	381.1
	2005	519	22,803	853.1	604.2	1.4	248.8
	2006	584	23,571	972.0	606.4	1.6	365.6
	2007	594	24,711	976.9	618.2	1.6	358.7
	2008	562	26,260	915.2	641.1	1.4	274.1
	2009	632	24,911	996.2	593.4	1.7	402.8
	2010	659	25,621	957.3	594.7	1.6	362.5
	2011	629	26,451	890.1	596.7	1.5	293.4
	2012	678	27,057	979.3	592.3	1.7	387.1
	2013	n.a.	n.a.	1,003.1	565.6	1.8	437.5
Long term 1998–2013[k]	**Annual change**[l]	7.3*	383.2*	–15.9*	–9.1*	n.a.	–6.8
	Per cent change over period[m]	19.1*	25.3*	–21.0*	–19.5*	n.a.	–23.4
Since baseline 2006–2013[k]	**Annual change**[l]	16.0*	475.0*	1.4	–6.5*	n.a.	7.9
	Per cent change over period[m]	16.8*	11.8*	1.0	–7.3*	n.a.	16.6

(continued)

Table 1.22.7 (continued): Age-standardised mortality rates, rate ratios and rate differences, by jurisdiction, 1998–2013[(a)(b)(c)(d)(e)(f)(g)]

	Year	Indigenous deaths	Non-Indigenous deaths	Indigenous rate per 100,000 (age-standardised)[(h)]	Non-Indigenous rate per 100,000 (age-standardised)[(h)]	Rate ratio[(i)]	Rate difference[(j)]
				WA			
	1998	378	10,286	1,792.8	680.6	2.6	1,112.2
	1999	350	10,406	1,601.6	667.0	2.4	934.6
	2000	407	10,119	1,655.8	627.6	2.6	1,028.2
	2001	336	10,265	1,440.2	613.5	2.3	826.7
	2002	371	10,803	1,375.1	625.7	2.2	749.4
	2003	338	10,759	1,225.9	606.4	2.0	619.5
	2004	400	10,704	1,645.8	586.5	2.8	1,059.3
	2005	406	10,804	1,402.3	573.7	2.4	828.6
	2006	443	11,103	1,519.3	572.9	2.7	946.5
	2007	449	11,768	1,440.1	589.4	2.4	850.7
	2008	486	12,185	1,415.3	593.9	2.4	821.4
	2009	416	12,046	1,240.3	570.9	2.2	669.4
	2010	436	12,174	1,234.8	561.4	2.2	673.4
	2011	454	12,152	1,235.1	541.8	2.3	693.3
	2012	466	12,765	1,324.3	549.9	2.4	774.4
	2013	n.a.	n.a.	1,121.3	532.4	2.1	589.0
Long term 1998–2013[(k)]	**Annual change**[(l)]	8.3*	185.0*	–30.4*	–8.2*	n.a.	–22.1*
	Per cent change over period[(m)]	33.0*	26.1*	–27.7*	–18.8*	n.a.	–33.6*
Since baseline 2006–2013[(k)]	**Annual change**[(l)]	1.0	205.1*	–46.6*	–7.7*	n.a.	–38.9*
	Per cent change over period[(m)]	1.4	10.8*	–22.0*	–9.1*	n.a.	–30.6*

(continued)

Table 1.22.7 (continued): Age-standardised mortality rates, rate ratios and rate differences, by jurisdiction, 1998–2013(a)(b)(c)(d)(e)(f)(g)

	Year	Indigenous deaths	Non-Indigenous deaths	Indigenous rate per 100,000 (age-standardised)(h)	Non-Indigenous rate per 100,000 (age-standardised)(h)	Rate ratio(i)	Rate difference(j)
				SA			
	1998	127	11,570	1,021.6	720.4	1.4	301.2
	1999	116	10,854	866.3	658.5	1.3	207.8
	2000	144	11,461	1,014.3	678.5	1.5	335.8
	2001	125	11,444	898.4	659.6	1.4	238.8
	2002	107	11,604	707.5	655.8	1.1	51.7
	2003	137	11,828	841.4	656.2	1.3	185.2
	2004	131	11,303	847.1	615.5	1.4	231.6
	2005	142	11,638	796.6	623.3	1.3	173.4
	2006	124	11,704	769.7	614.0	1.3	155.7
	2007	138	12,119	835.3	625.2	1.3	210.1
	2008	141	12,402	804.2	627.6	1.3	176.6
	2009	160	12,251	820.4	612.9	1.3	207.4
	2010	147	12,750	894.2	627.5	1.4	266.8
	2011	141	12,492	715.3	604.4	1.2	110.9
	2012	151	12,996	811.1	617.2	1.3	193.9
	2013	n.a.	n.a.	827.7	587.6	1.4	240.1
Long term 1998–2013(k)	**Annual change(l)**	2.0*	117.4*	–9.4*	–6.0*	n.a.	–3.5
	Per cent change over period(m)	23.5*	14.8*	–15.5*	–13.1*	n.a.	–22.4
Since baseline 2006–2013(k)	**Annual change(l)**	3.3	177.5*	1.1	–3.3	n.a.	4.4
	Per cent change over period(m)	15.0	9.0*	1.0	–3.7	n.a.	17.3

(continued)

Table 1.22.7 (continued): Age-standardised mortality rates, rate ratios and rate differences, by jurisdiction, 1998–2013[(a)(b)(c)(d)(e)(f)(g)]

	Year	Indigenous deaths	Non-Indigenous deaths	Indigenous rate per 100,000 (age-standardised)(h)	Non-Indigenous rate per 100,000 (age-standardised)(h)	Rate ratio(i)	Rate difference(j)
				NT			
	1998	415	456	1,704.3	791.8	2.2	912.5
	1999	399	419	1,685.3	733.7	2.3	951.6
	2000	450	439	1,794.1	719.4	2.5	1,074.8
	2001	429	436	1,662.4	713.6	2.3	948.8
	2002	462	444	1,660.6	690.6	2.4	970.0
	2003	435	431	1,565.5	725.2	2.2	840.3
	2004	449	436	1,541.4	652.6	2.4	888.8
	2005	454	523	1,439.3	750.3	1.9	689.0
	2006	452	471	1,549.3	648.5	2.4	900.8
	2007	461	537	1,532.0	701.2	2.2	830.8
	2008	467	570	1,593.8	752.8	2.1	840.9
	2009	431	518	1,399.5	637.1	2.2	762.5
	2010	447	529	1,422.6	622.5	2.3	800.1
	2011	437	526	1,360.1	595.0	2.3	765.0
	2012	539	497	1,534.8	543.5	2.8	991.3
	2013	n.a.	n.a.	1,490.1	632.4	2.4	857.7
Long term 1998–2013(k)	**Annual change**(l)	4.1*	8.3*	–20.2*	–10.7*	n.a.	–9.5
	Per cent change over period(m)	13.8*	27.5*	–17.7*	–21.0*	n.a.	–15.0
Since baseline 2006–2013(k)	**Annual change**(l)	6.9	0.5	–12.8	–16.5	n.a.	3.7
	Per cent change over period(m)	9.4	0.6	–5.9	–16.6	n.a.	3.1

(continued)

Table 1.22.7 (continued): Age-standardised mortality rates, rate ratios and rate differences, by jurisdiction, 1998–2013(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(c) These data exclude registered deaths where the Indigenous status was not stated.

(d) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(e) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(f) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+. Records with not stated age at death were pro-rated across all age groups.

(i) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(j) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(k) For number of deaths, the periods 1998–2012 and 2006–2012 were tested.

(l) Annual change determined using linear regression analysis.

(m) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.22.8: Age-standardised mortality rates, by Indigenous status, Australia(a) and New Zealand, 1998–2012

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Annual change	Per cent change
Deaths per 100,000																	
New Zealand Maori(b)	1,250.2	1,301.9	1,245.1	1,154.5	1,122.7	1,123.9	1,083.3	1,032.4	1,014.4	988.8	976.8	980.0	884.0	930.1	922.2	–27.9*	–30.9*
New Zealand other(b)	716.7	755.2	697.5	716.1	707.0	688.5	684.3	633.4	649.3	642.5	646.7	626.5	605.3	627.7	614.8	–9.3*	–17.8*
Australia Aboriginal and Torres Strait Islander(b)	1179.8	1103.1	1149.8	1086.3	1086.0	1008.3	1047.8	963.6	1018.6	1031.7	998.0	971.2	977.2	977.0	982.6	–13.2*	–16.4*
Australia non-Indigenous(b)	700.4	672.8	671.1	643.6	652.9	636.3	633.0	605.5	606.8	612.2	624.3	590.3	590.6	594.1	580.3	–7.5*	–15.4*

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the reported period.

(a) Data are reported for New South Wales, Queensland, South Australia, Western Australia and the Northern Territory only. These five states and territories are currently considered to have adequate levels of Indigenous identification in mortality data for these periods. Data for these five jurisdictions over-represent Indigenous populations in less urbanised and more remote locations. Mortality data for the five jurisdictions should not be assumed to represent the experience in the other jurisdictions.

(b) Rates are directly age-standardised to the Australian Standard Population 2001.

Notes

1. Annual change in rates determined using linear regression analysis over the specified periods.
2. Per cent change between the first year and the last year of the specified periods based on the annual change over the specified periods.
3. For Australia, records with not stated age at death have been pro-rated across all age groups.
4. For Australia, data exclude 23,161 registered deaths where Indigenous status was not stated.

Source: ABS and AIHW analysis of National Mortality Database; AIHW analysis of data from (Statistics New Zealand 2015).

Table 1.22.9: Potential years of life lost before age 75 years (PYLL), NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g][h][i]

	Indigenous					Non-Indigenous					
	Deaths before age 75		PYLL before age 75			Deaths before age 75		PYLL before age 75			
	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	PYLL per 1,000 rate difference[j]
Males											
0–4	341	5.4	25,463.0	676.4	74.6	2,536	1.0	189,466.4	378.7	74.7	297.7
5–9	29	0.5	1,988.9	55.7	68.6	234	0.1	15,932.4	34.0	68.1	21.7
10–14	31	0.5	1,941.9	55.2	62.6	257	0.1	16,115.4	33.8	62.7	21.4
15–19	180	2.8	10,386.9	322.1	57.7	1,098	0.4	63,149.4	125.6	57.5	196.5
20–24	218	3.4	11,539.4	446.7	52.9	1,638	0.6	86,791.5	157.4	53.0	289.4
25–29	220	3.5	10,542.0	485.4	47.9	1,982	0.8	95,095.2	169.1	48.0	316.3
30–34	264	4.2	11,316.3	653.5	42.8	2,319	0.9	99,498.6	193.7	42.9	459.8
35–39	367	5.8	13,927.6	763.7	37.9	2,935	1.2	111,165.6	202.8	37.9	560.9
40–44	485	7.6	15,901.5	969.6	32.8	3,910	1.5	128,733.1	244.9	32.9	724.7
45–49	557	8.8	15,600.4	1,089.3	28.0	5,796	2.3	161,230.9	299.6	27.8	789.7
50–54	584	9.2	13,477.4	1,130.8	23.1	8,551	3.4	195,673.9	386.6	22.9	744.3
55–59	593	9.3	10,716.1	1,233.6	18.1	11,704	4.6	209,181.1	458.0	17.9	775.6
60–64	575	9.0	7,480.5	1,264.5	13.0	16,546	6.5	213,159.4	504.0	12.9	760.4
65–69	519	8.2	4,204.0	1,130.7	8.1	20,589	8.1	163,585.1	511.0	7.9	619.7
70–74	477	7.5	1,480.7	679.2	3.1	26,086	10.2	75,650.5	311.6	2.9	367.6
Total 0–74 years	**5,443**	**85.6**	**155,966.6**	**543.4**	**. .**	**106,182**	**41.7**	**1,824,428.4**	**255.6**	**. .**	**287.8**

(continued)

Table 1.22.9 (continued): Potential years of life lost before age 75 years (PYLL), NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)(h)(i)]

	Indigenous					Non-Indigenous					
	Deaths before age 75		PYLL before age 75			Deaths before age 75		PYLL before age 75			
	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	PYLL per 1,000 rate difference[(j)]
Females											
0–4	269	5.1	20,070.8	555.2	74.6	1,930	0.8	144,135.6	304.1	74.7	251.1
5–9	29	0.6	1,980.4	57.8	68.3	188	0.1	12,794.6	28.8	68.1	29.0
10–14	33	0.6	2,059.4	61.2	62.4	181	0.1	11,379.5	25.1	62.9	36.1
15–19	76	1.4	4,405.8	146.2	58.0	500	0.2	28,856.3	60.4	57.7	85.8
20–24	100	1.9	5,310.0	207.6	53.1	631	0.3	33,393.5	63.8	52.9	143.8
25–29	122	2.3	5,877.1	275.6	48.2	748	0.3	35,891.6	66.1	48.0	209.5
30–34	125	2.4	5,330.0	291.6	42.6	969	0.4	41,625.9	81.3	43.0	210.3
35–39	260	5.0	9,812.9	503.0	37.7	1,474	0.6	55,715.5	101.0	37.8	402.0
40–44	321	6.1	10,568.0	584.7	32.9	2,219	0.9	72,877.3	137.6	32.8	447.0
45–49	363	6.9	10,147.9	654.2	28.0	3,605	1.5	100,225.6	184.2	27.8	470.0
50–54	441	8.4	10,131.9	807.3	23.0	5,151	2.1	118,068.4	230.3	22.9	577.0
55–59	482	9.2	8,677.7	925.8	18.0	6,889	2.9	123,160.6	267.4	17.9	658.4
60–64	455	8.7	5,922.1	896.2	13.0	9,782	4.1	125,919.8	301.2	12.9	595.0
65–69	435	8.3	3,494.7	823.2	8.0	12,132	5.0	95,971.4	298.8	7.9	524.4
70–74	486	9.3	1,450.3	518.1	3.0	16,542	6.9	47,615.2	188.8	2.9	329.3
Total 0–74 years	**3,998**	**76.1**	**105,239.0**	**365.4**	**. .**	**62,942**	**26.1**	**1,047,630.8**	**149.3**	**. .**	**216.1**

(continued)

Table 1.22.9 (continued): Potential years of life lost before age 75 years (PYLL), NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g][h][i]

	Indigenous					Non-Indigenous					
	Deaths before age 75		PYLL before age 75			Deaths before age 75		PYLL before age 75			
	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	PYLL per 1,000 rate difference[j]
Persons											
0–4	610	5.3	45,533.7	617.0	74.6	4,466	0.9	333,601.2	342.4	74.7	274.6
5–9	58	0.5	3,969.4	56.8	68.4	422	0.1	28,726.9	31.5	68.1	25.3
10–14	64	0.6	4,001.4	58.1	62.5	438	0.1	27,494.8	29.5	62.8	28.6
15–19	256	2.2	14,792.1	237.1	57.8	1,598	0.3	92,005.1	93.9	57.6	143.2
20–24	318	2.7	16,848.8	327.7	53.0	2,269	0.5	120,184.0	111.8	53.0	216.0
25–29	342	2.9	16,418.7	381.4	48.0	2,730	0.6	130,985.7	118.5	48.0	263.0
30–34	389	3.4	16,645.7	467.7	42.8	3,288	0.7	141,123.4	137.6	42.9	330.0
35–39	627	5.4	23,740.2	629.0	37.9	4,409	0.9	166,880.1	151.7	37.8	477.2
40–44	806	6.9	26,469.1	767.8	32.8	6,129	1.2	201,609.4	191.1	32.9	576.7
45–49	920	7.9	25,747.9	863.1	28.0	9,401	1.9	261,455.4	241.6	27.8	621.5
50–54	1,025	8.8	23,609.1	964.9	23.0	13,702	2.8	313,740.9	307.9	22.9	656.9
55–59	1,075	9.3	19,393.7	1,073.8	18.0	18,593	3.8	332,340.1	362.3	17.9	711.5
60–64	1,030	8.9	13,402.6	1,070.2	13.0	26,329	5.3	339,077.6	403.2	12.9	667.0
65–69	954	8.2	7,698.7	966.8	8.1	32,720	6.6	259,555.3	404.7	7.9	562.1
70–74	963	8.3	2,931.0	588.7	3.0	42,628	8.6	123,265.2	249.0	2.9	339.6
Total 0–74 years	**9,440**	**81.3**	**261,202.0**	**454.2**	**. .**	**169,123**	**34.1**	**2,872,045.2**	**202.9**	**. .**	**251.3**

(continued)

Table 1.22.9 (continued): Potential years of life lost before age 75 years (PYLL), NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

(a) PYLL represents the total number of years of life lost before a given age (for example 75 years). If dying before the age of 75 is considered premature then a person dying at age 65 would have lost 10 years of potential life.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous PYLL.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(e) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) These data exclude 2,714 registered deaths where the Indigenous status was not stated for those aged under 75 over the period 2008–2012.

(h) Not stated for age has been pro-rated across each age group. Rows may not add to subtotals due to rounding.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) PYLL Rate difference = Indigenous PYLL per 1,000 minus non-Indigenous PYLL per 1,000.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.22.10: Potential years of life lost before age 75 years (PYLL), NSW, Qld, WA, SA and NT, 2009–2013(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Indigenous					Non-Indigenous					
	Deaths before age 75		PYLL before age 75			Deaths before age 75		PYLL before age 75			
	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	PYLL per 1,000 rate difference(j)
Males											
0–4	356	5.4	26,555.0	712.4	74.6	2,458	1.0	183,635.3	366.3	74.7	346.1
5–9	33	0.5	2,251.3	62.5	68.2	228	0.1	15,545.2	32.5	68.2	30.0
10–14	34	0.5	2,124.3	60.3	62.5	256	0.1	16,033.2	33.5	62.6	26.8
15–19	180	2.7	10,377.6	313.6	57.6	1,061	0.4	61,004.8	121.7	57.5	191.9
20–24	205	3.1	10,864.6	399.1	53.0	1,618	0.6	85,748.7	155.5	53.0	243.5
25–29	207	3.1	9,896.5	443.9	47.8	1,970	0.8	94,503.4	165.3	48.0	278.6
30–34	262	4.0	11,238.7	633.0	42.9	2,264	0.9	97,166.6	184.4	42.9	448.6
35–39	383	5.8	14,516.2	812.3	37.9	2,857	1.1	108,184.4	200.5	37.9	611.9
40–44	494	7.5	16,201.5	953.5	32.8	3,911	1.5	128,871.0	237.6	32.9	716.0
45–49	597	9.1	16,674.5	1150.7	27.9	5,729	2.2	159,288.4	298.8	27.8	851.8
50–54	616	9.4	14,180.2	1148.7	23.0	8,521	3.3	194,894.2	376.3	22.9	772.4
55–59	617	9.4	11,168.7	1218.1	18.1	11,733	4.6	209,922.3	451.4	17.9	766.7
60–64	603	9.2	7,831.2	1242.3	13.0	16,548	6.4	213,043.6	491.8	12.9	750.5
65–69	543	8.2	4,402.7	1104.5	8.1	21,330	8.3	169,487.2	503.7	7.9	600.9
70–74	513	7.8	1,613.2	704.8	3.1	26,243	10.2	76,058.9	301.5	2.9	403.3
Total 0–74 years	**5,644**	**85.7**	**159,896.3**	**546.9**	**. .**	**106,728**	**41.6**	**1,813,387.2**	**250.8**	**. .**	**296.1**

(continued)

Table 1.22.10 (continued): Potential years of life lost before age 75 years (PYLL), NSW, Qld, WA, SA and NT, 2009–2013(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Indigenous					Non-Indigenous					
	Deaths before age 75		PYLL before age 75			Deaths before age 75		PYLL before age 75			
	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	PYLL per 1,000 rate difference(j)
Females											
0–4	265	4.9	19,778.6	551.6	74.6	1,926	0.8	143,824.7	302.4	74.7	249.2
5–9	31	0.6	2,112.4	61.0	68.1	182	0.1	12,401.7	27.4	68.1	33.6
10–14	34	0.6	2,118.4	62.5	62.3	190	0.1	11,947.6	26.2	62.9	36.3
15–19	81	1.5	4,686.9	150.9	57.9	497	0.2	28,728.5	60.6	57.8	90.4
20–24	100	1.8	5,319.0	202.2	53.2	643	0.3	34,047.8	64.5	52.9	137.7
25–29	117	2.1	5,616.0	252.1	48.0	747	0.3	35,809.9	64.7	47.9	187.3
30–34	125	2.3	5,321.0	288.1	42.6	988	0.4	42,480.3	81.2	43.0	206.9
35–39	260	4.8	9,798.8	516.4	37.7	1,478	0.6	55,812.0	102.9	37.8	413.6
40–44	333	6.1	10,949.0	581.8	32.9	2,274	0.9	74,671.0	136.4	32.8	445.4
45–49	367	6.7	10,248.9	651.0	27.9	3,584	1.5	99,555.4	184.9	27.8	466.1
50–54	476	8.7	10,928.0	829.3	23.0	5,218	2.2	119,628.4	227.8	22.9	601.5
55–59	489	9.0	8,784.6	899.4	18.0	6,993	2.9	124,986.7	265.7	17.9	633.7
60–64	484	8.9	6,273.2	888.7	13.0	9,843	4.1	126,501.8	294.1	12.9	594.5
65–69	479	8.8	3,830.7	843.8	8.0	12,441	5.1	98,608.3	292.4	7.9	551.3
70–74	498	9.1	1,493.3	509.8	3.0	16,582	6.9	47,577.6	183.4	2.9	326.4
Total 0–74 years	**4,140**	**75.9**	**107,258.7**	**365.4**	**. .**	**63,586**	**26.3**	**1,056,581.8**	**148.5**	**. .**	**216.9**

(continued)

Table 1.22.10 (continued): Potential years of life lost before age 75 years (PYLL), NSW, Qld, WA, SA and NT, 2009–2013[a][b][c][d][e][f][g][h][i]

	Indigenous					Non-Indigenous					
	Deaths before age 75		PYLL before age 75			Deaths before age 75		PYLL before age 75			
	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	Number	% of all deaths	Number	PYLL per 1,000	PYLL per death	PYLL per 1,000 rate difference[j]
Persons											
0–4	621	5.2	46,333.7	633.6	74.6	4,384	0.9	327,459.7	335.2	74.7	298.4
5–9	64	0.5	4,363.7	61.7	68.2	410	0.1	27,946.8	30.0	68.2	31.7
10–14	68	0.6	4,242.7	61.4	62.4	446	0.1	27,980.9	29.9	62.7	31.4
15–19	261	2.2	15,064.5	234.8	57.7	1,558	0.3	89,732.9	92.0	57.6	142.9
20–24	305	2.5	16,183.7	302.3	53.1	2,261	0.5	119,795.9	111.0	53.0	191.3
25–29	324	2.7	15,512.6	348.0	47.9	2,717	0.5	130,312.6	115.8	48.0	232.2
30–34	387	3.2	16,559.8	457.1	42.8	3,252	0.7	139,646.2	132.9	42.9	324.2
35–39	643	5.3	24,315.0	659.9	37.8	4,335	0.9	163,995.9	151.5	37.8	508.4
40–44	827	6.9	27,150.5	758.2	32.8	6,185	1.2	203,541.5	186.8	32.9	571.4
45–49	964	8.0	26,923.5	890.5	27.9	9,314	1.9	258,843.1	241.6	27.8	648.9
50–54	1,092	9.1	25,108.2	983.7	23.0	13,739	2.8	314,521.8	301.5	22.9	682.2
55–59	1,106	9.2	19,953.3	1053.7	18.0	18,726	3.8	334,908.2	358.0	17.9	695.7
60–64	1,087	9.0	14,104.3	1055.5	13.0	26,391	5.3	339,544.5	393.3	12.9	662.2
65–69	1,022	8.5	8,233.4	965.7	8.1	33,770	6.8	268,094.7	397.9	7.9	567.7
70–74	1,011	8.4	3,106.5	595.3	3.1	42,825	8.6	123,636.2	241.7	2.9	353.7
Total 0–74 years	**9,784**	**81.3**	**267,155.4**	**456.0**	**. .**	**170,314**	**34.2**	**2,869,960.9**	**200.1**	**. .**	**255.9**

(continued)

Table 1.22.10 (continued): Potential years of life lost before age 75 years (PYLL), NSW, Qld, WA, SA and NT, 2009–2013(a)(b)(c)(d)(e)(f)(g)(h)(i)

(a) PYLL represents the total number of years of life lost before a given age (for example 75 years). If dying before the age of 75 is considered premature then a person dying at age 65 would have lost 10 years of potential life.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous PYLL.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(e) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) These data exclude 2,608 registered deaths where the Indigenous status was not stated for those aged under 75 over the period 2009–2013.

(h) Not stated for age has been pro-rated across each age group. Rows may not add to subtotals due to rounding.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) PYLL Rate difference = Indigenous PYLL per 1,000 minus non-Indigenous PYLL per 1,000.

Source: ABS and AIHW analysis of National Mortality Database.

Data sources and quality

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013a). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013b).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: ‘While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records’.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the

2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

List of symbols used in tables

n.a.	not available
. .	not applicable
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

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Aboriginal and Torres Strait Islander
Health Performance Framework
2014 report

Measure 23 of 68
Detailed analyses

1.23 Leading causes of mortality

This measure reports on causes of death of Aboriginal and Torres Strait Islander Australians, expressed as a rate by age group, age-standardised rate, rate ratio and rate difference

Introduction

This is no. 23 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data source

National Mortality Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Data are included for 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) that have been assessed by the ABS and the AIHW as having adequate identification of Aboriginal and Torres Strait Islander Australians.

For current period analyses, data have been combined for the 5-year period 2008–2012 because of the small number of deaths from some conditions each year.

Age-standardised rates, rate ratios and rate differences have been used as a measure of mortality in the Indigenous population relative to non-Indigenous Australians. Ratios of this type illustrate differences between the rates of mortality among Indigenous and non-Indigenous Australians, taking into account differences in the age structure of the 2 populations.

An underlying cause of death is the cause that led directly to the death; associated causes of death are all causes of death other than the underlying cause; multiple causes of death include all causes and conditions reported on the death certificate (that is, both underlying and associated causes). These statistics are valuable in providing an accurate portrayal of mortality in deaths attributable to a number of concurrent disease processes.

Note that fluctuations in the level of Indigenous mortality over time partly reflect changing levels of coverage of Indigenous deaths and population estimates. Given the volatility in the measures of Indigenous mortality, caution should be exercised in assessing trends in Indigenous mortality over time and comparisons between jurisdictions and with the non-Indigenous population.

The following data are presented for this measure:

- Leading causes of death—see tables 1.23.1–3, 1.23.6–29
- Deaths from chronic disease—see tables 1.23.4–5.

For more information about mortality, see measures 1.20, 1.21, 1.22 and 1.24. See also 'Other related information' at the end of this measure.

Leading causes of death

Current period

In 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The 5 most common causes of death among Indigenous Australians were:
    - Circulatory diseases (2,958 deaths, 25% of all deaths). The age-standardised rate for Indigenous Australians (286 per 100,000) was significantly higher than the rate for non-Indigenous Australians (192 per 100,000). This was a gap of 94 per 100,000 (24% of the overall mortality gap).
    - Neoplasms (including cancer) (2,340 deaths, 20% of all deaths). The age-standardised rate for Indigenous Australians (224 per 100,000) was significantly higher than the rate for non-Indigenous Australians (178 per 100,000). This was a gap of 46 per 100,000 (12% of the overall mortality gap).
    - External causes (injury and poisoning) (1,766 deaths, 15% of all deaths). The age-standardised rate for Indigenous Australians (75 per 100,000) was significantly higher than the rate for non-Indigenous Australians (38 per 100,000). This was a gap of 37 per 100,000 (10% of the overall mortality gap).
    - Diabetes (921 deaths, 8% of all deaths). The age-standardised rate for Indigenous Australians (90 per 100,000) was significantly higher than the rate for non-Indigenous Australians (16 per 100,000). This was a gap of 74 per 100,000 (19% of the overall mortality gap).
    - Respiratory diseases (888 deaths, 8% of all deaths). The age-standardised rate for Indigenous Australians (96 per 100,000) was significantly higher than the rate for non-Indigenous Australians (50 per 100,000). This was a gap of 47 per 100,000 (12% of the overall mortality gap).
- There were also 290 deaths due to kidney disease among Indigenous Australians. The age-standardised rate for Indigenous Australians (30 per 100,000) was significantly higher than the rate for non-Indigenous Australians (11 per 100,000). This was a gap of 18 per 100,000 (5% of the overall mortality gap) (Table 1.23.1).

Trend

Between 1998 and 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The age-standardised rate for Indigenous Australians for deaths due to circulatory disease decreased from 462 per 100,000 in 1998 to 283 per 100,000 in 2012. There was a significant 43% decrease in the gap between Indigenous and non-Indigenous Australians, from a rate difference of 169 per 100,000 in 1998 to 108 per 100,000 in 2012 (Table 1.23.18, Figure 1.23.1).
- The age-standardised rate for Indigenous Australians for deaths due to malignant neoplasms (cancer) increased from 185 per 100,000 in 1998 to 223 per 100,000 in 2012. There was a significant increase in the gap between Indigenous and non-Indigenous Australians, from a rate difference of –9 per 100,000 in 1998 to 53 per 100,000 in 2012 (Table 1.23.20, Figure 1.23.1).

- The age-standardised rate for Indigenous Australians for deaths due to respiratory disease decreased from 134 per 100,000 in 1998 to 99 per 100,000 in 2012. There was a significant 40% decrease in the gap between Indigenous and non-Indigenous Australians, from a rate difference of 82 per 100,000 in 1998 to 46 per 100,000 in 2012 (Table 1.23.21, Figure 1.23.1).

Between 2006 and 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The age-standardised rate for Indigenous Australians for deaths due to malignant neoplasms (cancer) increased from 203 per 100,000 in 2006 to 223 per 100,000 in 2012. There was a significant 135% increase in the gap between Indigenous and non-Indigenous Australians, a rate difference of 24 per 100,000 in 2006 to 53 per 100,000 in 2012
(Table 1.23.20).
- The age-standardised rate for Indigenous Australians for deaths due to kidney disease decreased from 44 per 100,000 in 2006 to 25 per 100,000 in 2012. There was a significant 53% decrease in the gap between Indigenous and non-Indigenous Australians, from a rate difference of 33 per 100,000 in 2006 to 14 per 100,000 in 2012 (Table 1.23.23).

Chronic disease

For this measure, 'chronic diseases' include: selected circulatory diseases; selected neoplasms (including cancers); endocrine, metabolic and nutritional disorders, including diabetes; respiratory diseases; digestive diseases; kidney diseases; and nervous system diseases.

Current period

In 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The age-standardised rate of deaths due to chronic disease in those aged 0–74 was 460 per 100,000 for Indigenous Australians compared with 169 per 100,000 for non-Indigenous Australians. This was a gap of 291 deaths per 100,000 (Table 1.23.5).

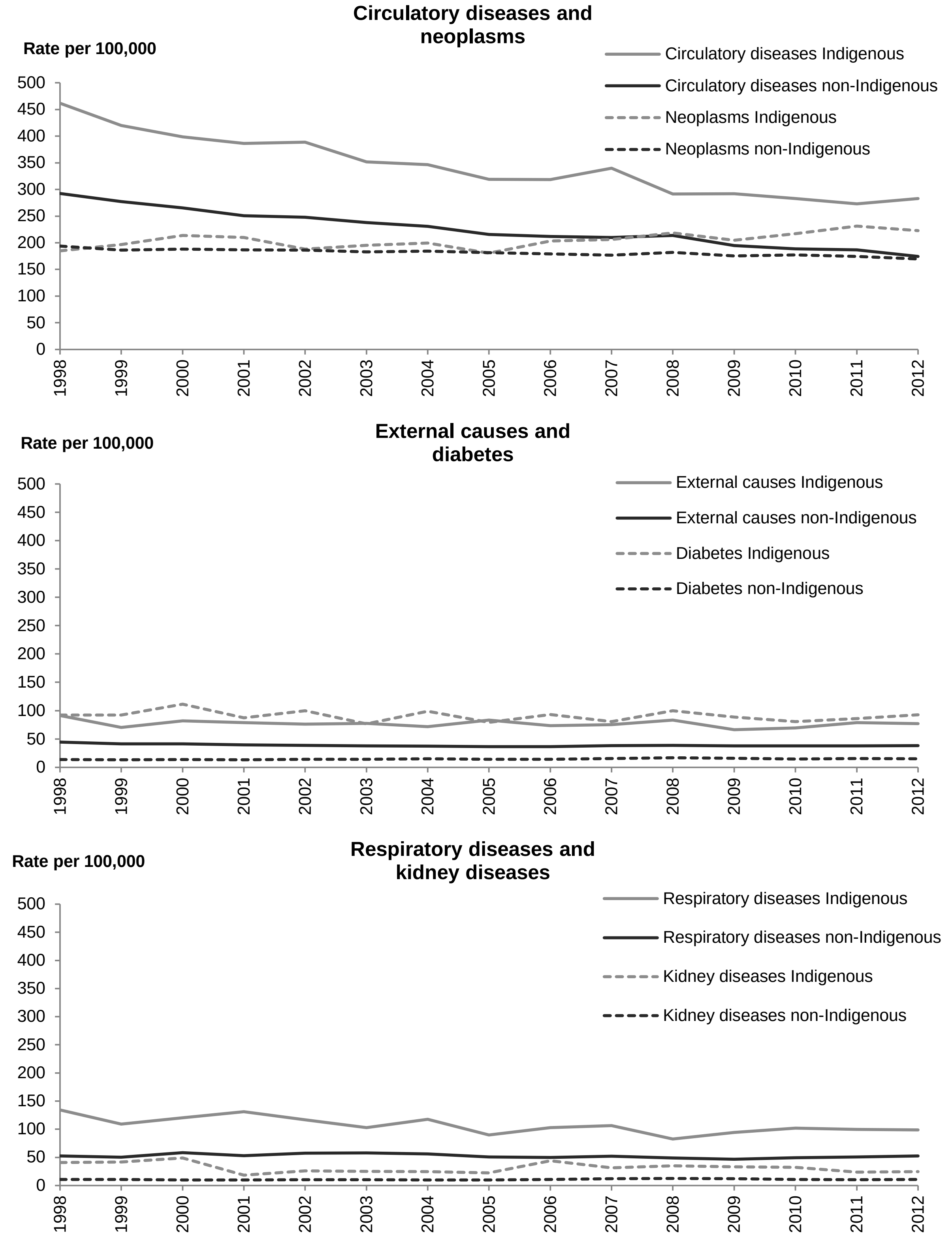
Trend

Between 1998 and 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The age-standardised rate for Indigenous Australians for deaths due to chronic disease decreased by 19%, from 951 per 100,000 to 782 per 100,000. There was a significant 14% decrease in the gap between Indigenous and non-Indigenous Australians, from 354 per 100,000 to 326 per 100,000 (Table 1.23.4).

Between 2006 and 2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- The age-standardised rate for Indigenous Australians for deaths due to chronic disease decreased by 6%, from 826 per 100,000 in 2006 to 782 per 100,000 in 2012. There was no significant change in the gap between Indigenous and non-Indigenous Australians (Table 1.23.4).



Source: Tables 1.23.18, 1.23.19, 1.23.20 1.23.21 1.23.22 and 1.23.23

Figure 1.23.1: Age-standardised mortality rates for Indigenous and non-Indigenous Australians, selected causes of death, NSW, Qld, WA, SA and NT combined, 1998–2012

Table 1.23.1: Causes of mortality per 100,000, by Indigenous status, by sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)

	Number			Per cent			Rate per 100,000(i)				
Underlying cause of death	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Rate ratio(j)**	**Rate difference(k)**	**Rate difference %(l)**
					Males						
Circulatory diseases (I00–I99)	1,645	76,287	931	25.9	29.9	30.0	331.6	208.3	1.6*	123.3*	28.4
External causes (V01–Y98)	1,193	19,746	541	18.8	7.7	17.4	101.9	52.7	1.9*	49.2*	11.4
Neoplasms (C00–C97, D00–D48)	1,205	84,809	719	18.9	33.3	23.2	259.6	223.1	1.2*	36.5*	8.4
Digestive organ cancers (C15–C26)(m)	*380*	*23,101*	*188*	*6.0*	*9.1*	*6.1*	*73.3*	*60.0*	*1.2**	*13.4**	*3.1*
Lung cancer (C34)(m)	*322*	*17,367*	*149*	*5.1*	*6.8*	*4.8*	*75.3*	*45.1*	*1.7**	*30.2**	*7.0*
Cervical cancer (C53)(m)(n)	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Endocrine, metabolic & nutritional disorders (E00–E89)	493	9,433	105	7.8	3.7	3.4	104.2	25.5	4.1*	78.7*	18.1
Diabetes (E10–E14)(m)	*429*	*6,783*	*76*	*6.7*	*2.7*	*2.5*	*90.7*	*18.4*	*4.9**	*72.3**	*16.7*
Respiratory diseases (J00–J99)	457	21,868	251	7.2	8.6	8.1	112.6	60.1	1.9*	52.5*	12.1
Digestive diseases (K00–K93)	351	8,524	132	5.5	3.3	4.3	52.7	22.6	2.3*	30.1*	6.9
Conditions originating in perinatal period (P00–P96)	140	1,077	40	2.2	0.4	1.3	4.9	2.8	1.7*	2.1*	0.5
Nervous system diseases (G00–G99)	166	9,750	97	2.6	3.8	3.1	24.4	26.6	0.9	–2.2	–0.5
Kidney diseases (N00–N29)	133	4,453	46	2.1	1.7	1.5	29.1	12.4	2.3*	16.7*	3.8
Infectious & parasitic diseases (A00–B99)	152	3,969	39	2.4	1.6	1.3	21.4	10.7	2.0*	10.7*	2.5
Other causes(o)	426	15,006	201	6.7	5.9	6.5	77.6	41.5	1.9*	36.1*	8.3
All causes	**6,361**	**254,922**	**3,102**	**100.0**	**100.0**	**100.0**	**1,120.0**	**686.4**	**1.6***	**433.7***	**100.0**

(continued)

Table 1.23.1 (continued): Causes of mortality per 100,000, by Indigenous status, by sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)

	Number			**Per cent**			**Rate per 100,000(i)**				
Underlying cause of death	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Rate ratio(j)**	**Rate difference(k)**	**Rate difference %(l)**
						Females					
Circulatory diseases (I00–I99)	1,313	83,777	801	25.0	34.8	33.2	247.1	175.6	1.4*	71.5*	20.2
External causes (V01–Y98)	573	10,284	241	10.9	4.3	10.0	49.8	24.0	2.1*	25.9*	7.3
Neoplasms (C00–C97, D00–D48)	1,135	64,200	538	21.6	26.7	22.3	197.0	141.9	1.4*	55.2*	15.6
Digestive organ cancers (C15–C26)(m)	*297*	*16,913*	*142*	*5.7*	*7.0*	*5.9*	*53.8*	*37.0*	*1.5**	*16.9**	*4.8*
Lung cancer (C34)(m)	*247*	*10,847*	*102*	*4.7*	*4.5*	*4.2*	*42.5*	*24.0*	*1.8**	*18.5**	*5.2*
Cervical cancer (C53)(m)(n)	*53*	*809*	*11*	*1.0*	*0.3*	*0.5*	*6.5*	*1.9*	*3.4**	*4.6**	*1.3*
Endocrine, metabolic & nutritional disorders (E00–E89)	561	9,448	120	10.7	3.9	5.0	102.2	20.1	5.1*	82.1*	23.2
Diabetes (E10–E14)(m)	*492*	*6,249*	*81*	*9.4*	*2.6*	*3.4*	*89.2*	*13.2*	*6.7**	*75.9**	*21.4*
Respiratory diseases (J00–J99)	431	19,657	210	8.2	8.2	8.7	84.5	41.8	2.0*	42.7*	12.1
Digestive diseases (K00–K93)	295	8,571	90	5.6	3.6	3.7	42.5	18.4	2.3*	24.1*	6.8
Conditions originating in perinatal period (P00–P96)	99	846	27	1.9	0.4	1.1	3.6	2.4	1.5*	1.3*	0.4
Nervous system diseases (G00–G99)	130	11,670	103	2.5	4.8	4.3	22.8	24.9	0.9	–2.1	–0.6
Kidney diseases (N00–N29)	157	4,919	31	3.0	2.0	1.3	29.9	10.3	2.9*	19.6*	5.5
Infectious & parasitic diseases (A00–B99)	123	3,638	34	2.3	1.5	1.4	17.6	7.8	2.3*	9.8*	2.8
Other causes(o)	434	23,850	220	8.3	9.9	9.1	74.7	50.6	1.5*	24.1*	6.8
All causes	**5,251**	**240,860**	**2,415**	**100.0**	**100.0**	**100.0**	**871.9**	**517.7**	**1.7***	**354.2***	**100.0**

(continued)

Table 1.23.1 (continued): Causes of mortality per 100,000, by Indigenous status, by sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)

	Number			Per cent			Rate per 100,000(i)				
Underlying cause of death	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Rate ratio**(j)	**Rate difference**(k)	**Rate difference %**(l)
Persons											
Circulatory diseases (I00–I99)	2,958	160,064	1,732	25.5	32.3	31.4	285.7	191.8	1.5*	93.8*	24.1
External causes (V01–Y98)	1,766	30,030	782	15.2	6.1	14.2	75.2	38.2	2.0*	37.0*	9.5
Neoplasms (C00–C97, D00–D48)	2,340	149,009	1,257	20.2	30.1	22.8	224.1	177.9	1.3*	46.2*	11.9
Digestive organ cancers (C15–C26)(m)	*677*	*40,014*	*330*	*5.8*	*8.1*	*6.0*	*62.9*	*47.7*	*1.3**	*15.2**	*3.9*
Lung cancer (C34)(m)	*569*	*28,214*	*251*	*4.9*	*5.7*	*4.5*	*56.4*	*33.5*	*1.7**	*22.9**	*5.9*
Cervical cancer (C53)(m)(n)	*53*	*809*	*11*	*0.5*	*0.2*	*0.2*	*3.5*	*1.0*	*3.5**	*2.5**	*0.6*
Endocrine, metabolic & nutritional disorders (E00–E89)	1,054	18,881	225	9.1	3.8	4.1	103.3	22.7	4.6*	80.6*	20.7
Diabetes (E10–E14)(m)	*921*	*13,032*	*157*	*7.9*	*2.6*	*2.8*	*89.9*	*15.6*	*5.8**	*74.3**	*19.1*
Respiratory diseases (J00–J99)	888	41,525	461	7.6	8.4	8.4	96.3	49.8	1.9*	46.5*	12.0
Digestive diseases (K00–K93)	646	17,095	222	5.6	3.4	4.0	47.4	20.5	2.3*	26.9*	6.9
Conditions originating in perinatal period (P00–P96)	239	1,923	67	2.1	0.4	1.2	4.3	2.6	1.6*	1.7*	0.4
Nervous system diseases (G00–G99)	296	21,420	200	2.5	4.3	3.6	24.0	25.8	0.9	–1.8	–0.5
Kidney diseases (N00–N29)	290	9,372	77	2.5	1.9	1.4	29.6	11.2	2.6*	18.4*	4.7
Infectious & parasitic diseases (A00–B99)	275	7,607	73	2.4	1.5	1.3	19.4	9.2	2.1*	10.2*	2.6
Other causes(o)	860	38,856	421	7.4	7.8	7.6	76.4	47.0	1.6*	29.4*	7.6
All causes	**11,612**	**495,782**	**5,517**	**100.0**	**100.0**	**100.0**	**985.6**	**596.7**	**1.7***	**388.9***	**100.0**

(continued)

Table 1.23.1 (continued): Causes of mortality per 100,000, by Indigenous status, by sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008-2010 (final), 2011 (revised), 2012 (preliminary). See Causes of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(g) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(h) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(i) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(l) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all causes.

(m) Data for lung cancer, cervical cancer and digestive organ cancers are a subset of the data presented for all cancers; data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

(n) Data for cervical cancer are for females only.

(o) Includes: diseases of the blood and blood-forming organs and certain disorders involving the immune system, mental & behavioural disorders, diseases of the eye and adnexa, diseases of the ear and mastoid process, diseases of the skin & subcutaneous tissue, diseases of the musculoskeletal system and connective tissue, diseases of the genitourinary system (excluding kidney diseases), pregnancy, childbirth & the puerperium, congenital malformations, deformations and chromosomal abnormalities, symptoms, signs and abnormal clinical findings not elsewhere classified.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.2: Causes of mortality by Indigenous status, by jurisdiction, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f]

	Jurisdiction					
Underlying cause of death	**NSW**	**Qld**[g]	**WA**[h]	**SA**	**NT**	**Total**
			Indigenous—number			
Circulatory diseases (I00–I99)	890	782	577	186	523	2,958
External causes (V01–Y98)	388	430	429	130	389	1,766
Neoplasms (C00–C97, D00–D48)	738	693	383	119	407	2,340
Digestive organ cancers (C15–C26)[k]	*210*	*188*	*121*	*33*	*125*	*677*
Lung cancer (C34)[k]	*202*	*170*	*71*	*28*	*98*	*569*
Cervical cancer (C53)[k][l]	*19*	*19*	*5*	*3*	*7*	*53*
Endocrine, metabolic & nutritional disorders (E00–E89)	198	311	230	47	268	1,054
Diabetes (E10–E14)[j]	*167*	*272*	*204*	*41*	*237*	*921*
Respiratory diseases (J00–J99)	289	214	140	62	183	888
Digestive diseases (K00–K93)	152	174	130	63	127	646
Conditions originating in perinatal period (P00–P96)	57	82	33	13	54	239
Nervous system diseases (G00–G99)	71	75	60	33	57	296
Kidney diseases (N00–N29)	64	65	64	14	83	290
Infectious & parasitic diseases (A00–B99)	70	76	55	22	52	275
Other causes[m]	216	258	157	51	178	860
All causes	**3,133**	**3,160**	**2,258**	**740**	**2,321**	**11,612**
			Indigenous—age-standardised rate per 100,000[i][j]			
Circulatory diseases (I00–I99)	255.7	276.8	380.9	230.0	330.7	285.7
External causes (V01–Y98)	51.0	61.0	120.0	83.4	122.8	75.2
Neoplasms (C00–C97, D00–D48)	194.5	231.2	254.4	156.2	316.2	224.1
Digestive organ cancers (C15–C26)[k]	*53.3*	*62.4*	*73.3*	*46.4*	*95.9*	*62.9*
Lung cancer (C34)[k]	*54.5*	*57.9*	*54.4*	*38.3*	*74.3*	*56.4*
Cervical cancer (C53)[k][l]	*n.p.*	*n.p.*	*n.p.*	*n.p.*	*n.p.*	*3.5*
Endocrine, metabolic & nutritional disorders (E00–E89)	56.9	106.8	161.7	62.6	210.2	103.3
Diabetes (E10–E14)[j]	*49.8*	*90.8*	*141.5*	*56.1*	*184.6*	*89.9*
Respiratory diseases (J00–J99)	88.9	85.1	105.6	78.8	151.8	96.3
Digestive diseases (K00–K93)	30.1	49.9	58.8	55.7	79.5	47.4
Conditions originating in perinatal period (P00–P96)	2.9	4.4	4.1	n.p.	9.3	4.3
Nervous system diseases (G00–G99)	17.6	22.8	36.0	34.3	28.0	24.0
Kidney diseases (N00–N29)	20.5	25.0	39.6	n.p.	63.2	29.6
Infectious & parasitic diseases (A00–B99)	14.7	18.4	23.4	21.4	31.9	19.4
Other causes[m]	58.1	69.1	108.8	64.0	125.2	76.4
All causes	**791.0**	**950.6**	**1,293.3**	**813.8**	**1,469.1**	**985.6**

(continued)

Table 1.23.2 (continued): Causes of mortality by Indigenous status, by jurisdiction, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f]

	Jurisdiction					
Underlying cause of death	**NSW**	**Qld[g]**	**WA[h]**	**SA**	**NT**	**Total**
	Non-Indigenous – age-standardised rate per 100,000[i][j]					
Circulatory diseases (I00–I99)	193.7	197.8	169.0	196.7	153.9	191.8
External causes (V01–Y98)	34.6	41.6	41.8	38.3	58.9	38.2
Neoplasms (C00–C97, D00–D48)	176.6	182.3	173.3	179.4	197.1	177.9
Digestive organ cancers (C15–C26)[k]	*48.3*	*47.4*	*45.4*	*48.9*	*50.8*	*47.7*
Lung cancer (C34)[k]	*33.0*	*34.4*	*34.0*	*32.6*	*45.7*	*33.5*
Cervical cancer (C53)[k][l]	*1.0*	*1.0*	*1.0*	*0.9*	*1.5*	*1.0*
Endocrine, metabolic & nutritional disorders (E00–E89)	21.2	23.5	23.7	25.4	30.6	22.7
Diabetes (E10–E14)[j]	*14.4*	*16.2*	*16.1*	*18.3*	*22.5*	*15.6*
Respiratory diseases (J00–J99)	51.0	50.1	43.9	50.1	59.1	49.8
Digestive diseases (K00–K93)	20.8	20.4	19.6	20.8	25.1	20.5
Conditions originating in perinatal period (P00–P96)	2.8	3.0	1.6	2.2	2.7	2.6
Nervous system diseases (G00–G99)	23.9	24.9	30.6	30.6	27.1	25.8
Kidney diseases (N00–N29)	11.7	9.8	10.2	13.6	9.8	11.2
Infectious & parasitic diseases (A00–B99)	10.6	7.0	7.5	9.8	13.3	9.2
Other causes[m]	48.0	44.2	44.1	51.4	50.7	47.0
All causes	**594.9**	**604.7**	**565.3**	**618.3**	**628.1**	**596.7**
	Rate difference[n]					
Circulatory diseases (I00–I99)	62.1	79.0	211.9	33.3	176.8	93.8
External causes (V01–Y98)	16.4	19.4	78.2	45.0	63.9	37.0
Neoplasms (C00–C97, D00–D48)	17.9	49.0	81.1	–23.2	119.1	46.2
Digestive organ cancers (C15–C26)[k]	*5.0*	*15.0*	*27.8*	*–2.5*	*45.1*	*15.2*
Lung cancer (C34)[k]	*21.5*	*23.6*	*20.4*	*5.6*	*28.7*	*22.9*
Cervical cancer (C53)[k][l]	*n.p.*	*n.p.*	*n.p.*	*n.p.*	*n.p.*	*2.5*
Endocrine, metabolic & nutritional disorders (E00–E89)	35.6	83.3	137.9	37.3	179.6	80.6
Diabetes (E10–E14)[j]	*35.5*	*74.6*	*125.4*	*37.8*	*162.1*	*74.3*
Respiratory diseases (J00–J99)	37.9	35.0	61.7	28.7	92.7	46.5
Digestive diseases (K00–K93)	9.3	29.5	39.2	34.9	54.4	26.9
Conditions originating in perinatal period (P00–P96)	0.1	1.4	2.5	n.p.	6.5	1.7
Nervous system diseases (G00–G99)	–6.3	–2.1	5.4	3.7	1.0	–1.8
Kidney diseases (N00–N29)	8.9	15.1	29.3	n.p.	53.4	18.4
Infectious & parasitic diseases (A00–B99)	4.1	11.4	15.9	11.6	18.7	10.2
Other causes[m]	10.1	24.9	64.8	12.6	74.6	29.4
All causes	**196.1**	**345.9**	**728.0**	**195.5**	**841.0**	**388.9**

(continued)

Table 1.23.2 (continued): Causes of mortality by Indigenous status, by jurisdiction, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(e) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Cells with small values have been randomly assigned to protect the confidentiality of individuals, so some totals will not equal the sum of their components. Cells with a zero value have not been affected.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+. Not stated for age has been pro-rated across each age group.

(j) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(k) Data for lung cancer, cervical cancer and digestive organ cancers are a subset of the data presented for all cancers; data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

(l) Data for cervical cancer are for females only.

(m) Includes: diseases of the blood and blood-forming organs and certain disorders involving the immune system, mental & behavioural disorders, diseases of the eye and adnexa, diseases of the ear and mastoid process, diseases of the skin & subcutaneous tissue, diseases of the musculoskeletal system and connective tissue, diseases of the genitourinary system (excluding kidney diseases), pregnancy, childbirth & the puerperium, congenital malformations, deformations and chromosomal abnormalities, symptoms, signs and abnormal clinical findings not elsewhere classified.

(n) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.3: Causes of Indigenous mortality rates, by age group, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g][h]

	Age											
	Under 1	1–4	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total[i]
Underlying cause of death	**Rate per 1,000 live births[j][k]**	**Rate per 100,000 population[j][k]**										
Circulatory diseases (I00–I99)	0.1	3.7	5.4	n.p.	6.3	30.8	109.4	219.5	369.5	772.7	2,466.6	101.8
External causes (V01–Y98)	0.2	21.1	21.5	8.8	77.5	106.8	102.5	80.7	56.9	57.2	171.1	60.8
Neoplasms (C00–C97, D00–D48)	n.p.	n.p.	n.p.	1.4	3.9	10.4	48.5	148.8	410.7	947.3	1,515.6	80.6
Digestive organ cancers (C15–C26)[l]	*0.0*	*0.0*	*0.0*	*0.0*	*n.p.*	*3.3*	*10.8*	*43.1*	*140.6*	*273.5*	*383.2*	*23.3*
Lung cancer (C34)[l]	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*n.p.*	*7.5*	*36.1*	*107.9*	*262.7*	*369.5*	*19.6*
Cervical cancer (C53)[l][m]	*0.0*	*0.0*	*0.0*	*0.0*	*n.p.*	*n.p.*	*3.9*	*3.7*	*8.5*	*13.9*	*n.p.*	*1.8*
Endocrine, metabolic & nutritional disorders (E00–E89)	n.p.	n.p.	n.p.	0.0	0.9	4.3	26.0	67.0	184.4	381.7	762.9	36.3
Diabetes (E10–E14)[l]	*0.0*	*0.0*	*0.0*	*0.0*	*n.p.*	*4.1*	*20.8*	*57.5*	*172.6*	*341.5*	*639.8*	*31.7*
Respiratory diseases (J00–J99)	0.3	2.7	7.6	0.9	1.4	6.4	16.6	42.7	110.5	330.7	896.3	30.6
Digestive diseases (K00–K93)	0.1	n.p.	2.2	n.p.	n.p.	5.3	39.0	71.5	84.4	115.9	253.2	22.2
Conditions originating in perinatal period (P00–P96)	3.0	n.p.	65.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
Nervous system diseases (G00–G99)	0.1	1.7	4.1	3.5	3.5	7.4	10.8	12.9	23.5	58.7	205.3	10.2
Kidney diseases (N00–N29)	n.p.	0.0	n.p.	n.p.	n.p.	n.p.	8.0	18.0	44.5	94.3	253.2	10.0
Infectious & parasitic diseases (A00–B99)	0.2	1.7	6.5	n.p.	n.p.	3.6	15.5	21.7	36.0	41.7	112.9	9.5
Other causes[n]	2.1	6.1	51.2	1.7	5.4	10.2	20.5	33.5	56.2	162.3	790.3	29.6
All causes	**6.2**	**39.7**	**166.0**	**17.6**	**100.9**	**185.9**	**396.8**	**716.4**	**1,376.5**	**2,962.4**	**7,427.3**	**399.8**

(continued)

Table 1.23.3 (continued): Causes of Indigenous mortality rates, by age group, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)(h)]

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(e) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Data have been revised to include previously unprocessed NSW Birth Registrations for the period 2005 to 2010.

(i) Total includes deaths where the age of the deceased was not stated.

(j) Rates for infants (under 1 year) calculated per 1,000 live births; age-specific death rates for age groups calculated per 100,000 estimated resident population for selected age group; rates for 1–4 year olds calculated per 100,000 for the averaged estimated population of 2009, 2010, 2011.

(k) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(l) Data for lung cancer, cervical cancer and digestive organ cancers are a subset of the data presented for all cancers; data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

(m) Data for cervical cancer are for females only.

(n) Includes: diseases of the blood and blood-forming organs and certain disorders involving the immune system, mental & behavioural disorders, diseases of the eye and adnexa, diseases of the ear and mastoid process, diseases of the skin & subcutaneous tissue, diseases of the musculoskeletal system and connective tissue, disease of the genitourinary system (excluding kidney diseases), pregnancy, childbirth & the puerperium, congenital malformations, deformations and chromosomal abnormalities, symptoms, signs and abnormal clinical findings not elsewhere classified.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.4: Chronic disease mortality rates, rate differences and confidence intervals by Indigenous status, NSW, Qld, SA, WA & NT, 1998–2012[a][b][c][d][e][f][g][h]

	Indigenous				Non-Indigenous				Rate difference[i]		
Year	**Deaths**	**Rate per 100,000[j]**	**95% LCL[k][l]**	**95% UCL[k][m]**	**Deaths**	**Rate per 100,000[j]**	**95% LCL[k][l]**	**95% UCL[k][m]**	**Rate per 100,000[j]**	**95% LCL[k][l]**	**95% UCL[k][m]**
1998	1,293	951.3	888.0	1,014.5	73,494	597.3	593.0	601.6	354.0	295.0	412.9
1999	1,242	922.8	861.1	984.4	72,590	572.5	568.3	576.6	350.3	292.8	407.8
2000	1,331	930.2	870.9	989.6	73,555	562.9	558.9	567.0	367.3	312.0	422.6
2001	1,292	866.8	810.6	923.0	73,152	541.9	538.0	545.8	324.9	272.6	377.2
2002	1,364	873.2	818.3	928.1	75,543	545.3	541.4	549.2	327.9	276.9	378.9
2003	1,351	812.0	760.6	863.4	74,849	527.3	523.5	531.1	284.7	237.1	332.3
2004	1,394	821.3	770.4	872.3	75,930	523.0	519.3	526.8	298.3	251.1	345.5
2005	1,377	762.8	714.9	810.6	74,305	499.5	495.9	503.1	263.3	219.0	307.5
2006	1,482	825.9	776.6	875.1	75,148	494.3	490.8	497.9	331.5	285.8	377.2
2007	1,577	816.7	769.3	864.0	77,428	496.4	492.9	499.9	320.3	276.4	364.1
2008	1,534	797.7	751.0	844.4	81,145	508.9	505.4	512.4	288.8	245.6	332.0
2009	1,578	769.7	725.0	814.4	78,132	479.5	476.1	482.9	290.2	248.9	331.6
2010	1,640	773.4	729.4	817.4	79,283	474.8	471.5	478.1	298.6	257.9	339.3
2011	1,685	776.0	732.4	819.6	81,139	473.3	470.0	476.5	302.7	262.4	343.1
2012	1,749	781.8	738.7	824.8	80,338	455.9	452.8	459.1	325.8	285.9	365.7

(continued)

Table 1.23.4 (continued): Chronic disease mortality rates, rate differences and confidence intervals by Indigenous status, NSW, Qld, SA, WA & NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)

		Indigenous				Non-Indigenous				Rate difference(i)		
Year		Deaths	Rate per 100,000(j)	95% LCL(k)(l)	95% UCL(k)(m)	Deaths	Rate per 100,000(j)	95% LCL(k)(l)	95% UCL(k)(m)	Rate per 100,000(j)	95% LCL(k)(l)	95% UCL(k)(m)
Long term 1998–2012	Annual change(n)	34.2*	–12.3*	. .	. .	603.4*	–8.8*	. .	. .	–3.5*	. .	. .
	Per cent change over period(o)	39.3*	–18.8*	. .	. .	11.7*	–21.4*	. .	. .	–14.4*	. .	. .
Medium Term 2001–2012	Annual change(n)	39.9*	–7.8*	. .	. .	679.2*	–7.5*	. .	. .	–0.3	. .	. .
	Per cent change over period(o)	34.3*	–10.2*	. .	. .	10.2*	–15.2*	. .	. .	–1.2	. .	. .
To baseline 1998–2006	Annual change(n)	22.4*	–20.9*	. .	. .	303.5*	–12.1*	. .	. .	–8.8*	. .	. .
	Per cent change over period(o)	14.3*	–17.7*	. .	. .	3.3*	–16.4*	. .	. .	–19.7*	. .	. .
Since baseline 2006–2012	Annual change(n)	40.1*	–8.5*	. .	. .	754.6	–7.0*	. .	. .	–1.5	. .	. .
	Per cent change over period(o)	16.2*	–6.2*	. .	. .	5.9	–8.3*	. .	. .	–2.9	. .	. .

(continued)

Table 1.23.4 (continued): Chronic disease mortality rates, rate differences and confidence intervals by Indigenous status, NSW, Qld, SA, WA & NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)(h)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p<0.05$ level.

(a) ICD–10–AM codes included: Circulatory disease: I05–I09, I10–I15, I20–I25, I26–I28, I30–I52, I60–I69, I70–I79, I80–I89, I95–I99. Cancer: C00–C14, C15–C26, C30–C39, C40–C41, C43–C44, C45–C49, C50, C51–C58, C60–C63, C64–C68, C69–C72, C73–C75, C76–C80, C81–C96, C97, D10–D36. Endocrine/metabolic/nutritional disorders—diabetes: E09–E14, E15–E16, E20–E35, E40–E46, E65–E68, E70–E89. Respiratory diseases: J30–J39, J40–J47, J80–J84, J95–J99. Digestive diseases: K20–K31, K50–K52, K55–K63, K70–K77, K80–K87, K90–K93. Kidney diseases: N00–N08, N10–N16, N17–N19, N25–N29, N30–N39. Nervous system disease: G10–G13, G20–G26, G30–G32, G35, G37, G40–G47, G70–G73, G80–G83, G90–G99.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 17,858 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final) 2011 (revised) and 2012 (preliminary). See Causes of Death, Australia, 2010 (cat.no. 3303.0) Explanatory Notes for further information.

(h) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(i) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(j) Rates are directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(k) Variability bands accompanying mortality data should be used for the purposes of comparisons at a point in time and over time. They should not be used for comparing mortality rates at a single point in time between jurisdictions as the variability bands and mortality rates do not take into account differences in under-identification of Indigenous deaths between jurisdictions.

(l) LCL = lower confidence limit.

(m) UCL = upper confidence limit.

(n) Annual change determined using linear regression analysis.

(o) Per cent change based on the annual change over the period.

Note: Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.5: Chronic disease mortality rates by Indigenous status and age, persons aged 0–74, by State/Territory, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)]

Age group (years)	Deaths per 100,000[(h)] Indigenous	Deaths per 100,000[(h)] Non-Indigenous	Rate ratio[(i)]	Rate difference[(j)]
		NSW		
0–4	6.9	11.0	0.6	–4.1
5–14	2.8	4.6	0.6	–1.8
15–24	10.5	9.2	1.1	1.2
25–34	39.7	16.8	2.4	22.9
35–44	143.9	52.9	2.7	90.9
45–54	367.4	165.8	2.2	201.6
55–64	868.1	447.8	1.9	420.3
65–74	2,122.9	1,193.1	1.8	929.9
Total 0–74 years (crude)[(k)]	**167.3**	**192.0**	**0.9**	**–24.8**
Total 0–74 years (age-standardised)[(k)(l)]	**334.2**	**170.5**	**2.0**	**163.8**
		Qld[(g)]		
0–4	19.5	11.6	1.7	7.9
5–14	5.3	4.8	1.1	0.5
15–24	8.4	8.8	1.0	–0.4
25–34	45.9	18.4	2.5	27.5
35–44	189.8	51.6	3.7	138.1
45–54	459.4	160.9	2.9	298.4
55–64	1,112.7	447.4	2.5	665.3
65–74	2,490.7	1,225.4	2.0	1,265.3
Total 0–74 years (crude)[(k)]	**184.6**	**187.8**	**1.0**	**–3.1**
Total 0–74 years (age-standardised)[(k)(l)]	**414.2**	**172.9**	**2.4**	**241.4**
		WA[(h)]		
0–4	13.2	8.6	1.5	4.6
5–14	7.9	4.7	1.7	3.2
15–24	19.8	8.3	2.4	11.5
25–34	81.0	15.2	5.3	65.8
35–44	343.5	45.6	7.5	297.9
45–54	808.9	146.5	5.5	662.4
55–64	1,559.6	398.2	3.9	1,161.5
65–74	3,463.4	1,104.3	3.1	2,359.0
Total 0–74 years (crude)[(k)]	**287.5**	**162.4**	**1.8**	**125.1**
Total 0–74 years (age-standardised)[(k)(l)]	**622.3**	**154.9**	**4.0**	**467.4**

(continued)

Table 1.23.5 (continued): Chronic disease mortality rates by Indigenous status and age, persons aged 0–74, by State/Territory, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g]

	Deaths per 100,000[h]			
Age group (years)	**Indigenous**	**Non-Indigenous**	**Rate ratio[i]**	**Rate difference[j]**
		SA		
0–4	n.p.	9.3	n.p.	n.p.
5–14	n.p.	4.0	n.p.	n.p.
15–24	13.5	8.7	1.6	4.8
25–34	67.4	18.3	3.7	49.1
35–44	306.3	56.4	5.4	249.9
45–54	628.1	182.0	3.5	446.1
55–64	1,159.0	464.6	2.5	694.4
65–74	2,206.9	1,170.5	1.9	1,036.4
Total 0–74 years (crude)[k]	**229.0**	**207.6**	**1.1**	**21.5**
Total 0–74 years (age-standardised)[k][l]	**437.9**	**172.7**	**2.5**	**265.2**
		NT		
0–4	20.8	n.p.	n.p.	n.p.
5–14	10.7	7.4	1.4	3.3
15–24	48.7	5.3	9.2	43.4
25–34	128.8	18.3	7.0	110.5
35–44	528.5	39.2	13.5	489.3
45–54	1,115.0	152.8	7.3	962.2
55–64	2,192.9	448.1	4.9	1,744.8
65–74	4,186.0	1,347.0	3.1	2,839.1
Total 0–74 years (crude)[k]	**407.3**	**149.3**	**2.7**	**258.0**
Total 0–74 years (age-standardised)[k][l]	**816.0**	**183.2**	**4.5**	**632.8**
		NSW, Qld, WA, SA, NT[b][f][g]		
0–4	14.2	10.6	1.3	3.6
5–14	5.6	4.7	1.2	1.0
15–24	16.0	8.9	1.8	7.1
25–34	62.6	17.2	3.6	45.4
35–44	248.7	51.6	4.8	197.0
45–54	564.3	163.2	3.5	401.1
55–64	1,206.5	442.5	2.7	764.0
65–74	2,630.2	1,188.5	2.2	1,441.7
Total 0–74 years (crude)[j][m][n]	**222.9**	**187.7**	**1.2**	**35.2**
Total 0–74 years (age-standardised)[j][m][o]	**460.2**	**169.2**	**2.7**	**291.0**

(continued)

Table 1.23.5 (continued): Chronic disease mortality rates by Indigenous status and age, persons aged 0–74, by State/Territory, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) ICD–10–AM codes included: Circulatory disease: I05–I09, I10–I15, I20–I25, I26–I28, I30–I52, I60–I69, I70–I79, I80–I89, I95–I99. Cancer: C00–C14, C15–C26, C30–C39, C40–C41, C43–C44, C45–C49, C50, C51–C58, C60–C63, C64–C68, C69–C72, C73–C75, C76–C80, C81–C96, C97, D10–D36. Endocrine/metabolic/nutritional disorders—diabetes: E09–E14, E15–E16, E20–E35, E40–E46, E65–E68, E70–E89. Respiratory diseases: J30, J39, J40–J47, J80–J84, J95–J99. Digestive diseases: K20–K31, K50–K52, K55–K63, K70–K77, K80–K87, K90–K93. Kidney diseases: N00–N08, N10–N16, N17–N19, N25–N29, N30–N39. Nervous system disease: G10–G13, G20–G26, G30–G32, G35–G37, G40–G47, G70–G73, G80–G83, G90–G99.

(b) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(e) These data exclude 3,984 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Age-specific death rates per 100,000 using the midpoint populations for the relevant years. Denominator for 0–4 age-specific death rate is the average of the 0–4 population in 2009, 2010 and 2011.

(j) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(k) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(l) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(m) Totals exclude those aged 75 years and over.

(n) Crude rates calculated per 100,000 estimated resident population for the mid-point year. Crude rates cannot be compared across years or to age-standardised rates.

(o) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 74.

Note: Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.6: Deaths from endocrine, metabolic and nutritional disorders, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f]

	Indigenous					Non-Indigenous			
	Deaths	**Per cent**	**Rate per 100,000[g]**	**95% LCL[h]**	**95% UCL[i]**	**Rate per 100,000[g]**	**Rate ratio[j]**	**Rate difference[k]**	**Rate difference %[l]**
					Males				
Endocrine, metabolic & nutritional disorders (E00–E89)	493	7.8	104.2	79.2	129.1	25.5	4.1*	78.7*	18.1
Diabetes (E10–E14)[m]	*429*	*6.7*	*90.7*	*67.5*	*114.0*	*18.4*	*4.9**	*72.3**	*16.7*
All causes	**6,361**	**100.0**	**1,120.0**	**1,040.0**	**1,200.1**	**686.4**	**1.6***	**433.7***	**100.0**
					Females				
Endocrine, metabolic & nutritional disorders (E00–E89)	561	10.7	102.2	81.0	123.5	20.1	5.1*	82.1*	23.2
Diabetes (E10–E14)[m]	*492*	*9.4*	*89.2*	*69.5*	*108.8*	*13.2*	*6.7**	*75.9**	*21.4*
All causes	**5,251**	**100.0**	**871.9**	**810.2**	**933.6**	**517.7**	**1.7***	**354.2***	**100.0**
					Persons				
Endocrine, metabolic & nutritional disorders (E00–E89)	1,054	9.1	103.3	87.1	119.4	22.7	4.6*	80.6*	20.7
Diabetes (E10–E14)[m]	*921*	*7.9*	*89.9*	*74.9*	*104.9*	*15.6*	*5.8**	*74.3**	*19.1*
All causes	**11,612**	**100.0**	**985.6**	**936.5**	**1,034.8**	**596.7**	**1.7***	**388.9***	**100.0**

(continued)

Table 1.23.6 (continued): Deaths from endocrine, metabolic and nutritional disorders, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(c) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(d) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+. Not stated for age has been pro-rated across each age group.

(h) LCL = lower confidence limit.

(i) UCL = upper confidence limit.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(l) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all causes.

(m) Data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.7: Deaths of Indigenous Australians from endocrine, metabolic and nutritional disorders, by age, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	0–4	**5–9**	**10–14**	**15–19**	**20–24**	**25–29**	**30–34**	**35–39**	**40–44**	**45–49**	**50–54**	**55–59**	**60–64**	**65–69**	**70–74**	**75+**	**Total**[h]
Endocrine, metabolic & nutritional disorders (E00–E89)	3	0	0	1	3	7	10	34	60	73	109	135	147	118	129	223	1,054
Diabetes (E10–E14)[i]	*0*	*0*	*0*	*0*	*4*	*7*	*9*	*23*	*52*	*62*	*94*	*130*	*134*	*104*	*117*	*187*	*921*
All causes	**610**	**58**	**64**	**256**	**318**	**342**	**389**	**627**	**806**	**920**	**1,025**	**1,075**	**1,030**	**954**	**963**	**2,171**	**11,612**

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(e) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(h) Includes deaths for which the age of the deceased was not stated.

(i) Data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.8: Deaths from circulatory diseases, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Indig. deaths	Per cent	Indig. rate per 100,000(h)(i)	95% LCL(j)	95% UCL(k)	Non-Indig. rate per 100,000(h)(i)	Rate ratio(l)	Rate difference(m)	Rate difference %(n)
					Males				
Ischaemic heart disease (I20–I25)	1,041	63.3	193.0	160.0	225.9	111.3	1.7	81.7	66.3
Acute myocardial infarction (I21)(o)	*389*	*23.6*	*76.0*	*54.7*	*97.3*	*49.8*	*1.5*	*26.2*	*21.2*
Cerebrovascular disease (I60–I69)	220	13.4	61.7	40.2	83.3	44.2	1.4	17.5	14.2
Stroke (I60–I64)(o)	*180*	*10.9*	*48.4*	*29.5*	*67.3*	*32.9*	*1.5*	*15.5*	*12.6*
Other heart disease (I26–I52)	245	14.9	46.5	29.9	63.1	34.3	1.4	12.2	9.9
Rheumatic heart disease (I00–I09)	33	2.0	4.2	0.1	8.3	1.0	4.2	3.2	2.6
Hypertension disease (I10–I15)	55	3.3	14.0	4.2	23.9	6.1	2.3	8.0	6.5
Other diseases of the circulatory system (I70–I99)	51	3.1	12.2	3.0	21.4	11.5	1.1	0.7	0.6
Total circulatory diseases (I00–I99)	**1,645**	**100.0**	**331.6**	**286.7**	**276.6**	**208.3**	**1.6**	**123.3**	**100.0**
					Females				
Ischaemic heart disease (I20–I25)	587	44.7	107.6	85.6	129.6	73.9	1.5	33.7	47.1
Acute myocardial infarction (I21)(o)	*249*	*19.0*	*46.6*	*32.0*	*61.1*	*36.9*	*1.3*	*9.7*	*13.6*
Cerebrovascular disease (I60–I69)	281	21.4	60.2	42.7	77.8	51.0	1.2	9.2	12.9
Stroke (I60–I64)(o)	*231*	*17.6*	*47.8*	*32.4*	*63.3*	*38.0*	*1.3*	*9.8*	*13.7*
Other heart disease (I26–I52)	264	20.1	46.5	31.9	61.1	32.2	1.4	14.3	20.0
Rheumatic heart disease (I00–I09)	63	4.8	7.1	2.5	11.7	1.6	4.5	5.5	7.7
Hypertension disease (I10–I15)	65	5.0	13.8	5.5	22.0	8.7	1.6	5.1	7.1
Other diseases of the circulatory system (I70–I99)	53	4.0	11.9	4.0	19.7	8.2	1.5	3.7	5.2
Total circulatory diseases (I00–I99)	**1,313**	**100.0**	**247.1**	**213.1**	**281.1**	**175.6**	**1.4**	**71.5**	**100.0**
					Persons				
Ischaemic heart disease (I20–I25)	1,628	55.0	146.2	127.3	165.0	91.4	1.6	54.8	58.4
Acute myocardial infarction (I21)(o)	*638*	*21.6*	*59.7*	*47.4*	*71.9*	*43.0*	*1.4*	*16.7*	*17.8*
Cerebrovascular disease (I60–I69)	501	16.9	60.9	47.3	74.4	48.4	1.3	12.5	13.3
Stroke (I60–I64)(o)	*411*	*13.9*	*48.0*	*36.1*	*60.0*	*36.0*	*1.3*	*12.0*	*12.8*
Other heart disease (I26–I52)	509	17.2	46.9	35.9	57.9	33.4	1.4	13.5	14.4
Rheumatic heart disease (I00–I09)	96	3.2	5.7	2.6	8.9	1.3	4.3	4.4	4.7
Hypertension disease (I10–I15)	120	4.1	13.9	7.6	20.2	7.7	1.8	6.3	6.7
Other diseases of the circulatory system (I70–I99)	104	3.5	12.1	6.1	18.1	9.7	1.3	2.4	2.6
Total circulatory diseases (I00–I99)	**2,958**	**100.0**	**285.7**	**258.3**	**313.0**	**191.8**	**1.5**	**93.8**	**100.0**

(continued)

Table 1.23.8 (continued): Deaths from circulatory diseases, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(d) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(e) These data exclude 1,732 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+. Not stated for age has been pro-rated across each age group.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) LCL = lower confidence limit.

(k) UCL = upper confidence limit.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all circulatory diseases.

(o) Data presented for acute myocardial infarction are a subset of data presented for ischaemic heart disease; data presented for stroke are a subset of data presented for cerebrovascular disease.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.9: Deaths of Indigenous Australians from circulatory diseases, by age, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)]

	Under 1	1–4	*0–4*	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total[(h)]
Ischaemic heart disease (I20–I25)	0	0	*0*	0	6	61	238	393	342	272	316	1,628
Acute myocardial infarction (I21)[(i)]	*0*	*0*	*0*	*0*	*4*	*26*	*94*	*130*	*129*	*118*	*138*	*638*
Cerebrovascular disease (I60–I69)	2	3	*2*	0	5	8	38	71	89	82	206	501
Stroke (I60–I64)[(i)]	*0*	*4*	*3*	*0*	*5*	*8*	*37*	*61*	*79*	*64*	*156*	*411*
Other heart disease (I26–I52)	6	6	*12*	1	17	34	81	77	84	85	117	509
Rheumatic heart disease (I00–I09)	4	3	*5*	2	8	16	15	19	15	12	1	96
Hypertension disease (I10–I15)	0	0	*0*	0	0	0	15	15	21	30	39	120
Other diseases of the circulatory system (I70–I99)	4	0	2	0	0	3	8	21	14	19	39	104
Total circulatory diseases (I00–I99)	**9**	**11**	***20***	**2**	**36**	**121**	**395**	**596**	**565**	**500**	**721**	**2,958**

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(c) Data are presented in 5-year groupings because of small numbers each year.

(d) These data exclude 1,732 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(h) Includes deaths for which the age of the deceased was not stated.

(i) Data presented for acute myocardial infarction are a subset of data presented for ischaemic heart disease; data presented for stroke are a subset of data presented for cerebrovascular disease.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.10: Deaths from external causes (injury and poisoning), by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)]

	Indig. deaths	Per cent	Indigenous rate per 100,000[(h)(i)]	95% LCL[(j)]	95% UCL[(k)]	Non-Indigenous rate per 100,000[(h)(i)]	Rate ratio[(l)]	Rate difference[(m)]	Rate difference %[(n)]
					Males				
Intentional self-harm (X60–X84, Y870)[(o)]	408	34.2	30.4	22.7	38.0	16.2	1.9	14.1	28.7
Accidents									
Transport accidents (V01–V99)	305	25.6	23.5	16.6	30.5	10.5	2.3	13.1	26.6
Accidental drowning or accidental threats to breathing (W65–W84)	56	4.7	5.2	0.6	9.9	2.7	1.9	2.5	5.0
Accidental poisoning by and exposure to noxious substances (X40–X49)	125	10.5	10.5	6.3	14.8	5.9	1.8	4.6	9.3
Exposure to electric current/smoke/fire/ animals/nature (W85–W99,X00–X39)	31	2.6	3.0	–0.2	6.2	1.0	3.1	2.0	4.1
Accidental falls (W00–W19)	49	4.1	8.3	1.7	15.0	6.7	1.2	1.6	3.2
Exposure to inanimate mechanical forces (W20–W49)	15	1.3	n.p.	n.p.	n.p.	0.7	n.p.	n.p.	n.p.
Other external causes of accidental injury (W50–W64 X50–X59)	17	1.4	n.p.	n.p.	n.p.	3.6	n.p.	n.p.	n.p.
Assault (X85–Y09, Y87.1)	114	9.6	9.5	5.3	13.7	1.4	6.9	8.1	16.5
Complications of medical or surgical care (Y40–Y84)	10	0.8	n.p.	n.p.	n.p.	1.2	n.p.	n.p.	n.p.
Other external causes[(p)]	63	5.3	5.7	1.9	9.5	2.8	2.1	3.0	6.0
Total external causes (V01–Y98)	**1,193**	**100.0**	**101.9**	**85.7**	**118.1**	**52.7**	**1.9**	**49.2**	**100.0**

(continued)

Table 1.23.10 (continued): Deaths from external causes (injury and poisoning), by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g]

	Indig. deaths	Per cent	Indigenous rate per 100,000[h][i]	95% LCL[j]	95% UCL[k]	Non-Indigenous rate per 100,000[h][i]	Rate ratio[l]	Rate difference[m]	Rate difference %[n]
					Females				
Intentional self-harm (X60–X84, Y870)[o]	153	26.7	10.5	6.4	14.5	4.8	2.2	5.6	21.8
Accidents									
Transport accidents (V01–V99)	147	25.7	10.8	6.5	15.1	3.4	3.2	7.4	28.6
Accidental drowning or accidental threats to breathing (W65–W84)	22	3.8	1.3	–0.4	3.1	1.1	1.2	0.2	0.9
Accidental poisoning by and exposure to noxious substances (X40–X49)	71	12.4	6.1	2.6	9.6	2.6	2.4	3.5	13.6
Exposure to electric current/smoke/fire/ animals/nature (W85–W99,X00–X39)	15	2.6	n.p.	n.p.	n.p.	0.4	n.p.	n.p.	n.p.
Accidental falls (W00–W19)	21	3.7	4.2	–0.3	8.8	5.0	0.8	–0.8	–3.2
Exposure to inanimate mechanical forces (W20–W49)	5	0.9	n.p.	n.p.	n.p.	0.1	n.p.	n.p.	n.p.
Other external causes of accidental injury (W50–W64 X50–X59)	24	4.2	4.7	–0.2	9.7	3.7	1.3	1.0	3.9
Assault (X85–Y09, Y87.1)	75	13.1	5.8	2.8	8.8	0.7	8.2	5.1	19.6
Complications of medical or surgical care (Y40–Y84)	10	1.7	n.p.	n.p.	n.p.	0.9	n.p.	n.p.	n.p.
Other external causes[p]	30	5.2	2.6	0.1	5.1	1.2	2.2	1.5	5.6
Total external causes (V01–Y98)	**573**	**100.0**	**49.8**	**38.6**	**61.1**	**24.0**	**2.1**	**25.9**	**100.0**

(continued)

Table 1.23.10 (continued): Deaths from external causes (injury and poisoning), by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)]

	Indig. deaths	Per cent	Indigenous rate per 100,000[(h)(i)]	95% LCL[(j)]	95% UCL[(k)]	Non-Indigenous rate per 100,000[(h)(i)]	Rate ratio[(l)]	Rate difference[(m)]	Rate difference %[(n)]
					Persons				
Intentional self-harm (X60–X84, Y870)[(o)]	561	31.8	20.1	15.9	24.3	10.4	1.9	9.7	26.1
Accidents									
Transport accidents (V01–V99)	452	25.6	17.0	13.0	20.9	6.9	2.5	10.1	27.3
Accidental drowning or accidental threats to breathing (W65–W84)	78	4.4	3.1	0.9	5.3	1.9	1.6	1.2	3.3
Accidental poisoning by and exposure to noxious substances (X40–X49)	196	11.1	8.3	5.5	11.1	4.3	1.9	4.0	10.9
Exposure to electric current/smoke/fire/ animals/nature (W85–W99,X00–X39)	46	2.6	2.1	0.3	3.8	0.7	3.1	1.4	3.8
Accidental falls (W00–W19)	70	4.0	6.1	2.2	10.0	5.9	1.0	0.3	0.7
Exposure to inanimate mechanical forces (W20–W49)	20	1.1	0.8	0.0	1.6	0.4	2.0	0.4	1.1
Other external causes of accidental injury (W50–W64 X50–X59)	41	2.3	3.8	0.5	7.1	3.7	1.0	0.1	0.2
Assault (X85–Y09, Y87.1)	189	10.7	7.6	5.0	10.1	1.0	7.3	6.5	17.7
Complications of medical or surgical care (Y40–Y84)	20	1.1	2.2	–0.3	4.7	1.0	2.1	1.2	3.1
Other external causes[(p)]	93	5.3	4.1	1.9	6.3	2.0	2.1	2.2	5.8
Total external causes (V01–Y98)	**1,766**	**100.0**	**75.2**	**65.5**	**84.8**	**38.2**	**2.0**	**37.0**	**100.0**

(continued)

Table 1.23.10 (continued): Deaths from external causes (injury and poisoning), by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(d) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(e) These data exclude 782 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+. Not stated for age has been pro-rated across each age group.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) LCL = lower confidence limit.

(k) UCL = upper confidence limit.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all circulatory diseases.

(o) Care needs to be taken in interpreting figures relating to suicide. See Cause of Death, Australia, 2012 (cat. No. 3303.0) Explanatory Notes 92–94 for further information.

(p) All other external causes of death not presented elsewhere in this table.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.11: Deaths of Indigenous Australians from external causes (injury and poisoning), by age, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)

	0–4	5–9	10–14	5–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75+	Total(i)
Intentional self-harm (X60–X84, Y870)(j)	n.p.	n.p.	n.p.	14	105	117	86	71	57	43	33	14	9	1	2	4	1	561
Accidents																		
Transport accidents (V01–V99)	25	13	14	. .	69	59	48	54	47	37	26	26	14	9	6	2	1	452
Accidental drowning or accidental threats to breathing (W65–W84)	30	4	5	. .	3	1	5	3	1	1	1	5	3	1	1	2	1	78
Accidental poisoning by and exposure to noxious substances (X40–X49)	3	0	1	. .	1	19	26	33	42	25	22	12	5	1	0	2	3	196
Assault (X85–Y09, Y87.1)	6	2	3	. .	10	23	27	22	22	32	25	8	1	7	0	2	0	189
Other external causes(k)	17	2	4	. .	14	15	27	20	27	30	30	15	16	13	10	10	38	290
Total external causes (V01–Y98)	**79**	**21**	**40**	**. .**	**205**	**236**	**219**	**201**	**199**	**171**	**139**	**80**	**50**	**37**	**20**	**17**	**50**	**1,766**

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Data are presented in 5-year groupings because of small numbers each year.

(d) Cells with small values have been randomly assigned to protect the confidentiality of individuals, so some totals will not equal the sum of their components. Cells with a zero value have not been affected.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(f) These data exclude 782 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Total includes deaths where the age of the deceased was not stated.

(j) Care needs to be taken in interpreting figures relating to suicide. See Cause of Death, Australia, 2012 (cat. No. 3303.0) Explanatory Notes 92–94 for further information.

(k) All other external causes of death not presented elsewhere in this table.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.12: Deaths from neoplasms (cancer), by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g]

Site of neoplasm	Indig. deaths	Per cent	Indigenous rate per 100,000[h][i]	95% LCL[j]	95% UCL[k]	Non-Indigenous rate per 100,000[h][i]	Rate ratio[l]	Rate difference[m]	Rate difference %[n]
					Males				
Digestive organs (C15–C26)	380	31.5	73.3	53.5	93.1	60.0	1.2	13.4	36.6
Bowel cancer(C18–C20)[o]	*66*	*5.5*	*13.6*	*4.8*	*22.5*	*19.7*	*0.7*	*–6.1*	*–16.7*
Respiratory and inthrathoracic organs (C30–C39)	353	29.3	81.0	58.7	103.3	47.3	1.7	33.7	91.9
Bronchus & lung (C34)[o]	*322*	*26.7*	*75.3*	*53.6*	*97.0*	*45.1*	*1.7*	*30.2*	*82.5*
Ill-defined, secondary & unspecified site (C76–C80)	83	6.9	18.1	7.7	28.4	11.8	1.5	6.3	17.1
Malignant neoplasm, without specification of site (C80)[o]	*74*	*6.1*	*16.0*	*6.3*	*25.6*	*11.0*	*1.5*	*5.0*	*13.7*
Lymphoid, haematopoietic and related tissue (C81–C96)	63	5.2	14.9	5.1	24.8	20.6	0.7	–5.7	–15.6
Female genital organs (C51–C58)	. .	. .	. .	. .	. .	. .	. .	. .	. .
Cervix (C53)[o]	. .	. .	. .	. .	. .	. .	. .	. .	. .
Lip, oral cavity and pharynx (C00–C14)	110	9.1	18.1	9.1	27.0	4.6	3.9	13.4	36.7
Breast (C50)	0	0.0	n.p.	n.p.	n.p.	0.2	n.p.	n.p.	n.p.
Malignant neoplasms of urinary tract (C64–C68)	39	3.2	8.3	1.4	15.3	12.3	0.7	–4.0	–10.9
Male genital organs (C60–C63)	76	6.3	24.2	10.5	37.9	30.4	0.8	–6.2	–17.0
Other malignant neoplasms[p]	80	6.6	16.7	6.4	27.0	30.5	0.5	–13.8	–37.7
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	**1,189**	**98.7**	**256.3**	**217.2**	**295.4**	**221.0**	**1.2**	**35.2**	**96.6**
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	16	1.3	n.p.	n.p.	n.p.	2.1	n.p.	n.p.	n.p.
Total neoplasms	**1,205**	**100.0**	**259.6**	**220.2**	**299.0**	**223.1**	**1.2**	**36.5**	**100.0**

(continued)

Table 1.23.12 (continued): Deaths from neoplasms (cancer), by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g]

Site of neoplasm	Indig. deaths	Per cent	Indigenous rate per 100,000[h][i]	95% LCL[j]	95% UCL[k]	Non-Indigenous rate per 100,000[h][i]	Rate ratio[l]	Rate difference[m]	Rate difference %[n]
Females									
Digestive organs (C15–C26)	297	26.2	53.8	38.6	69.1	37.0	1.5	16.9	30.6
Bowel cancer(C18–C20)[o]	*67*	*5.9*	*11.7*	*4.7*	*18.7*	*13.1*	*0.9*	*–1.4*	*–2.6*
Respiratory and inthrathoracic organs (C30–C39)	251	22.1	43.3	30.0	56.7	24.5	1.8	18.8	34.2
Bronchus & lung (C34)[o]	*247*	*21.8*	*42.5*	*29.3*	*55.6*	*24.0*	*1.8*	*18.5*	*33.4*
Ill-defined, secondary & unspecified site (C76–C80)	67	5.9	12.8	5.2	20.3	9.0	1.4	3.7	6.7
Malignant neoplasm, without specification of site (C80)[o]	*61*	*5.4*	*11.4*	*4.3*	*18.5*	*8.3*	*1.4*	*3.1*	*5.7*
Lymphoid, haematopoietic and related tissue (C81–C96)	68	6.0	13.0	5.2	20.8	12.5	1.0	0.5	0.9
Female genital organs (C51–C58)	133	11.7	20.2	11.5	28.9	12.6	1.6	7.6	13.8
Cervix (C53)[o]	*53*	*4.7*	*6.5*	*2.1*	*10.8*	*1.9*	*3.4*	*4.6*	*8.3*
Lip, oral cavity and pharynx (C00–C14)	24	2.1	4.1	–0.1	8.4	1.6	2.7	2.6	4.7
Breast (C50)	150	13.2	24.2	14.3	34.1	21.8	1.1	2.4	4.4
Malignant neoplasms of urinary tract (C64–C68)	30	2.6	5.8	0.6	10.9	5.2	1.1	0.5	1.0
Male genital organs (C60–C63)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other malignant neoplasms[p]	83	7.3	13.9	6.1	21.7	14.2	1.0	–0.3	–0.6
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	**1,111**	**97.9**	**193.0**	**164.4**	**221.6**	**140.0**	**1.4**	**53.0**	**96.1**
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	24	2.1	4.0	0.0	8.1	1.9	2.1	2.1	3.9
Total neoplasms	**1,135**	**100.0**	**197.0**	**168.1**	**225.9**	**141.9**	**1.4**	**55.2**	**100.0**

(continued)

Table 1.23.12 (continued): Deaths from neoplasms (cancer), by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)]

Site of neoplasm	Indig. deaths	Per cent	Indigenous rate per 100,000[(h)(i)]	95% LCL[(j)]	95% UCL[(k)]	Non-Indigenous rate per 100,000[(h)(i)]	Rate ratio[(l)]	Rate difference[(m)]	Rate difference %[(n)]
					Persons				
Digestive organs (C15–C26)	677	28.9	62.9	50.8	75.1	47.7	1.3	15.2	33.0
Bowel cancer(C18–C20)[(o)]	*133*	*5.7*	*12.5*	*7.1*	*18.0*	*16.2*	*0.8*	*–3.6*	*–7.8*
Respiratory and inthrathoracic organs (C30–C39)	604	25.8	59.4	47.4	71.5	34.8	1.7	24.7	53.3
Bronchus & lung (C34)[(o)]	*569*	*24.3*	*56.4*	*44.6*	*68.1*	*33.5*	*1.7*	*22.9*	*49.5*
Ill-defined, secondary & unspecified site (C76–C80)	150	6.4	15.1	9.0	21.3	10.3	1.5	4.8	10.4
Malignant neoplasm, without specification of site (C80)[(o)]	*135*	*5.8*	*13.5*	*7.7*	*19.2*	*9.5*	*1.4*	*3.9*	*8.5*
Lymphoid, haematopoietic and related tissue (C81–C96)	131	5.6	13.8	7.7	20.0	16.2	0.9	–2.3	–5.0
Female genital organs (C51–C58)	133	5.7	11.1	6.2	16.1	6.7	1.7	4.4	9.6
Cervix (C53)[(o)]	*53*	*2.3*	*3.5*	*1.1*	*5.8*	*1.0*	*3.5*	*2.5*	*5.4*
Lip, oral cavity and pharynx (C00–C14)	134	5.7	10.5	5.9	15.2	3.0	3.5	7.5	16.3
Breast (C50)	150	6.4	13.5	7.8	19.2	11.6	1.2	1.9	4.1
Malignant neoplasms of urinary tract (C64–C68)	69	2.9	6.9	2.7	11.1	8.4	0.8	–1.5	–3.2
Male genital organs (C60–C63)	76	3.2	10.0	4.5	15.6	13.2	0.8	–3.2	–6.9
Other malignant neoplasms[(p)]	163	7.0	15.1	8.8	21.3	21.6	0.7	–6.5	–14.1
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	**2,300**	**98.3**	**220.4**	**197.2**	**243.7**	**175.9**	**1.3**	**44.5**	**96.3**
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	40	1.7	3.7	0.7	6.7	2.0	1.8	1.7	3.7
Total neoplasms	**2,340**	**100.0**	**224.1**	**200.6**	**247.6**	**177.9**	**1.3**	**46.2**	**100.0**

(continued)

Table 1.23.12 (continued): Deaths from neoplasms (cancer), by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(d) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(e) These data exclude 1,232 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+. Not stated for age has been pro-rated across each age group.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) LCL = lower confidence limit.

(k) UCL = upper confidence limit.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all circulatory diseases.

(o) Data presented for bowel cancer are a subset for all cancers of the digestive organs; data presented for bronchus & lung cancer are a subset of data presented for all respiratory and inthrathoracic organs; data presented for cervix cancer are a subset of data presented for all cancers of the female genital organs in this table.

(p) Includes neoplasms of bone and articular cartilage (C40-C41); melanoma & other neoplasms of skin (C43-C44); neoplasms of mesothelial and soft tissue (C45-C49); neoplasms of eye, brain and other parts of central nervous system (C69-C72); neoplasms of thyroid and other endocrine glands (C73-C75); C9 Malignant neoplasms of independent (primary) multiple sites (C97).

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.13: Deaths of Indigenous Australians from neoplasms (cancer), by age, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Under 1	1–4	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total(j)
						Number						
Digestive organs (C15–C26)	0	0	0	0	4	13	39	117	215	177	112	677
Bowel cancer(C18–C20)(h)	*0*	*0*	*0*	*0*	*4*	*5*	*11*	*15*	*37*	*40*	*22*	*133*
Respiratory and inthrathoracic organs (C30–C39)	0	0	0	0	0	3	29	107	175	181	111	604
Bronchus & lung (C34)(h)	*0*	*0*	*0*	*0*	*0*	*1*	*27*	*98*	*165*	*170*	*108*	*569*
Ill-defined, secondary & unspecified site (C76–C80)	4	0	2	0	1	4	6	19	43	46	30	150
Unspecified site (C80)	*2*	*0*	*3*	*0*	*2*	*3*	*3*	*18*	*40*	*41*	*26*	*135*
Lymphoid, haematopoietic and related tissue (C81–C96)	0	1	2	4	3	2	13	16	23	36	33	131
Female genital organs (C51–C58)	0	0	0	0	3	7	20	27	31	30	17	133
Cervix (C53)(h)	*0*	*0*	*0*	*0*	*2*	*3*	*14*	*10*	*13*	*9*	*4*	*53*
Lip, oral cavity and pharynx (C00–C14)	0	0	0	0	0	3	16	34	46	23	13	134
Breast (C50)	0	0	0	0	0	3	24	34	33	27	29	150
Malignant neoplasms of urinary tract (C64–C68)	0	0	0	0	1	3	1	14	13	23	14	69
Male genital organs (C60–C63)	0	0	0	0	0	4	2	4	13	25	33	76
Other malignant neoplasms(i)	0	0	0	8	10	3	20	26	31	34	43	176
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	**2**	**3**	**3**	**10**	**21**	**40**	**171**	**396**	**623**	**602**	**435**	**2300**
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	3	1	2	0	4	4	1	8	5	11	8	40
Total neoplasms (C00–D48)	**3**	**2**	**3**	**10**	**22**	**41**	**175**	**404**	**628**	**613**	**443**	**2340**

(continued)

Table 1.23.13 (continued): Deaths of Indigenous Australians from neoplasms (cancer), by age, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Under 1	1–4	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total[j]
Rate per 100,000 population												
Digestive organs (C15–C26)	—	—	—	—	n.p.	3.3	10.8	43.1	140.6	273.5	383.2	23.3
Bowel cancer(C18–C20)[h]	—	—	—	—	*n.p.*	*1.3*	*3.0*	*5.5*	*24.2*	*61.8*	*75.3*	*4.6*
Respiratory and inthrathoracic organs (C30–C39)	—	—	—	—	—	n.p.	8.0	39.4	114.4	279.7	379.7	20.8
Bronchus & lung (C34)[h]	—	—	—	—	—	*n.p.*	*7.5*	*36.1*	*107.9*	*262.7*	*369.5*	*19.6*
Ill-defined, secondary & unspecified site (C76–C80)	n.p.	—	n.p.	—	n.p.	n.p.	1.7	7.0	28.1	71.1	102.6	5.2
Unspecified site (C80)	*n.p.*	—	*n.p.*	—	*n.p.*	*n.p.*	*n.p.*	*6.6*	*26.2*	*63.4*	*88.9*	*4.6*
Lymphoid, haematopoietic and related tissue (C81–C96)	—	n.p.	n.p.	n.p.	n.p.	n.p.	3.6	5.9	15.0	55.6	112.9	4.5
Female genital organs (C51–C58)	—	—	—	—	n.p.	1.8	5.5	9.9	20.3	46.4	58.2	4.6
Cervix (C53)[h]	—	—	—	—	*n.p.*	*n.p.*	*3.9*	*3.7*	*8.5*	*13.9*	*n.p.*	*1.8*
Lip, oral cavity and pharynx (C00–C14)	—	—	—	—	—	n.p.	4.4	12.5	30.1	35.5	44.5	4.6
Breast (C50)	—	—	—	—	—	n.p.	6.6	12.5	21.6	41.7	99.2	5.2
Malignant neoplasms of urinary tract (C64–C68)	—	—	—	—	n.p.	n.p.	n.p.	5.2	8.5	35.5	47.9	2.4
Male genital organs (C60–C63)	—	—	—	—	—	n.p.	n.p.	n.p.	8.5	38.6	112.9	2.6
Other malignant neoplasms[i]	—	—	—	1.2	1.8	n.p.	5.5	9.6	20.3	52.5	147.1	6.1
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	**n.p.**	**n.p.**	**n.p.**	**1.4**	**3.7**	**10.2**	**47.4**	**145.9**	**407.4**	**930.3**	**1488.2**	**79.2**
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	n.p.	n.p.	n.p.	—	n.p.	n.p.	n.p.	2.9	3.3	17.0	27.4	1.4
Total neoplasms (C00–D48)	**n.p.**	**n.p.**	**n.p.**	**1.4**	**3.9**	**10.4**	**48.5**	**148.8**	**410.7**	**947.3**	**1515.6**	**80.6**

(continued)

Table 1.23.13 (continued): Deaths of Indigenous Australians from neoplasms (cancer), by age, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers of deaths each year. For rate calculations, the numerator is the average of the total number of deaths. The denominator varies according to the age group: for those under the age of one, the denominator is live births data for the mid-point year (2010); for ages 1–4 the denominator is the rolling average of the three mid-point years (2009–2011); for all other age groups, the denominator is the mid-point of the population for the time period (2010).

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(d) These data exclude 1,257 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(g) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(h) Data presented for bowel cancer are a subset for all cancers of the digestive organs; data presented for bronchus & lung cancer are a subset of data presented for all respiratory and inthrathoracic organs; data presented for cervix cancer are a subset of data presented for all cancers of the female genital organs in this table.

(i) Includes neoplasms of bone and articular cartilage (C40–C41); melanoma & other neoplasms of skin (C43–C44); neoplasms of mesothelial and soft tissue (C45–C49); neoplasms of eye, brain and other parts of central nervous system (C69–C72); neoplasms of thyroid and other endocrine glands (C73–C75); C9 Malignant neoplasms of independent (primary) multiple sites (C97); D45 Polycythaemia vera; D46 myelodysplastic syndromes; D47.1 Chronic myeloproliferative disease; D47.3 Essential (haemorrhagic) thrombocythaemia.

(j) Total includes deaths where the age of the deceased was not stated.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.14: Deaths from respiratory diseases, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Indig. deaths	Per cent	Indigenous rate per 100,000[h][i]	95% LCL[j]	95% UCL[k]	Non-Indigenous rate per 100,000[h][i]	Rate ratio[l]	Rate difference[m]	Rate difference %[n]
					Males				
Chronic lower respiratory diseases (J40–J47)	280	61.3	71.4	49.2	93.6	31.3	2.2	35.2	66.9
COPD (J40–J44)[o]	*231*	*50.5*	*64.4*	*42.9*	*85.8*	*29.2*	*2.1*	*1.4*	*2.6*
Asthma (J45–J46)[o]	*14*	*3.1*	*n.p.*	*n.p.*	*n.p.*	*1.3*	*n.p.*	*n.p.*	*n.p.*
Pneumonia and influenza (J09–J18)	91	19.9	19.6	8.2	31.0	8.8	2.2	10.7	20.4
Other respiratory disease (J00–06, J20–39, J60–99)	86	18.8	22.1	9.5	34.7	20.0	1.1	2.1	4.0
Total respiratory diseases (J00–J99)	**457**	**100.0**	**112.8**	**84.8**	**140.7**	**60.1**	**1.9**	**52.6**	**100.0**
					Females				
Chronic lower respiratory diseases (J40–J47)	284	65.9	56.7	40.4	72.9	21.2	2.8	32.1	75.3
COPD (J40–J44)[o]	*240*	55.7	*49.9*	*34.6*	*65.2*	*17.8*	*1.7*	*1.3*	*3.0*
Asthma (J45–J46)[o]	*21*	4.9	*3.2*	*0.0*	*6.4*	*1.9*	*2.7*	*35.4*	*83.1*
Pneumonia and influenza (J09–J18)	76	17.6	12.3	4.9	19.8	8.7	1.4	3.6	8.5
Other respiratory disease (J00–06, J20–39, J60–99)	71	16.5	15.9	6.9	24.9	11.9	1.3	4.0	9.5
Total respiratory diseases (J00–J99)	**431**	**100.0**	**84.5**	**64.5**	**104.5**	**41.8**	**2.0**	**42.7**	**100.0**
					Persons				
Chronic lower respiratory diseases (J40–J47)	564	63.5	62.8	49.6	76.0	25.6	2.5	33.1	71.3
COPD (J40–J44)[o]	*471*	53.0	*55.8*	*43.3*	*68.4*	*22.7*	*1.8*	*1.4*	*3.0*
Asthma (J45–J46)[o]	*35*	3.9	*3.0*	*0.4*	*5.7*	*1.6*	*2.5*	*37.2*	*80.1*
Pneumonia and influenza (J09–J18)	167	18.8	15.4	9.0	21.8	8.8	1.8	6.6	14.3
Other respiratory disease (J00–06, J20–39, J60–99)	157	17.7	18.1	10.7	25.5	15.4	1.2	2.7	5.8
Total respiratory diseases (J00–J99)	**888**	**100.0**	**96.2**	**79.8**	**112.6**	**49.8**	**1.9**	**46.4**	**100.0**

(continued)

Table 1.23.14 (continued): Deaths from respiratory diseases, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(d) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(e) These data exclude 461 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) LCL = lower confidence limit.

(k) UCL = upper confidence limit.

(l) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(m) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(n) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all circulatory diseases.

(o) Data presented for COPD and asthma are a subset of data presented for all chronic lower respiratory diseases.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.15: Deaths of Indigenous Australians from respiratory diseases, by age, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Under 1	1–4	0–4	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+	Total(j)
Chronic lower respiratory diseases (J40–J47)	3	4	3	1	2	11	26	67	128	165	158	564
COPD (J40–J44)(k)	*3*	*2*	*1*	*0*	*0*	*4*	*7*	*52*	*112*	*150*	*146*	*471*
Asthma (J45–J46)(k)	*4*	*0*	*2*	*2*	*4*	*3*	*7*	*2*	*6*	*5*	*6*	*35*
Pneumonia and influenza (J09–J18)	12	3	14	1	4	9	26	30	18	25	42	167
Other respiratory disease (J00–06, J20–39, J60–99)	6	4	10	1	2	5	8	19	23	24	62	157
Total respiratory diseases (J00–J99)	**20**	**8**	**28**	**6**	**8**	**25**	**60**	**116**	**169**	**214**	**262**	**888**

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Cells with small values have been randomly assigned to protect the confidentiality of individuals, so some totals will not equal the sum of their components. Cells with a zero value have not been affected.

(d) Data are presented in under 1 year, 1 to 4 years and 10-year groupings from age 5 years because of small numbers each year.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(f) These data exclude 461 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(g) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(h) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) Total includes deaths where the age of the deceased was not stated.

(k) Data presented for COPD and asthma are a subset of data presented for all chronic lower respiratory diseases.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.16: Deaths from diseases of the genitourinary system, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)]

	Indig. deaths	Per cent	Indigenous rate per 100,000[(h)]	95% LCL[(i)]	95% UCL[(j)]	Non-Indigenous rate per 100,000[(h)]	Rate ratio[(k)]	Rate difference[(l)]	Rate difference %[(m)]
					Males				
Renal failure (N17–N19)	113	74.3	25.8	12.9	38.7	11.1	2.3	14.7	76.9
Other diseases of the urinary system (N30–N39)	13	8.6	n.p.	n.p.	n.p.	1.9	n.p.	n.p.	n.p.
Renal tubulo-intestinal diseases (N10–N16)	8	5.3	n.p.	n.p.	n.p.	0.4	n.p.	n.p.	n.p.
Glomerular disease (N00–N08)	4	n.p.	n.p.	n.p.	n.p.	0.4	n.p.	n.p.	n.p.
Other diseases of the genitourinary system[(n)]	17	11.2	n.p.	n.p.	n.p.	1.3	n.p.	n.p.	n.p.
Total genitourinary diseases (N00–N99)	**152**	**100.0**	**34.1**	**19.3**	**48.9**	**15.0**	**2.3**	**19.1**	**100.0**
					Females				
Renal failure (N17–N19)	139	74.3	27.1	15.8	38.4	9.2	3.0	17.9	75.2
Other diseases of the urinary system (N30–N39)	28	15.0	6.3	0.6	12.1	2.4	2.6	3.9	16.5
Renal tubulo-intestinal diseases (N10–N16)	3	n.p.	n.p.	n.p.	n.p.	0.5	n.p.	n.p.	n.p.
Glomerular disease (N00–N08)	8	4.3	n.p.	n.p.	n.p.	0.3	n.p.	n.p.	n.p.
Other diseases of the genitourinary system[(n)]	8	4.3	n.p.	n.p.	n.p.	0.5	n.p.	n.p.	n.p.
Total genitourinary diseases (N00–N99)	**187**	**100.0**	**36.7**	**23.5**	**49.9**	**12.9**	**2.9**	**23.8**	**100.0**
					Persons				
Renal failure (N17–N19)	252	74.3	26.6	18.1	35.1	10.0	2.7	16.6	75.7
Other diseases of the urinary system (N30–N39)	41	12.1	4.9	1.1	8.8	2.2	2.3	2.8	12.6
Renal tubulo-intestinal diseases (N10–N16)	12	3.5	n.p.	n.p.	n.p.	0.4	n.p.	n.p.	n.p.
Glomerular disease (N00–N08)	9	2.7	n.p.	n.p.	n.p.	0.3	n.p.	n.p.	n.p.
Other diseases of the genitourinary system[(n)]	25	7.4	2.5	–0.1	5.1	0.8	3.0	1.7	7.6
Total genitourinary diseases (N00–N99)	**339**	**100.0**	**35.7**	**25.8**	**45.6**	**13.8**	**2.6**	**21.9**	**100.0**

(continued)

Table 1.23.16 (continued): Deaths from diseases of the genitourinary system, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) These data exclude 105 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(i) LCL = lower confidence limit.

(j) UCL = upper confidence limit.

(k) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(l) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(m) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all genitourinary diseases.

(n) Includes: urolithiasis; other disorders of the kidney & urether; disease of male genital organs; disorders of breast; inflammatory disorders of the female pelvic organs; non-inflammatory disorders of the female genital tract; other disorders of the genitourinary tract.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.17: Deaths of Indigenous Australians from diseases of the genitourinary system, by age, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g]

	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	65–69	70–74	75+	Total[h]
Renal failure (N17–N19)	3	0	0	2	0	3	4	9	14	19	22	33	26	25	30	69	252
Other diseases of the genitourinary system[i]	0	0	1	0	3	1	0	2	5	7	10	9	8	7	9	25	87
Total genitourinary diseases (N00–N99)	**2**	**0**	**2**	**3**	**4**	**2**	**2**	**12**	**19**	**26**	**32**	**42**	**34**	**32**	**39**	**94**	**339**

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(d) These data exclude 105 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Total includes deaths where the age of the deceased was not stated.

(i) Includes: other diseases of the urinary system (N30–N39); renal tubulo-intestinal diseases (N10–N16); glomerular disease (N00–N08); urolithiasis (N20–N23); other disorders of the kidney and urether (N25–N29); disease of male genital organs (N40–N51); disorders of breast (N60–N64); inflammatory diseases of female pelvic organs ((N70–N77), non-inflammatory disorders of the female genital tract (N80–N98); other disorders of the genitourinary tract (N99).

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.18: Age-standardised mortality rates, rate ratios and rate differences, circulatory diseases, NSW, Qld, WA, SA and NT, 1998–2012[(a)(b)(c)(d)(e)(f)(g)]

Year		Indigenous rate per 100,000[(h)]	Non-Indigenous rate per 100,000[(h)]	Rate ratio[(i)]	Rate difference[(j)]
1998		461.7	292.3	1.6	169.4
1999		419.9	277.2	1.5	142.7
2000		398.5	265.6	1.5	132.9
2001		386.5	250.8	1.5	135.7
2002		388.8	248.0	1.6	140.8
2003		351.6	237.9	1.5	113.7
2004		346.6	230.8	1.5	115.8
2005		318.8	215.6	1.5	103.2
2006		318.6	211.8	1.5	106.8
2007		339.9	209.9	1.6	130.0
2008		291.5	213.6	1.4	77.9
2009		292.1	194.9	1.5	97.2
2010		283.1	188.8	1.5	94.3
2011		273.1	186.9	1.5	86.2
2012		282.9	174.6	1.6	108.3
Long term 1998–2012	**Annual change[(k)]**	–12.3*	–7.7*	n.a.	–4.6*
	% change over period[(l)]	–39.9*	–38.4*	n.a.	–42.9*
Medium term 2001–2012	**Annual change[(k)]**	–10.1*	–6.7*	n.a.	–3.4*
	% change over period[(l)]	–29.5*	–29.4*	n.a.	–29.7*
Medium term 1998–2006	**Annual change[(k)]**	–16.9*	–9.8*	n.a.	–7.1*
	% change over period[(l)]	–30.4*	–27.4*	n.a.	–36.0*
Short term 2006–2012	**Annual change[(k)]**	–8.9	–6.5*	n.a.	–2.4
	% change over period[(l)]	–16.5	–18.0*	n.a.	–13.3

(continued)

Table 1.23.18 (continued): Age-standardised mortality rates, rate ratios and rate differences, circulatory diseases, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(c) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(d) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(e) These data exclude 8,499 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(f) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(i) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(j) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(k) Annual change determined using linear regression analysis.

(l) Per cent change based on the annual change over the period.

Notes

1. ICD-10 codes I00–I99 included.
2. Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.19: Age-standardised mortality rates, rate ratios and rate differences, external causes (injury and poisoning), NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

Year		Indigenous rate per 100,000(h)(i)	Non-Indigenous rate per 100,000(h)(i)	Rate ratio(j)	Rate difference(k)
1998		91.5	44.3	2.1	47.3
1999		70.5	41.5	1.7	29.0
2000		82.1	41.2	2.0	40.8
2001		78.7	39.7	2.0	38.9
2002		76.3	38.6	2.0	37.8
2003		77.4	37.9	2.0	39.5
2004		71.5	37.3	1.9	34.2
2005		83.1	36.6	2.3	46.5
2006		73.7	36.6	2.0	37.0
2007		75.2	38.1	2.0	37.1
2008		83.4	38.7	2.2	44.8
2009		66.2	37.8	1.8	28.4
2010		69.7	38.0	1.8	31.7
2011		78.7	37.9	2.1	40.8
2012		77.2	38.4	2.0	38.9
	Annual change(l)	–0.5	–0.3*	n.a.	–0.2
Long term 1998–2012	**% change over period(m)**	–8.9	–10.5*	n.a.	–7.1
	Annual change(l)	–0.3	—	n.a.	–0.2
Medium term 2001–2012	**% change over period(m)**	–3.6	–1.0	n.a.	–6.1
	Annual change(l)	–0.9	–0.9*	n.a.	—
Medium term 1998–2006	**% change over period(m)**	–9.1	–17.1*	n.a.	–0.4
	Annual change(l)	0.1	0.2	n.a.	—
Short term 2006–2012	**% change over period(m)**	1.1	2.5	n.a.	0.0

(continued)

Table 1.23.19 (continued): Age-standardised mortality rates, rate ratios and rate differences, external causes (injury and poisoning), NSW, Qld, WA, SA and NT, 1998–2012[a][b][c][d][e][f][g]

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) ICD-10 codes V01–Y98 included.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) These data exclude 2,373 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(l) Annual change determined using linear regression analysis.

(m) Per cent change based on the annual change over the period.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.20: Age-standardised mortality rates, rate ratios and rate differences, cancer, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

Year		Indigenous rate per 100,000(h)(i)	Non-Indigenous rate per 100,000(h)(i)	Rate ratio(j)	Rate difference(k)
1998		185.0	193.9	1.0	–8.9
1999		196.9	186.3	1.1	10.6
2000		213.8	188.1	1.1	25.8
2001		209.8	186.9	1.1	22.9
2002		188.2	186.3	1.0	1.8
2003		195.4	183.0	1.1	12.4
2004		199.5	184.5	1.1	15.0
2005		180.5	181.7	1.0	–1.2
2006		203.2	179.1	1.1	24.1
2007		206.1	176.9	1.2	29.3
2008		218.7	181.9	1.2	36.8
2009		204.7	175.4	1.2	29.3
2010		217.3	177.3	1.2	39.9
2011		231.1	174.5	1.3	56.6
2012		222.8	169.7	1.3	53.1
	Annual change(l)	2.1*	–1.3*	n.a.	3.4*
Long term 1998–2012	**% change over period**(m)	15.3*	–9.7*	n.a.	Significant increase(n)
	Annual change(l)	2.9*	–1.3*	n.a.	4.2*
Medium term 2001–2012	**% change over period**(m)	16.7*	–7.9*	n.a.	Significant increase(n)
	Annual change(l)	–0.3	–1.4*	n.a.	1.1
Medium term 1998–2006	**% change over period**(m)	–1.3	–5.9*	n.a.	121.3
	Annual change(l)	3.8*	–1.3*	n.a.	5.2*
Short term 2006–2012	**% change over period**(m)	11.3*	–4.5*	n.a.	135.2*

(continued)

Table 1.23.20 (continued): Age-standardised mortality rates, rate ratios and rate differences, cancer, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant increases or declines at the p < 0.05 level over the selected periods.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) ICD-10 codes for malignant neoplasms: C00–C97, D45, D46, D47.1, D47.3

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) These data exclude 5,379 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(l) Annual change determined using linear regression analysis.

(m) Per cent change based on the annual change over the period.

(n) Per cent change more than 1,000 per cent.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.21: Age-standardised mortality rates, rate ratios and rate differences, respiratory diseases, NSW, Qld, WA, SA & NT, 1998–2012[a][b][c][d][e][f][g]

Year		Indigenous rate per 100,000[h][i]	Non-Indigenous rate per 100,000[h][i]	Rate ratio[j]	Rate difference[k]
1998		134.4	52.7	2.5	81.7
1999		109.0	50.4	2.2	58.6
2000		120.3	58.2	2.1	62.1
2001		131.0	52.9	2.5	78.1
2002		116.7	57.4	2.0	59.3
2003		103.0	58.0	1.8	45.0
2004		117.8	56.1	2.1	61.7
2005		90.0	50.9	1.8	39.1
2006		102.6	50.0	2.1	52.6
2007		106.3	52.0	2.0	54.3
2008		82.4	48.9	1.7	33.5
2009		94.3	46.5	2.0	47.7
2010		101.8	49.4	2.1	52.3
2011		99.8	50.7	2.0	49.1
2012		98.7	52.5	1.9	46.2
	Annual change[l]	–2.3*	–0.4	n.a.	–1.9*
Long term 1998–2012	**% change over period**[m]	–26.5*	–10.2	n.a.	–39.8*
	Annual change[l]	–2.3*	–0.6*	n.a.	–1.7
Medium term 2001–2012	**% change over period**[m]	–21.6*	–12.3*	n.a.	–30.2
	Annual change[l]	–3.6*	–0.1	n.a.	–3.5*
Medium term 1998–2006	**% change over period**[m]	–22.6*	–2.1	n.a.	–37.8*
	Annual change[l]	–0.2	0.2	n.a.	–0.4
Short term 2006–2012	**% change over period**[m]	–1.2	2.3	n.a.	–4.7

(continued)

Table 1.23.21 (continued): Age-standardised mortality rates, rate ratios and rate differences, respiratory diseases, NSW, Qld, WA, SA & NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) ICD-10 codes J00–J99 included.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) These data exclude 2,034 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(i) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(l) Annual change determined using linear regression analysis.

(m) Per cent change based on the annual change over the period.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.22: Age-standardised mortality rates, rate ratios and rate differences, diabetes, NSW, Qld, WA, SA and NT, 1998–2012[(a)(b)(c)(d)(e)(f)(g)]

Year		Indigenous rate per 100,000[(h)(i)]	Non-Indigenous rate per 100,000[(h)(i)]	Rate ratio[(j)]	Rate difference[(k)]
1998		92.3	13.9	6.7	78.5
1999		92.3	13.3	6.9	78.9
2000		111.2	13.8	8.1	97.4
2001		87.3	13.2	6.6	74.0
2002		99.8	14.1	7.1	85.7
2003		76.8	14.0	5.5	62.8
2004		99.1	14.9	6.7	84.2
2005		79.5	14.2	5.6	65.3
2006		93.3	14.4	6.5	78.8
2007		80.7	15.4	5.3	65.3
2008		99.6	16.8	5.9	82.9
2009		88.6	15.9	5.6	72.7
2010		80.6	14.6	5.5	66.1
2011		85.8	15.5	5.6	70.4
2012		92.7	15.2	6.1	77.5
Long term 1998–2012	**Annual change**[(l)]	–0.7	0.2*	n.a.	–0.8
	% change over period[(m)]	–9.6	17.7*	n.a.	–14
Medium term 2001–2012	**Annual change**[(l)]	–0.2	0.2*	n.a.	–0.3
	% change over period[(m)]	–1.9	14.6*	n.a.	–4.8
Medium term 1998–2006	**Annual change**[(l)]	–1.2	0.1*	n.a.	–1.3
	% change over period[(m)]	–9.5	7.6*	n.a.	–12.3
Short term 2006–2012	**Annual change**[(l)]	–0.4	—	n.a.	–0.4
	% change over period[(m)]	–2.5	0.6	n.a.	–3.0

(continued)

Table 1.23.22 (continued): Age-standardised mortality rates, rate ratios and rate differences, diabetes, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) ICD-10 codes E10–E14 included.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) These data exclude 460 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(i) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(l) Annual change determined using linear regression analysis.

(m) Per cent change based on the annual change over the period.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.23: Age-standardised mortality rates, rate ratios and rate differences, kidney diseases, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

Year		Indigenous rate per 100,000(h)(i)	Non-Indigenous rate per 100,000(h)(i)	Rate ratio(j)	Rate difference(k)
1998		40.6	10.8	3.8	29.8
1999		41.6	10.7	3.9	30.9
2000		48.7	9.7	5.0	39.0
2001		18.5	9.8	1.9	8.7
2002		26.0	10.4	2.5	15.6
2003		24.9	10.3	2.4	14.6
2004		24.8	9.8	2.5	15.0
2005		22.6	9.9	2.3	12.7
2006		43.8	10.6	4.1	33.2
2007		31.4	12.2	2.6	19.2
2008		34.8	12.5	2.8	22.3
2009		33.1	11.9	2.8	21.2
2010		32.4	10.5	3.1	22.0
2011		23.9	10.4	2.3	13.5
2012		24.6	10.9	2.3	13.7
Long term 1998–2012	**Annual change(l)**	–0.7	0.1	n.a.	–0.7
	% change over period(m)	–25.4	10.9	n.a.	–39.5
Medium term 2001–2012	**Annual change(l)**	0.6	0.1	n.a.	0.5
	% change over period(m)	25.4	12.7	n.a.	34.1
Medium term 1998–2006	**Annual change(l)**	–1.4	—	n.a.	–1.4
	% change over period(m)	–30.0	–3.2	n.a.	–40.0
Short term 2006–2012	**Annual change(l)**	–2.7*	–0.2	n.a.	–2.5*
	% change over period(m)	–40.1*	–8.5	n.a.	–53.2*

(continued)

Table 1.23.23 (continued): Age-standardised mortality rates, rate ratios and rate differences, kidney diseases, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) ICD-10 codes N00–N29 included.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) These data exclude 326 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(i) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(l) Annual change determined using linear regression analysis.

(m) Per cent change based on the annual change over the period.

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

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Table 1.23.24: Selected multiple causes of death, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Mean no. of causes(i)	Mean no. of causes(i)
							Males							
All causes	6,361	100.0	100.0	254,922	100.0	100.0	6,361	100.0	100.0	254,922	100.0	100.0	3.3	3.2
Circulatory diseases (I00–I99)	1645	25.9	29.6	76,287	29.9	30.4	3,158	49.6	59.0	142,415	55.9	56.6	3.3	3.5
External causes (V01–Y98)	1,193	18.8	9.1	19,746	7.7	7.7	1,417	22.3	12.5	29,390	11.5	11.5	3.1	3.4
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	1189	18.7	22.9	84,025	33.0	32.2	1,313	20.6	26.0	97,384	38.2	37.6	2.7	2.6
Digestive organ cancers (C15–C26)(j)	*380*	*6.0*	*6.5*	*23,101*	*9.1*	*8.7*	*411*	*6.5*	*7.2*	*26,533*	*10.4*	*10.1*	*2.7*	*2.5*
Lung cancer (C34)(j)	*322*	*5.1*	*6.7*	*17,367*	*6.8*	*6.6*	*340*	*5.3*	*7.1*	*18,954*	*7.4*	*7.2*	*2.7*	*2.6*
Cervical cancer (C53)(j)(k)	*. .*	*. .*	*. .*	*. .*	*. .*	*. .*	*. .*	*. .*	*. .*	*. .*	*. .*	*. .*	*. .*	*. .*
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	16	0.3	0.3	784	0.3	0.3	26	0.4	0.4	1,531	0.6	0.6	3.9	3.3
Endocrine, metabolic & nutritional disorders (E00–E89)	493	7.8	9.3	9,433	3.7	3.7	1,372	21.6	26.1	38,282	15.0	15.0	4.4	4.4
Diabetes (E10–E14)(j)	*429*	*6.7*	*8.1*	*6,783*	*2.7*	*2.7*	*1,109*	*17.4*	*21.6*	*27,080*	*10.6*	*10.7*	*4.3*	*4.4*
Respiratory diseases (J00–J99)	457	7.2	10.1	21,868	8.6	8.8	1,605	25.2	33.0	80,029	31.4	31.9	3.5	3.5

(continued)

Table 1.23.24 (continued): Selected multiple causes of death, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Mean no. of causes(i)	Mean no. of causes(i)
Digestive diseases (K00–K93)	351	5.5	4.7	8,524	3.3	3.3	827	13.0	12.0	23,818	9.3	9.2	3.9	3.9
Conditions originating in perinatal period (P00–P96)	140	2.2	0.4	1,077	0.4	0.4	168	2.6	0.5	1,479	0.6	0.6	2.3	2.6
Nervous system diseases (G00–G99)	166	2.6	2.2	9,750	3.8	3.9	474	7.5	7.6	23,610	9.3	9.4	3.3	3.1
Kidney diseases (N00–N29)	133	2.1	2.6	4,453	1.7	1.8	802	12.6	16.5	30,871	12.1	12.4	3.8	3.8
Infectious & parasitic diseases (A00–B99)	152	2.4	1.9	3,969	1.6	1.6	661	10.4	10.3	20,116	7.9	7.9	3.9	3.8
Other causes(l)	426	6.7	6.9	15,006	5.9	6.0	2,145	33.7	35.8	76,370	30.0	30.4	3.0	3.4
Females														
All causes	5,251	100.0	100.0	240,860	100.0	100.0	5,251	100.0	100.0	240,860	100.0	100.0	3.4	3.2
Circulatory diseases (I00–I99)	1,313	25.0	28.3	83,777	34.8	33.9	2,734	52.1	60.2	143,928	59.8	58.6	3.6	3.5
External causes (V01–Y98)	573	10.9	5.7	10,284	4.3	4.6	764	14.5	9.3	19,515	8.1	8.5	3.4	4.0
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	1,111	21.2	22.1	63,328	26.3	27.0	1,237	23.6	25.3	72,035	29.9	30.6	2.7	2.5
Digestive organ cancers (C15–C26)(j)	*297*	*5.7*	*6.2*	*16,913*	*7.0*	*7.1*	*329*	*6.3*	*7.0*	*19,281*	*8.0*	*8.1*	*2.6*	*2.4*

(continued)

Table 1.23.24 (continued): Selected multiple causes of death, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Mean no. of causes(i)	Mean no. of causes(i)
Lung cancer (C34)(j)	*247*	*4.7*	*4.9*	*10,847*	*4.5*	*4.6*	*272*	*5.2*	*5.5*	*11,657*	*4.8*	*5.0*	*2.6*	*2.4*
Cervical cancer (C53)(j)(k)	*53*	*1.0*	*0.7*	*809*	*0.3*	*0.4*	*64*	*1.2*	*0.9*	*987*	*0.4*	*0.4*	*2.6*	*2.4*
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	24	0.5	0.5	872	0.4	0.4	39	0.7	0.8	1,635	0.7	0.7	3.5	3.2
Endocrine, metabolic & nutritional disorders (E00–E89)	561	10.7	11.7	9,448	3.9	3.9	1,524	29.0	32.8	36,954	15.3	15.2	4.4	4.4
Diabetes (E10–E14)(j)	*492*	*9.4*	*10.2*	*6,249*	*2.6*	*2.6*	*1,235*	*23.5*	*26.3*	*22,708*	*9.4*	*9.3*	*4.3*	*4.3*
Respiratory diseases (J00–J99)	431	8.2	9.7	19,657	8.2	8.1	1,455	27.7	31.9	69,979	29.1	28.7	3.5	3.3
Digestive diseases (K00–K93)	295	5.6	4.9	8,571	3.6	3.5	679	12.9	12.0	21,965	9.1	9.1	4.1	3.8
Conditions originating in perinatal period (P00–P96)	99	1.9	0.4	846	0.4	0.5	126	2.4	0.5	1,115	0.5	0.6	2.2	2.6
Nervous system diseases (G00–G99)	130	2.5	2.6	11,670	4.8	4.8	378	7.2	7.2	25,167	10.4	10.4	3.2	2.8
Kidney diseases (N00–N29)	157	3.0	3.4	4,919	2.0	2.0	993	18.9	21.2	27,768	11.5	11.3	3.8	3.6
Infectious & parasitic diseases (A00–B99)	123	2.3	2.0	3,638	1.5	1.5	593	11.3	10.6	17,659	7.3	7.3	4.1	3.7
Other causes(l)	434	8.3	8.6	23,850	9.9	9.8	1,814	34.5	36.8	91,310	37.9	37.4	3.2	3.3

(continued)

Table 1.23.24 (continued): Selected multiple causes of death, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Mean no. of causes(i)	Mean no. of causes(i)
							Persons							
All causes	11,612	100.0	100.0	495,782	100.0	100.0	11,612	100.0	100.0	495,782	100.0	100.0	3.4	3.2
Circulatory diseases (I00–I99)	2,958	25.5	29.0	160,064	32.3	32.1	5,892	50.7	59.6	286,343	57.8	57.5	3.5	3.5
External causes (V01–Y98)	1,766	15.2	7.6	30,030	6.1	6.4	2,181	18.8	11.1	48,905	9.9	10.2	3.2	3.6
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	2,300	19.8	22.4	147,353	29.7	29.5	2,550	22.0	25.5	169,419	34.2	33.9	2.7	2.5
Digestive organ cancers (C15–C26)(j)	*677*	*5.8*	*6.4*	*40,014*	*8.1*	*8.0*	*740*	*6.4*	*7.1*	*45,814*	*9.2*	*9.2*	*2.7*	*2.4*
Lung cancer (C34)(j)	*569*	*4.9*	*5.7*	*28,214*	*5.7*	*5.6*	*612*	*5.3*	*6.3*	*30,611*	*6.2*	*6.1*	*2.6*	*2.5*
Cervical cancer (C53)(j)(k)	*53*	*0.5*	*0.4*	*809*	*0.2*	*0.2*	*64*	*0.6*	*0.4*	*987*	*0.2*	*0.2*	*2.6*	*2.4*
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	40	0.3	0.4	1,656	0.3	*0.3*	65	0.6	*0.6*	3,166	0.6	0.6	3.7	3.2
Endocrine, metabolic & nutritional disorders (E00–E89)	1,054	9.1	10.5	18,881	3.8	3.8	2,896	24.9	29.4	75,236	15.2	15.1	4.4	4.4
Diabetes (E10–E14)(j)	*921*	*7.9*	*9.1*	*13,032*	*2.6*	*2.6*	*2,344*	*20.2*	*23.8*	*49,788*	*10.0*	*10.0*	*4.3*	*4.4*
Respiratory diseases (J00–J99)	888	7.6	9.8	41,525	8.4	*8.3*	3,060	26.4	*32.2*	150,008	30.3	30.1	3.5	3.4

(continued)

Table 1.23.24 (continued): Selected multiple causes of death, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Underlying cause						Multiple cause							
	Indigenous			Non-Indigenous			Indigenous			Non-Indigenous			Indig.	Non-Indig.
	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Deaths	% of total deaths	Age-standardised(h) % of total deaths	Mean no. of causes(i)	Mean no. of causes(i)
Digestive diseases (K00–K93)	646	5.6	4.8	17,095	3.4	3.4	1,506	13.0	12.0	45,783	9.2	9.2	4.0	3.9
Conditions originating in perinatal period (P00–P96)	239	2.1	0.4	1,923	0.4	0.4	294	2.5	0.5	2,594	0.5	0.6	2.3	2.6
Nervous system diseases (G00–G99)	296	2.5	2.4	21,420	4.3	4.3	852	7.3	7.4	48,777	9.8	9.8	3.3	3.0
Kidney diseases (N00–N29)	290	2.5	3.0	9,372	1.9	1.9	1,795	15.5	18.7	58,639	11.8	11.8	3.8	3.7
Infectious & parasitic diseases (A00–B99)	275	2.4	2.0	7,607	1.5	1.5	1,254	10.8	10.4	37,775	7.6	7.6	4.0	3.8
Other causes(l)	860	7.4	7.7	38,856	7.8	7.9	3,959	34.1	36.3	167,680	33.8	33.8	3.1	3.3

(continued)

Table 1.23.24 (continued): Selected multiple causes of death, by Indigenous status and sex, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(i) Mean number of causes is calculated based on the average number of causes of death present for a death with the selected underlying cause of death. This data item provides insight into co-morbidity.

(j) Data for lung cancer, cervical cancer and digestive organ cancers are a subset of the data presented for all cancers; data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

(k) Data for cervical cancer are for females only.

(l) Includes: diseases of the blood and blood-forming organs and certain disorders involving the immune system (D50–D89), mental & behavioural disorders (F00–F99), diseases of the eye and adnexa (H00–H59), diseases of the ear and mastoid process (H60–H95), diseases of the skin & subcutaneous tissue (L00–L99), diseases of the musculoskeletal system and connective tissue (M00–M99), diseases of the genitourinary system (excluding kidney diseases) (N30–N99), pregnancy, childbirth & the puerperium (O00–O99), congenital malformations, deformations and chromosomal abnormalities (Q00–Q99), symptoms, signs and abnormal clinical findings not elsewhere classified (R00–R99).

Note: Not stated for age has been pro-rated across each age group.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.25: Selected underlying cause of death with associated cause, Indigenous Australians, crude rates per 100,000, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Selected underlying cause		Reported with selected associated cause(k)															
	Number	**Reported alone %**	**(I00–I99)**	**(V01–Y98)**	**Cancer-malign.**	**(C15–C26)**(h)	**(C34)**(h)	**(C53)**(h)(i)	**Non-malig.**	**(E00–E89)**	***(E10–E14)***(h)	**(J00–J99)**	**(K00–K93)**	**(P00–P96)**	**(G00–G99)**	**(N00–N29)**	**(A00–B99)**	**Other causes**(j)
All causes	11,612	15.3	167.6	19.1	21.9	2.3	1.5	0.4	0.9	72.0	49.4	90.0	40.2	7.3	20.8	53.5	35.2	116.8
Circulatory diseases (I00–I99)	2,958	16.0	66.6	5.0	2.9	0.3	0.5	n.p.	n.p.	25.7	20.7	24.7	7.5	n.p.	6.1	14.7	5.3	26.4
External causes (V01–Y98)	1,766	—	5.6	4.8	0.3	n.p.	n.p.	—	n.p.	1.6	1.0	3.7	1.6	—	1.6	1.1	1.4	17.5
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	2,300	29.5	21.5	1.9	13.3	23.9	19.9	2.0	0.2	12.6	9.5	17.6	8.2	—	2.4	7.1	6.0	17.8
Digestive organ cancers (C15–C26)(h)	*677*	*32.1*	*5.9*	*0.7*	*2.9*	*n.p.*	*n.p.*	—	*n.p.*	*4.4*	*3.6*	*3.3*	*4.6*	—	*0.6*	*2.1*	*2.2*	*4.4*
Lung cancer (C34)(h)	*569*	*26.2*	*5.4*	*0.3*	*3.4*	*n.p.*	—	—	*n.p.*	*2.7*	*2.2*	*6.7*	*0.7*	—	*0.8*	*0.9*	*0.7*	*4.9*
Cervical cancer (C53)(h)(i)	*53*	*28.3*	*0.5*	*n.p.*	*0.3*	—	—	—	*n.p.*	*0.2*	*n.p.*	*0.2*	*n.p.*	—	—	*0.3*	*n.p.*	*0.4*
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	40	7.5	0.5	n.p.	0.2	—	—	n.p.	—	0.2	0.2	0.5	n.p.	n.p.	0.3	0.2	n.p.	0.7
Endocrine, metabolic & nutritional disorders (E00–E89)	1,054	1.7	28.9	1.2	1.1	0.2	n.p.	—	n.p.	8.6	32.8	7.4	3.2	—	2.4	14.4	4.5	11.8
Diabetes (E10–E14)(h)	*921*	*1.3*	*25.4*	*1.0*	*1.0*	*0.2*	*n.p.*	—	*n.p.*	*7.0*	*0.5*	*6.0*	*2.6*	—	*2.0*	*13.3*	*4.1*	*9.9*
Respiratory diseases (J00–J99)	888	11.3	13.9	0.9	1.3	0.2	0.2	n.p.	n.p.	6.8	4.6	15.2	1.7	n.p.	1.7	3.6	3.5	11.6

(continued)

Table 1.23.25 (continued): Selected underlying cause of death with associated cause, Indigenous Australians, crude rates per 100,000, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g]

	Selected underlying cause		Reported with selected associated cause[k]															
	Number	**Reported alone %**	**(I00–I99)**	**(V01–Y98)**	**Cancer-malign.**	**(C15–C26)[h]**	**(C34)[h]**	**(C53)[h][i]**	**Non-malig.**	**(E00–E89)**	***(E10–E14)[h]***	**(J00–J99)**	**(K00–K93)**	**(P00–P96)**	**(G00–G99)**	**(N00–N29)**	**(A00–B99)**	**Other causes[j]**
Digestive diseases (K00–K93)	646	7.9	8.1	1.5	0.9	0.3	n.p.	n.p.	n.p.	4.4	3.4	5.8	10.5	n.p.	1.6	4.2	5.6	9.5
Conditions originating in perinatal period (P00–P96)	239	32.2	—	—	—	—	—	—	—	n.p.	—	—	n.p.	5.4	n.p.	n.p.	n.p.	n.p.
Nervous system diseases (G00–G99)	296	19.3	3.6	1.2	0.2	n.p.	n.p.	n.p.	—	1.9	1.4	3.5	0.4	n.p.	1.7	0.7	0.7	3.3
Kidney diseases (N00–N29)	290	6.2	5.7	0.9	0.3	n.p.	n.p.	—	—	3.3	2.3	2.3	1.5	n.p.	0.3	1.7	2.0	3.0
Infectious & parasitic diseases (A00–B99)	275	10.5	3.5	0.3	0.5	0.3	—	—	n.p.	2.1	1.5	2.8	3.1	n.p.	0.7	2.2	1.4	4.8
Other causes[j]	860	31.2	9.7	1.4	0.7	n.p.	—	n.p.	n.p.	4.7	3.1	6.4	2.3	1.5	1.9	3.6	4.3	10.2

(continued)

Table 1.23.25 (continued): Selected underlying cause of death with associated cause, Indigenous Australians, crude rates per 100,000, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(h) Data for lung cancer, cervical cancer and digestive organ cancers are a subset of the data presented for all cancers; data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

(i) Data for cervical cancer are for females only.

(j) Includes: diseases of the blood and blood-forming organs and certain disorders involving the immune system (D50–D89), mental & behavioural disorders (F00–F99), diseases of the eye and adnexa (H00–H59), diseases of the ear and mastoid process (H60–H95), diseases of the skin & subcutaneous tissue (L00–L99), diseases of the musculoskeletal system and connective tissue (M00–M99), diseases of the genitourinary system (excluding kidney diseases) (N30–N99), pregnancy, childbirth & the puerperium (O00–O99), congenital malformations, deformations and chromosomal abnormalities (Q00–Q99), symptoms, signs and abnormal clinical findings not elsewhere classified (R00–R99).

(k) 'Associated causes of death' refers to all causes of death listed on a death certificate other than the underlying cause of death. The associated causes of death data presented in this table represent counts of deaths of people with a particular disease or disorder, rather than the number of incidences of the disease or disorder on the death certificate. These data are not comparable with the 2012 HPF, which cross-classified underlying causes, not only with associated causes, but also with the same underlying cause. Here, underlying causes are eliminated from the multiple cause count, thus providing a true indication of deaths with associated causes. Only cells where the underlying cause corresponds with an associated cause are affected (e.g. 'Cervical cancer' as an underlying cause with 'Cancer—malignant neoplasms' as an associated cause). All cells are affected where 'All causes' is the underlying cause of death.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.26: Selected underlying cause of death with associated cause, Indigenous Australians, age-standardised rates per 100,000, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g]

	Selected underlying cause		**Reported with selected associated cause**[k]															
	Number	**Reported alone %**	**(I00–I99)**	**(V01–Y98)**	**Cancer-malign.**	**(C15–C26)**[h]	**(C34)**[h]	**(C53)**[h][i]	**Non-malig.**	**(E00–E89)**	***(E10–E14)***[h]	**(J00–J99)**	**(K00–K93)**	**(P00–P96)**	**(G00–G99)**	**(N00–N29)**	**(A00–B99)**	**Other causes**[j]
All causes	11,612	15.3	496.1	39.9	64.4	7.8	5.4	n.p.	2.1	210.0	145.5	270.2	91.1	3.8	51.5	160.3	85.9	313.5
Circulatory diseases (I00–I99)	2,958	16.0	194.5	12.2	11.2	n.p.	n.p.	n.p.	n.p.	74.6	60.6	80.7	18.4	n.p.	18.5	46.2	12.4	82.6
External causes (V01–Y98)	1,766	—	10.7	5.8	n.p.	n.p.	n.p.	—	n.p.	4.0	2.8	7.6	2.9	—	2.2	3.5	3.3	24.2
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	2,300	29.5	68.2	4.5	33.5	64.9	57.3	3.8	n.p.	38.7	29.4	53.0	22.3	—	6.1	22.1	15.0	49.5
Digestive organ cancers (C15–C26)[h]	*677*	*32.1*	*17.6*	*n.p.*	*7.4*	*n.p.*	*n.p.*	—	*n.p.*	*12.4*	*10.1*	*9.5*	*11.8*	—	*n.p.*	*6.1*	*5.5*	*11.7*
Lung cancer (C34)[h]	*569*	*26.2*	*16.8*	*n.p.*	*8.4*	*n.p.*	—	—	*n.p.*	*8.7*	*7.0*	*20.7*	*1.5*	—	*2.2*	*2.4*	*1.2*	*13.7*
Cervical cancer (C53)[h][i]	*53*	*28.3*	*n.p.*	*n.p.*	*n.p.*	—	—	—	*n.p.*	*n.p.*	*n.p.*	*n.p.*	*n.p.*	—	—	*n.p.*	*n.p.*	*n.p.*
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	40	7.5	n.p.	n.p.	n.p.	—	—	n.p.	—	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.	2.0
Endocrine, metabolic & nutritional disorders (E00–E89)	1,054	1.7	83.9	3.2	3.8	n.p.	n.p.	—	n.p.	24.0	92.9	21.7	8.5	—	6.3	40.0	11.2	35.6
Diabetes (E10–E14)[h]	*921*	*1.3*	*73.3*	*2.7*	*3.4*	*n.p.*	*n.p.*	—	*n.p.*	*19.6*	*n.p.*	*17.8*	*7.2*	—	*5.2*	*36.1*	*9.8*	*29.4*
Respiratory diseases (J00–J99)	888	11.3	48.9	2.5	4.9	n.p.	n.p.	n.p.	n.p.	22.8	15.2	49.0	4.0	n.p.	5.5	13.2	10.2	37.8
Digestive diseases (K00–K93)	646	7.9	20.0	3.7	3.0	n.p.	n.p.	n.p.	n.p.	9.5	7.5	13.6	19.8	n.p.	3.1	10.1	12.3	20.7
Conditions originating in perinatal period (P00–P96)	239	32.2	—	—	—	—	—	—	—	n.p.	—	—	n.p.	2.8	n.p.	n.p.	n.p.	n.p.
Nervous system diseases (G00–G99)	296	19.3	10.2	1.9	n.p.	n.p.	n.p.	n.p.	—	6.0	4.8	7.9	n.p.	n.p.	2.8	2.0	1.5	9.1

(continued)

Table 1.23.26 (continued): Selected underlying cause of death with associated cause, Indigenous Australians, age-standardised rates per 100,000, NSW, Qld, WA, SA and NT, 2008–2012[(a)(b)(c)(d)(e)(f)(g)]

	Selected underlying cause		Reported with selected associated cause[(k)]															
	Number	Reported alone %	(I00–I99)	(V01–Y98)	Cancer-malign.	(C15–C26)[(h)]	(C34)[(h)]	(C53)[(h)(i)]	Non-malig.	(E00–E89)	*(E10–E14)[(h)]*	(J00–J99)	(K00–K93)	(P00–P96)	(G00–G99)	(N00–N29)	(A00–B99)	Other causes[(j)]
Kidney diseases (N00–N29)	290	6.2	16.2	2.3	n.p.	n.p.	n.p.	—	—	8.7	6.2	7.4	3.3	n.p.	n.p.	5.4	5.6	9.5
Infectious & parasitic diseases (A00–B99)	275	10.5	8.6	n.p.	n.p.	n.p.	—	—	n.p.	5.1	3.8	6.0	5.3	n.p.	1.4	5.8	2.3	10.3
Other causes[(j)]	860	31.2	33.1	3.3	2.6	n.p.	—	n.p.	n.p.	15.9	10.4	22.0	5.5	0.8	4.3	11.3	11.8	32.6

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Rates per 100,000 directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(h) Data for lung cancer, cervical cancer and digestive organ cancers are a subset of the data presented for all cancers; data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

(i) Data for cervical cancer are for females only.

(j) Includes: diseases of the blood and blood-forming organs and certain disorders involving the immune system (D50–D89), mental & behavioural disorders (F00–F99), diseases of the eye and adnexa (H00–H59), diseases of the ear and mastoid process (H60–H95), diseases of the skin & subcutaneous tissue (L00–L99), diseases of the musculoskeletal system and connective tissue (M00–M99), diseases of the genitourinary system (excluding kidney diseases) (N30–N99), pregnancy, childbirth & the puerperium (O00–O99), congenital malformations, deformations and chromosomal abnormalities (Q00–Q99), symptoms, signs and abnormal clinical findings not elsewhere classified (R00–R99).

(k) 'Associated causes of death' refers to all causes of death listed on a death certificate other than the underlying cause of death. The associated causes of death data presented in this table represent counts of deaths of people with a particular disease or disorder, rather than the number of incidences of the disease or disorder on the death certificate. These data are not comparable with the 2012 HPF, which cross-classified underlying causes, not only with associated causes, but also with the same underlying cause. Here, underlying causes are eliminated from the multiple cause count, thus providing a true indication of deaths with associated causes. Only cells where the underlying cause corresponds with an associated cause are affected (eg. 'Cervical cancer' as an underlying cause with 'Cancer—malignant neoplasms' as an associated cause). All cells are affected where 'All causes' is the underlying cause of death.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.27: Selected underlying cause of death with associated cause, non-Indigenous Australians, age-standardised rates per 100,000, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)

	Selected underlying cause		Reported with selected associated cause(k)															
	Number	**Reported alone %**	**(I00–I99)**	**(V01–Y98)**	**Cancer-malign.**	**(C15–C26)(h)**	**(C34)(h)**	**(C53)(h)(i)**	**Non-malig.**	**(E00–E89)**	***(E10–E14)(h)***	**(J00–J99)**	**(K00–K93)**	**(P00–P96)**	**(G00–G99)**	**(N00–N29)**	**(A00–B99)**	**Other causes(j)**
All causes	495,782	17.5	286.9	25.4	60.2	7.4	2.9	0.2	1.8	71.2	44.2	154.7	41.4	2.8	35.4	61.5	37.0	174.1
Circulatory diseases (I00–I99)	160,064	11.0	135.5	8.3	12.7	2.5	1.0	0.1	0.6	27.6	18.9	47.2	8.7	n.p.	15.2	23.4	6.7	73.6
External causes (V01–Y98)	30,030	—	7.9	2.7	1.0	0.2	0.1	n.p.	0.1	1.7	0.9	5.7	1.2	n.p.	1.8	1.4	1.2	10.4
Cancer—malignant neoplasms (C00–C97, D45, D46, D47.1, D47.3)	147,353	34.8	50.2	4.5	33.8	49.5	34.1	1.1	0.4	17.0	11.4	33.5	14.5	n.p.	5.7	12.2	9.5	42.9
Digestive organ cancers (C15–C26)(h)	*40,014*	*38.5*	*12.5*	*1.2*	*8.2*	*0.5*	*0.1*	*n.p.*	*0.1*	*5.0*	*3.6*	*5.9*	*7.5*	*n.p.*	*1.1*	*2.6*	*2.8*	*9.6*
Lung cancer (C34)(h)	*28,214*	*33.1*	*9.7*	*0.6*	*5.9*	*0.3*	*n.p.*	*n.p.*	*0.1*	*2.8*	*1.9*	*10.6*	*1.1*	*n.p.*	*0.8*	*1.1*	*0.9*	*7.5*
Cervical cancer (C53)(h)(i)	*809*	*38.2*	*0.2*	—	*0.2*	*n.p.*	—	—	*n.p.*	*0.1*	—	*0.1*	*0.1*	—	*n.p.*	*0.1*	*0.1*	*0.3*
Non-malignant neoplasms (D00–D44, D47.0, D47.2, D47.7–D48)	1,656	18.3	0.9	0.2	0.2	—	n.p.	—	—	0.3	0.2	0.4	0.2	n.p.	0.3	0.2	0.1	0.7
Endocrine, metabolic & nutritional disorders (E00–E89)	18,881	2.0	18.9	0.9	1.6	0.3	0.1	n.p.	0.1	3.7	16.3	4.9	1.4	—	2.0	5.4	1.8	12.2
Diabetes (E10–E14)(h)	*13,032*	*1.6*	*13.5*	*0.5*	*1.2*	*0.2*	*0.1*	*n.p.*	*0.1*	*2.4*	*0.2*	*3.1*	*0.9*	—	*1.3*	*4.2*	*1.4*	*8.5*
Respiratory diseases (J00–J99)	41,525	11.3	24.1	1.8	3.8	0.6	0.6	n.p.	0.2	5.4	3.5	24.6	2.4	—	3.0	4.6	4.2	20.4
Digestive diseases (K00–K93)	17,095	7.8	9.4	1.8	1.5	0.4	0.1	n.p.	0.1	3.1	1.6	5.0	7.1	n.p.	1.3	3.6	4.4	10.6
Conditions originating in perinatal period (P00–P96)	1,923	22.9	—	n.p.	—	—	—	—	n.p.	n.p.	n.p.	—	n.p.	1.9	—	n.p.	n.p.	0.1
Nervous system diseases (G00–G99)	21,420	16.8	8.8	1.3	1.3	0.2	0.1	n.p.	0.1	2.9	1.7	10.6	0.8	—	2.5	1.3	1.1	10.2

(continued)

Table 1.23.27 (continued): Selected underlying cause of death with associated cause, non-Indigenous Australians, age-standardised rates per 100,000, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g]

	Selected underlying cause		Reported with selected associated cause[k]															
	Number	**Reported alone %**	**(I00–I99)**	**(V01–Y98)**	**Cancer-malign.**	**(C15–C26)**[h]	**(C34)**[h]	**(C53)**[h][i]	**Non-malig.**	**(E00–E89)**	***(E10–E14)***[h]	**(J00–J99)**	**(K00–K93)**	**(P00–P96)**	**(G00–G99)**	**(N00–N29)**	**(A00–B99)**	**Other causes**[j]
Kidney diseases (N00–N29)	9,372	7.0	6.9	0.6	0.7	0.2	0.1	n.p.	—	1.9	1.1	3.1	0.9	n.p.	0.6	2.4	1.5	11.2
Infectious & parasitic diseases (A00–B99)	7,607	7.5	4.3	0.4	0.9	0.2	0.1	n.p.	—	1.4	0.8	2.7	1.7	n.p.	0.7	2.0	0.8	5.5
Other causes[j]	38,856	14.7	19.9	2.8	2.6	0.5	0.2	n.p.	0.2	6.2	3.3	17.0	2.5	0.7	2.4	5.0	6.0	47.0

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(d) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(e) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised), 2012 (preliminary). For further information see Explanatory Notes 29–33 and Technical Note, Causes of Death Revisions, 2010 and 2011 in Causes of Death, Australia, 2012 (cat. no. 3303.0).

(g) Rates per 100,000 directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(h) Data for lung cancer, cervical cancer and digestive organ cancers are a subset of the data presented for all cancers; data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

(i) Data for cervical cancer are for females only.

(j) Includes: diseases of the blood and blood-forming organs and certain disorders involving the immune system (D50–D89), mental & behavioural disorders (F00–F99), diseases of the eye and adnexa (H00–H59), diseases of the ear and mastoid process (H60–H95), diseases of the skin & subcutaneous tissue (L00–L99), diseases of the musculoskeletal system and connective tissue (M00–M99), diseases of the genitourinary system (excluding kidney diseases) (N30–N99), pregnancy, childbirth & the puerperium (O00–O99), congenital malformations, deformations and chromosomal abnormalities (Q00–Q99), symptoms, signs and abnormal clinical findings not elsewhere classified (R00–R99).

(k) 'Associated causes of death' refers to all causes of death listed on a death certificate other than the underlying cause of death. The associated causes of death data presented in this table represent counts of deaths of people with a particular disease or disorder, rather than the number of incidences of the disease or disorder on the death certificate. These data are not comparable with the 2012 HPF, which cross-classified underlying causes, not only with associated causes, but also with the same underlying cause. Here, underlying causes are eliminated from the multiple cause count, thus providing a true indication of deaths with associated causes. Only cells where the underlying cause corresponds with an associated cause are affected (eg. 'Cervical cancer' as an underlying cause with 'Cancer—malignant neoplasms' as an associated cause). All cells are affected where 'All causes' is the underlying cause of death.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.23.28: Age-standardised mortality rates, rate ratios and rate differences, circulatory diseases, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

		NSW				Qld			
Year		**Indigenous rate per 100,000**(h)	**Non-Indigenous rate per 100,000**(h)	**Rate ratio**(i)	**Rate difference**(j)	**Indigenous rate per 100,000**(h)	**Non-Indigenous rate per 100,000**(h)	**Rate ratio**(i)	**Rate difference**(j)
1998		336.5	291.5	1.2	45.0	491.4	302.2	1.6	189.2
1999		322.3	274.3	1.2	48.0	429.1	299.5	1.4	129.6
2000		318.5	272.2	1.2	46.3	381.5	271.3	1.4	110.1
2001		376.2	250.3	1.5	125.9	369.8	263.4	1.4	106.4
2002		373.5	250.3	1.5	123.2	404.7	259.8	1.6	145.0
2003		302.2	242.6	1.2	59.6	388.0	240.2	1.6	147.8
2004		265.3	238.4	1.1	26.8	339.9	239.2	1.4	100.7
2005		305.8	218.3	1.4	87.5	278.9	219.6	1.3	59.3
2006		280.8	215.4	1.3	65.4	347.2	218.7	1.6	128.5
2007		307.7	211.6	1.5	96.1	304.0	214.6	1.4	89.5
2008		258.0	217.3	1.2	40.6	273.2	223.2	1.2	50.0
2009		284.0	196.9	1.4	87.1	288.9	195.7	1.5	93.2
2010		242.4	188.8	1.3	53.6	278.3	193.6	1.4	84.7
2011		244.0	191.8	1.3	52.2	272.2	191.1	1.4	81.0
2012		245.3	173.9	1.4	71.4	267.9	184.3	1.5	83.6
	Annual change(k)	–7.8*	–7.6*	n.a.	–0.2	–13.9*	–8.3*	n.a.	–5.7*
Long term 1998–2012	**% change over period**(l)	–30.9*	–37.8*	n.a.	–3.3	–44.5*	–39.6*	n.a.	–54.2*
	Annual change(k)	–8.9*	–6.9*	n.a.	–2.0	–10.6*	–6.4*	n.a.	–4.2
Short term 2006–2012	**% change over period**(l)	–18.3*	–18.8*	n.a.	–16.8	–19.7*	–17.3*	n.a.	–25.1

(continued)

Table 1.23.28 (continued): Age-standardised mortality rates, rate ratios and rate differences, circulatory diseases, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

		WA				SA			
Year		**Indigenous rate per 100,000**(h)	**Non-Indigenous rate per 100,000**(h)	**Rate ratio**(i)	**Rate difference**(j)	**Indigenous rate per 100,000**(h)	**Non-Indigenous rate per 100,000**(h)	**Rate ratio**(i)	**Rate difference**(j)
1998		677.3	269.7	2.5	407.6	364.4	298.1	1.2	66.3
1999		565.7	258.2	2.2	307.5	330.2	266.1	1.2	64.1
2000		546.9	229.4	2.4	317.5	341.9	264.7	1.3	77.2
2001		507.8	223.6	2.3	284.2	283.7	253.9	1.1	29.8
2002		410.5	221.1	1.9	189.4	205.4	244.0	0.8	–38.7
2003		362.0	206.4	1.8	155.6	328.1	246.6	1.3	81.6
2004		460.3	198.9	2.3	261.4	384.1	217.0	1.8	167.2
2005		430.2	194.1	2.2	236.1	212.5	218.9	1.0	–6.4
2006		371.7	190.4	2.0	181.4	196.2	205.7	1.0	–9.5
2007		464.0	188.5	2.5	275.5	302.0	215.6	1.4	86.4
2008		428.7	189.2	2.3	239.5	248.6	205.4	1.2	43.2
2009		337.2	177.6	1.9	159.6	245.1	203.9	1.2	41.2
2010		388.8	166.7	2.3	222.1	247.8	202.7	1.2	45.0
2011		327.8	159.3	2.1	168.5	221.3	189.0	1.2	32.2
2012		417.8	151.1	2.8	266.6	184.2	182.3	1.0	1.9
Long term 1998–2012	**Annual change**(k)	–16.2*	–7.4*	n.a.	–8.9*	–9.5*	–7.0*	n.a.	–2.4
	% change over period(l)	–40.6*	–40.7*	n.a.	–40.5*	–39.1*	–35.6*	n.a.	–54.4
Short term 2006–2012	**Annual change**(k)	–6.2	–7.1*	n.a.	0.9	–7.1	–4.5*	n.a.	–2.6
	% change over period(l)	–9.1	–21.7*	n.a.	2.4	–16.6	–12.6*	n.a.	–36.8

(continued)

Table 1.23.28 (continued): Age-standardised mortality rates, rate ratios and rate differences, circulatory diseases, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

		NT				NSW, Qld, WA, SA and NT combined			
Year		Indigenous rate per 100,000(h)	Non-Indigenous rate per 100,000(h)	Rate ratio(i)	Rate difference(j)	Indigenous rate per 100,000(h)	Non-Indigenous rate per 100,000(h)	Rate ratio(i)	Rate difference(j)
1998		610.8	263.0	2.3	347.8	461.7	292.3	1.6	169.4
1999		592.8	235.0	2.5	357.7	419.9	277.2	1.5	142.7
2000		562.3	213.3	2.6	349.0	398.5	265.6	1.5	132.9
2001		437.7	260.5	1.7	177.1	386.5	250.8	1.5	135.7
2002		511.1	210.7	2.4	300.4	388.8	248.0	1.6	140.8
2003		441.8	227.0	1.9	214.8	351.6	237.9	1.5	113.7
2004		475.9	220.1	2.2	255.8	346.6	230.8	1.5	115.8
2005		419.7	188.3	2.2	231.4	318.8	215.6	1.5	103.2
2006		396.8	194.8	2.0	202.0	318.6	211.8	1.5	106.8
2007		420.3	202.4	2.1	217.9	339.9	209.9	1.6	130.0
2008		320.1	182.4	1.8	137.7	291.5	213.6	1.4	77.9
2009		312.5	155.0	2.0	157.4	292.1	194.9	1.5	97.2
2010		322.4	148.7	2.2	173.7	283.1	188.8	1.5	94.3
2011		346.0	149.8	2.3	196.2	273.1	186.9	1.5	86.2
2012		342.9	135.1	2.5	207.8	282.9	174.6	1.6	108.3
Long term 1998–2012	**Annual change(k)**	–20.5*	–8.3*	n.a.	–12.3*	–12.3*	–7.7*	n.a.	–4.6*
	% change over period(l)	–49.8*	–45.0*	n.a.	–53.6*	–39.9*	–38.4*	n.a.	–42.9*
Short term 2006–2012	**Annual change(k)**	–11.0	–11.4*	n.a.	0.4	–8.9	–6.5*	n.a.	–2.4
	% change over period(l)	–17.2	–33.9*	n.a.	1.2	–16.5	–18.0*	n.a.	–13.3

(continued)

Table 1.23.28 (continued): Age–standardised mortality rates, rate ratios and rate differences, circulatory diseases, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant increases or declines at the p < 0.05 level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(c) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(d) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(e) These data exclude registered deaths where the Indigenous status was not stated.

(f) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(i) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(j) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(k) Annual change determined using linear regression analysis.

(l) Per cent change based on the annual change over the period.

Notes

1. ICD-10 codes I00–I99 included.
2. Not stated for age has been pro-rated across each age group.
3. Cause of Death Unit Record File data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System and coded by the ABS. The data are maintained by the AIHW in the National Mortality Database.

Source: AIHW National Mortality Database (unpublished).

Table 1.23.29: Age-standardised mortality rates, rate ratios and rate differences, cancer, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

		NSW				Qld			
Year		**Indigenous rate per 100,000(h)**	**Non-Indigenous rate per 100,000(h)**	**Rate ratio(i)**	**Rate difference(j)**	**Indigenous rate per 100,000(h)**	**Non-Indigenous rate per 100,000(h)**	**Rate ratio(i)**	**Rate difference(j)**
1998		138.0	189.3	0.7	–51.3	197.9	204.0	1.0	–6.1
1999		145.9	177.0	0.8	–31.1	258.9	199.6	1.3	59.3
2000		167.6	184.2	0.9	–16.6	234.0	194.9	1.2	39.1
2001		194.0	184.8	1.0	9.2	239.7	191.0	1.3	48.8
2002		151.7	181.5	0.8	–29.8	184.7	193.6	1.0	–8.9
2003		168.9	180.3	0.9	–11.4	202.1	186.5	1.1	15.6
2004		164.7	186.2	0.9	–21.4	222.2	186.5	1.2	35.7
2005		165.9	183.2	0.9	–17.3	174.7	181.6	1.0	–6.8
2006		178.4	179.7	1.0	–1.2	188.8	176.4	1.1	12.4
2007		183.4	178.6	1.0	4.8	193.2	170.5	1.1	22.7
2008		187.2	178.2	1.1	9.0	240.9	189.4	1.3	51.5
2009		160.7	172.8	0.9	–12.1	220.6	178.7	1.2	41.8
2010		196.0	175.8	1.1	20.2	237.0	181.9	1.3	55.1
2011		223.7	177.8	1.3	45.9	209.4	173.8	1.2	35.6
2012		188.5	167.1	1.1	21.4	227.5	176.9	1.3	50.6
	Annual change(k)	3.5*	–0.9*	n.a.	4.4*	–0.1	–1.8*	n.a.	1.7
Long term 1998–2012	**% change over period(l)**	32.6*	–7.0*	n.a.	Significant increase(m)	–0.8	–12.9*	n.a.	134.8
	Annual change(k)	4.3	–1.5	n.a.	5.8	5.2	—	n.a.	5.1
Short term 2006–2012	**% change over period(l)**	14.6	–5.0	n.a.	n.p.(m)	15.4	0.1	n.a.	133.5

(continued)

Table 1.23.29 (continued): Age-standardised mortality rates, rate ratios and rate differences, cancer, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

		WA				SA			
Year		Indigenous rate per 100,000(h)	Non-Indigenous rate per 100,000(h)	Rate ratio(i)	Rate difference(j)	Indigenous rate per 100,000(h)	Non-Indigenous rate per 100,000(h)	Rate ratio(i)	Rate difference(j)
1998		247.3	193.0	1.3	54.3	156.5	194.2	0.8	–37.7
1999		271.2	197.5	1.4	73.7	100.5	185.5	0.5	–85.0
2000		266.5	188.5	1.4	77.9	127.1	189.4	0.7	–62.3
2001		193.6	183.0	1.1	10.6	171.2	191.6	0.9	–20.4
2002		259.6	187.8	1.4	71.7	80.7	191.4	0.4	–110.7
2003		270.6	182.2	1.5	88.4	124.1	188.3	0.7	–64.2
2004		283.2	178.7	1.6	104.5	126.3	181.8	0.7	–55.5
2005		217.1	177.4	1.2	39.8	112.8	180.4	0.6	–67.7
2006		330.3	178.1	1.9	152.3	179.8	182.6	1.0	–2.8
2007		266.1	178.9	1.5	87.2	162.1	181.0	0.9	–19.0
2008		228.6	175.1	1.3	53.5	146.0	187.4	0.8	–41.3
2009		234.1	176.1	1.3	58.0	163.7	177.9	0.9	–14.2
2010		214.4	171.7	1.2	42.8	174.3	180.5	1.0	–6.2
2011		267.5	165.4	1.6	102.1	145.4	172.9	0.8	–27.6
2012		272.1	166.2	1.6	105.9	147.4	169.0	0.9	–21.6
Long term 1998–2012	**Annual change(k)**	—	–1.9*	n.a.	1.9	2.6	–1.3*	n.a.	4.0*
	% change over period(l)	—	–13.9*	n.a.	43.6	30.0	–9.8*	n.a.	–79.3*
Short term 2006–2012	**Annual change(k)**	–6.6	–2.4*	n.a.	–4.3	–3.7	–2.3*	n.a.	–1.4
	% change over period(l)	–14.3	–7.9*	n.a.	–26.0	–12.8	–7.4*	n.a.	55.6

(continued)

Table 1.23.29 (continued): Age-standardised mortality rates, rate ratios and rate differences, cancer, NSW, Qld, WA, SA and NT, 1998–2012[a][b][c][d][e][f][g]

		NT				NSW, Qld, WA, SA and NT combined			
Year		Indigenous rate per 100,000[h]	Non-Indigenous rate per 100,000[h]	Rate ratio[i]	Rate difference[j]	Indigenous rate per 100,000[h]	Non-Indigenous rate per 100,000[h]	Rate ratio[i]	Rate difference[j]
1998		257.8	205.7	1.3	52.1	185.0	193.9	1.0	–8.9
1999		218.5	239.4	0.9	–20.9	196.9	186.3	1.1	10.6
2000		322.3	209.5	1.5	112.8	213.8	188.1	1.1	25.8
2001		238.7	188.7	1.3	50.0	209.8	186.9	1.1	22.9
2002		312.7	166.7	1.9	146.0	188.2	186.3	1.0	1.8
2003		249.5	196.6	1.3	53.0	195.4	183.0	1.1	12.4
2004		227.0	161.9	1.4	65.0	199.5	184.5	1.1	15.0
2005		249.2	222.3	1.1	26.9	180.5	181.7	1.0	–1.2
2006		188.5	222.3	0.8	–33.8	203.2	179.1	1.1	24.1
2007		271.2	214.8	1.3	56.4	206.1	176.9	1.2	29.3
2008		308.7	211.4	1.5	97.3	218.7	181.9	1.2	36.8
2009		317.5	191.1	1.7	126.4	204.7	175.4	1.2	29.3
2010		267.4	199.9	1.3	67.5	217.3	177.3	1.2	39.9
2011		321.5	189.4	1.7	132.1	231.1	174.5	1.3	56.6
2012		323.6	181.9	1.8	141.6	222.8	169.7	1.3	53.1
	Annual change[k]	4.0	–1.0	n.a.	5.0	2.1*	–1.3*	n.a.	3.4*
Long term 1998–2012	**% change over period[l]**	22.8	–6.6	n.a.	188.1	15.3*	–9.7*	n.a.	Significant increase[m]
	Annual change[k]	16.6	–6.6*	n.a.	23.1*	3.8*	–1.3*	n.a.	5.2*
Short term 2006–2012	**% change over period[l]**	42.2	–17.8*	n.a.	955.0*	11.3*	–4.5*	n.a.	135.2*

(continued)

Table 1.23.29 (continued): Age-standardised mortality rates, rate ratios and rate differences, cancer, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(c) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(d) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Cause of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(e) These data exclude registered deaths where the Indigenous status was not stated.

(f) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(i) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(j) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(k) Annual change determined using linear regression analysis.

(l) Per cent change based on the annual change over the period.

(m) Regression line crosses zero, so per cent change is difficult to interpret.

Notes

1. ICD-10 codes I00–I99 included.
2. Not stated for age has been pro-rated across each age group.
3. Cause of Death Unit Record File data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System and coded by the ABS. The data are maintained by the AIHW in the National Mortality Database.

Source: AIHW National Mortality Database (unpublished).

Data sources and quality

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional 'Unknown' response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013a). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013b).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the

2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see <http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

List of symbols used in tables

n.a.	not available
—	rounded to zero (including null cells)
0	zero
. .	not applicable
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

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Aboriginal and Torres Strait Islander

Health Performance Framework

2014 report

Measure 24 of 68

Detailed analyses

1.24 Avoidable and preventable deaths

This measure reports on the number of potentially avoidable deaths of Aboriginal and Torres Strait Islander people aged 0–74, expressed as an age-standardised rate and rate ratio

Introduction

This is no. 24 of 68 measures in the *Aboriginal and Torres Strait Islander Health Performance Framework 2014 report: detailed analyses*. This report provides information on a range of measures of health status, determinants of health and the health system performance relating to Aboriginal and Torres Strait Islander people.

The Framework comprises 3 tiers:

Tier 1—Health status and outcomes

Tier 2—Determinants of health

Tier 3—Health system performance.

The full report, including a comprehensive description of all data sources used in the report, and notes about the data quality is available from <http://www.aihw.gov.au/publication-detail/?id=60129550779>.

Tables referenced are available from <http://www.aihw.gov.au/indigenous-data/health-performance-framework/>.

Data source

National Mortality Database.

For more information, see 'Data sources and quality' at the end of this measure.

Data analyses

Avoidable and preventable mortality refers to deaths from certain conditions that are considered avoidable given timely and effective health care (including disease prevention and population health initiatives). Avoidable and preventable conditions are sometimes further differentiated into conditions where death can be averted by prevention ('preventable') or by treatment ('treatable' or 'amenable'):

- *Preventable* conditions include those for which there are effective ways of preventing the condition from occurring, for example, where the aetiology is to a considerable extent related to lifestyle factors (such as smoking).
- *Amenable* conditions are defined as those from which it is reasonable to expect death to be averted even after the condition has developed, for example, through early detection and effective treatment (such as cervical cancer).

Potentially avoidable deaths can sometimes be further assigned to primary (prevention), secondary (early intervention) and tertiary (medical treatment) levels of health intervention (NSW Health 2004).

Data are available for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory.

For more information about avoidable and preventable deaths, see measure 1.18. See also 'Other related information' at the end of this measure.

The following data are presented for this measure:

- Deaths from avoidable and preventable conditions, see tables 1.24.1–5
- Causes of avoidable and preventable deaths, see Table 1.24.6
- Potential years of life lost, see Table 1.24.7.

Deaths from avoidable and preventable causes

Current period

In 2008–2012 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined:

- There were 7,079 deaths of Indigenous Australians aged 0–74 from avoidable and preventable causes. This represented 75% of all deaths of Indigenous Australians aged 0–74. Of all deaths of Indigenous Australians aged 0–74, 28% were due to conditions amenable to treatment. By comparison, 66% of all non-Indigenous deaths in this age group were from avoidable causes, and 26% were deaths due to conditions amenable to treatment.
- After adjusting for age, the mortality rate for Indigenous Australians from all avoidable causes was 3 times the rate for non-Indigenous Australians (443 per 100,000 compared with 145 per 100,000). This constituted a gap of 297 per 100,000 (Table 1.24.1).

- The highest rate ratio of avoidable mortality between Indigenous and non-Indigenous Australians occurred in the 35–54 age-group, where the avoidable mortality rate for Indigenous Australians was more than 4 times the rate for non-Indigenous Australians (Table 1.24.3).

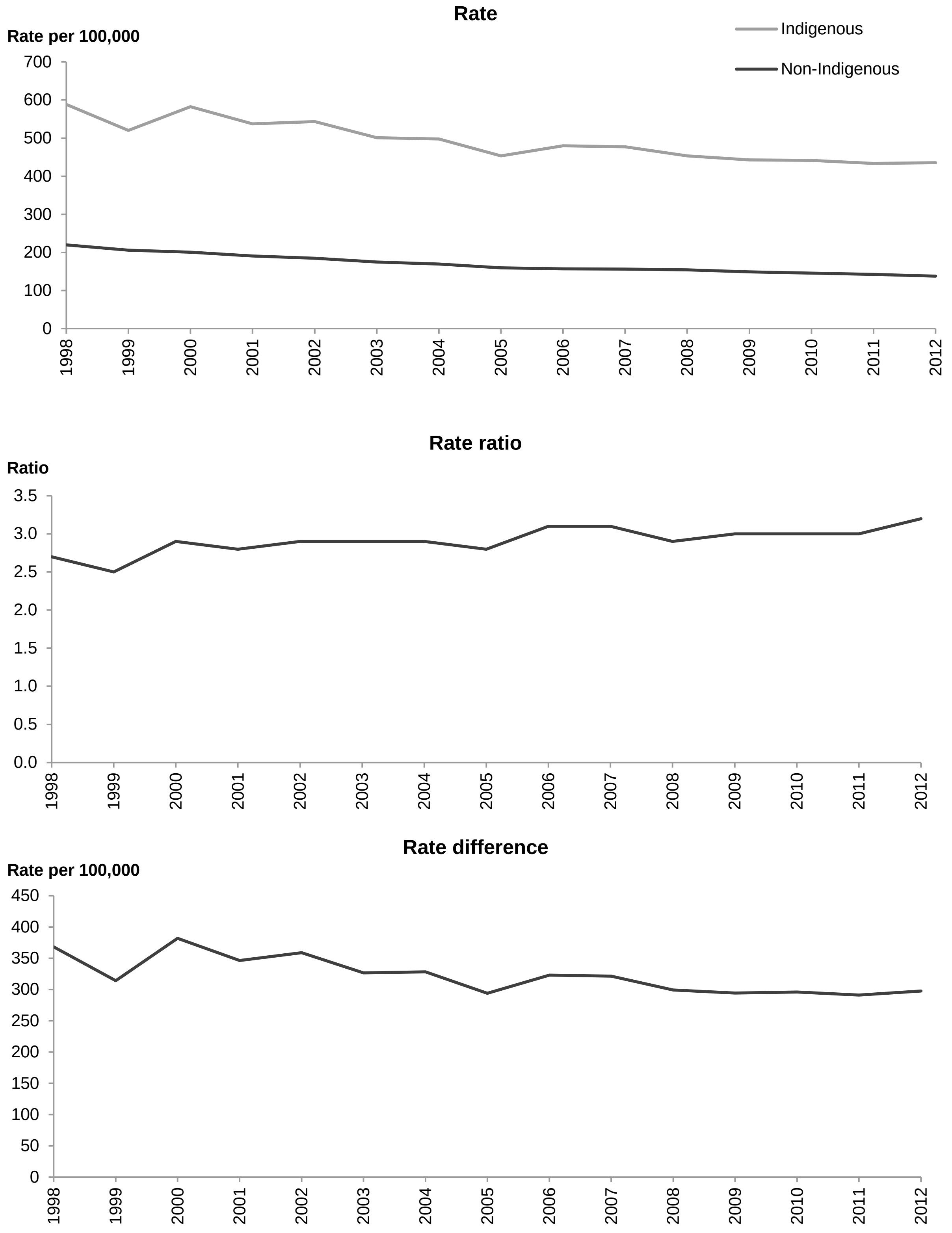
Trend

- From 1998 to 2012, the avoidable mortality rate for Indigenous Australians declined by 27%.
- There was a significant 20% decrease in the gap between Indigenous and non-Indigenous Australians, from 368 per 100,000 to 298 per 100,000 (Table 1.24.2, Figure 1.24.1).

Causes of avoidable and preventable deaths

Current period

- The most common conditions or events causing avoidable mortality for Indigenous Australians were ischaemic heart disease (19%), cancer (18%), diabetes (10%), suicide (9%) and road traffic injuries (6%).
- After adjusting for age, the conditions contributing the most to the avoidable mortality gap between Indigenous and non-Indigenous Australians were ischaemic heart disease (22% of the gap), diabetes (17% of the gap) and cancer (14% of the gap) (Table 1.24.6).



Source: Table 1.24.2.

Figure 1.24.1: Age-standardised mortality rates, rate ratios and rate differences for avoidable causes of death, Indigenous and non-Indigenous Australians aged 0–74, NSW, Qld, WA, SA and NT, 1998–2012

Table 1.24.1: Avoidable mortality, by Indigenous status, persons aged 0–74, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)

	Number			Per cent			Rate per 100,000(i)(j)			
Mortality category	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Rate ratio(k)**	**Rate difference(l)**
Avoidable mortality	7,079	112,076	1,934	75.0	66.3	35.1	442.7	145.3	3.0*	297.4*
Amenable mortality as a percentage of avoidable mortality(m)	*2,607*	*43,365*	*659*	*36.8*	*38.7*	*34.0*	*169.0*	*55.9*	*3.0**	*113.0**
Amenable mortality as a percentage of total mortality(n)	*2,607*	*43,365*	*659*	*27.6*	*25.6*	*11.9*	*169.0*	*55.9*	*3.0**	*113.0**
Unavoidable mortality(o)	2,359	57,035	3,583	25.0	33.7	64.9	150.2	73.4	*2.0**	76.8*
Total mortality(p)	**9,438**	**169,111**	**5,517**	**100.0**	**100.0**	**100.0**	**592.9**	**218.7**	**2.7***	**374.2***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Causes of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) This table presents data for Avoidable Mortality as defined in the National Healthcare Agreement (Indicator P–16).

(d) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(f) These data exclude 5,517 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 74.

(j) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(k) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(l) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(m) Amenable Mortality divided by Avoidable Mortality multiplied by 100.

(n) Amenable Mortality divided by Total Mortality multiplied by 100.

(o) Unavoidable Mortality is all causes other than those specified as Avoidable Mortality.

(p) Totals exclude those aged 75 years and over.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.24.2: Age-standardised avoidable mortality rates, rate ratios and rate differences, avoidable causes, persons aged 0–74, NSW, Qld, WA, SA and NT, 1998–2012(a)(b)(c)(d)(e)(f)(g)

	Indigenous rate per 100,000(h)(i)			Non-Indigenous rate per 100,000)(h)(i)			Rate ratio(j)			Rate difference(k)		
Year	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons
1998	707.1	475.9	588.1	294.9	147.2	219.9	2.4	3.2	2.7	412.2	328.7	368.2
1999	642.5	407.4	520.0	274.8	138.4	205.7	2.3	2.9	2.5	367.7	269.0	314.3
2000	667.8	503.4	582.6	265.6	137.3	200.7	2.5	3.7	2.9	402.2	366.1	381.9
2001	699.7	392.2	537.3	250.7	131.8	190.7	2.8	3.0	2.8	449.0	260.4	346.6
2002	644.8	449.3	543.5	239.5	130.3	184.4	2.7	3.4	2.9	405.3	319.0	359.1
2003	651.6	365.2	501.3	227.9	122.3	174.6	2.9	3.0	2.9	423.7	242.9	326.7
2004	601.0	403.7	497.8	219.7	120.1	169.4	2.7	3.4	2.9	381.2	283.6	328.4
2005	568.2	349.6	453.6	208.1	112.0	159.7	2.7	3.1	2.8	360.1	237.6	294.0
2006	582.5	387.3	480.0	203.1	111.1	156.8	2.9	3.5	3.1	379.4	276.2	323.2
2007	578.8	386.5	477.5	200.5	112.4	156.2	2.9	3.4	3.1	378.3	274.1	321.3
2008	550.5	364.7	453.1	198.3	110.0	153.9	2.8	3.3	2.9	352.2	254.7	299.2
2009	502.0	388.1	443.0	190.4	107.4	148.7	2.6	3.6	3.0	311.6	280.8	294.3
2010	555.9	338.9	441.3	185.4	105.5	145.3	3.0	3.2	3.0	370.5	233.4	296.0
2011	510.7	362.2	433.6	181.2	103.3	142.2	2.8	3.5	3.0	329.5	258.9	291.4
2012	521.6	356.0	435.3	174.3	100.8	137.4	3.0	3.5	3.2	347.3	255.2	297.9

(continued)

Table 1.24.2 (continued): Age-standardised avoidable mortality rates, rate ratios and rate differences, avoidable causes, persons aged 0–74, NSW, Qld, WA, SA and NT, 1998–2012[a][b][c][d][e][f][g]

		Indigenous rate per 100,000[h][i]			Non-Indigenous rate per 100,000)[h][i]			Rate ratio[j]			Rate difference[k]		
Year		**Males**	**Females**	**Persons**	**Males**	**Females**	**Persons**	**Males**	**Females**	**Persons**	**Males**	**Females**	**Persons**
Long term 1998–2012	**Annual change**[l]	–13.9*	–7.8*	–10.7*	–8.0*	–3.1*	–5.5*	n.a.	n.a.	n.a.	–5.9*	–4.6*	–5.2*
	% change over period[m]	–27.9*	–24.2*	–26.5*	–40.5*	–31.2*	–37.1*	n.a.	n.a.	n.a.	–19.6*	–21.0*	–20.4*
Medium term 2001–2012	**Annual change**[l]	–15.3*	–4.9*	–9.8*	–6.4*	–2.7*	–4.5*	n.a.	n.a.	n.a.	–8.9*	–2.2	–5.3*
	% change over period[m]	–25.4*	–13.3*	–20.4*	–29.3*	–23.0*	–26.9*	n.a.	n.a.	n.a.	–23.1*	–8.7	–17.0*
Medium term 1998–2006	**Annual change**[l]	–15.1*	12.6*	–14.0*	–11.4*	–4.5*	–7.8*	n.a.	n.a.	n.a.	–3.7	–8.1	–6.1
	% change over period[m]	17.2*	–21.6*	–19.3*	–31.6*	–24.5*	–29.0*	n.a.	n.a.	n.a.	–7.2	–20.3	–13.5
Short term 2006–2012	**Annual change**[l]	–11.2	–6.0	–8.3*	–4.9*	–1.9*	–3.4*	n.a.	n.a.	n.a.	–6.3	–4.1	–5.0*
	% change over period[m]	–11.6	–9.3	–10.5*	–14.4*	–10.2*	–12.8*	n.a.	n.a.	n.a.	–10.1	–9.0	–9.4*

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the selected periods.

(a) This table presents data for Avoidable Mortality as defined in the National Healthcare Agreement (Indicator P-16).

(b) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2006–2010 (final), 2011 (revised) and 2012 (preliminary). See Causes of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and other mortality rates because of these data quality issues.

(e) These data exclude 9,383 registered deaths where the Indigenous status was not stated over the period 1998–2012.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 74 years.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(k) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(l) Annual change determined using linear regression analysis.

(m) Per cent change based on the annual change over the period.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.24.3: Avoidable mortality, by Indigenous status, age group and sex, persons aged 0–74, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g][h][i]

	Rate per 100,000[j]					
Age group (years)	**Indig.**	**95% LCL**[k]	**95% UCL**[l]	**Non-Indig.**	**Rate ratio**[m]	**Rate difference**[n]
				Males		
Less than 1	368.8	237.7	500.0	238.5	1.5*	130.4*
1–4	24.1	6.5	41.7	10.7	2.3*	13.4*
0–4 years	*100.7*	*68.5*	*132.9*	*58.7*	*1.7**	*42.0**
1–14 years	*15.7*	*7.9*	*23.4*	*6.7*	*2.3**	*8.9**
5–14	12.1	4.0	20.2	5.1	2.4*	7.0*
15–24	116.4	88.6	144.1	40.9	2.8*	75.5*
25–34	208.0	162.8	253.3	64.9	3.2*	143.1*
35–44	384.5	319.2	449.9	97.4	3.9*	287.2*
45–54	687.5	587.2	787.9	196.1	3.5*	491.4*
55–64	1,227.1	1,047.5	1,406.8	426.5	2.9*	800.7*
65–74	2,404.2	2,008.5	2,799.9	1,054.1	2.3*	1350.1*
Total 0–74 years (crude)[o][p]	**289.0**	**269.4**	**308.7**	**199.6**	**1.4***	**89.4***
Total 0–74 years (age-standardised)[o][p][q]	**530.9**	**489.7**	**572.2**	**185.5**	**2.9***	**345.4***
				Females		
Less than 1	271.5	154.3	388.8	194.8	1.4*	76.7*
1–4	29.2	9.5	49.0	8.5	3.5*	20.8*
0–4 years	*80.8*	*51.4*	*110.2*	*47.9*	1.7*	32.9*
1–14 years	*15.9*	*8.0*	*23.9*	*5.3*	3.0*	10.6*
5–14	10.3	2.7	17.9	4.0	2.6*	6.3*
15–24	51.3	32.5	70.1	16.3	3.1*	35.0*
25–34	92.4	62.5	122.4	24.0	3.8*	68.4*
35–44	240.5	191.0	290.1	49.2	4.9*	191.4*
45–54	430.5	353.7	507.2	115.1	3.7*	315.3*
55–64	897.3	750.4	1,044.2	246.0	3.6*	651.3*
65–74	1,851.2	1,533.5	2,169.0	624.5	3.0*	1226.7*
Total 0–74 years (crude)[o][p]	**203.5**	**187.0**	**220.0**	**116.4**	**1.7***	**87.1***
Total 0–74 years (age-standardised)[o][p][q]	**362.6**	**330.3**	**395.0**	**105.3**	**3.4***	**257.3***

(continued)

Table 1.24.3 (continued): Avoidable mortality, by Indigenous status, age group and sex, persons aged 0–74, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Rate per 100,000(j)					
Age group (years)	**Indig.**	**95% LCL(k)**	**95% UCL(l)**	**Non-Indig.**	**Rate ratio(m)**	**Rate difference(n)**
			Persons			
Less than 1	322.2	233.8	410.6	217.2	1.5*	105.0*
1–4	26.6	13.4	39.8	9.6	2.8*	17.0*
0–4 years	*90.9*	*69.1*	*112.8*	*53.4*	1.7*	37.5*
1–14 years	*15.8*	*10.3*	*21.4*	*6.0*	2.6*	9.8*
5–14	11.2	5.7	16.8	4.6	2.5*	6.7*
15–24	84.5	67.6	101.4	28.9	2.9*	55.6*
25–34	149.8	122.7	176.8	44.6	3.4*	105.2*
35–44	309.6	269.0	350.2	73.2	4.2*	236.4*
45–54	554.7	492.0	617.3	155.4	3.6*	399.3*
55–64	1,054.8	939.7	1,169.9	336.3	3.1*	718.5*
65–74	2,103.2	1,853.4	2,353.1	837.3	2.5*	1265.9*
Total 0–74 years (crude)(o)(p)	**246.2**	**233.4**	**259.0**	**158.3**	**1.6***	**87.9***
Total 0–74 years (age-standardised)(o)(p)(q)	**442.7**	**416.9**	**468.5**	**145.3**	**3.0***	**297.4***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) This table presents data for Avoidable Mortality as defined in the National Healthcare Agreement (Indicator P-16).

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(e) These data exclude 1,934 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(f) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(g) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(h) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Causes of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) Age-specific death rates for age groups calculated per 100,000 estimated resident population for selected age group.

(k) LCL = lower confidence limit.

(l) UCL = upper confidence limit.

(m) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(n) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(o) The avoidable mortality classification includes some causes for only specific age groups. They are: childhood vaccine-preventable diseases (0–14 years), asthma (0–44 years) and chronic obstructive pulmonary disease (45–74 years). These causes have been included in only the relevant age groups and the subsets included in the total.

(p) Totals exclude those aged 75 years and over.

(q) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 74.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.24.4: Avoidable mortality, by Indigenous status and state/territory, NSW, Qld, WA, SA and NT, persons aged 0–74, 2008–2012[a][b][c][d][e][f][g][h]

	Number			Indigenous[e]			Non-Indigenous[e]				
State/territory	Indigenous[e]	Non-Indigenous[e]	Not stated	Rate per 100,000[i][j]	95% LCL[k]	95% UCL[l]	Rate per 100,000[i][j]	95% LCL[k]	95% UCL[l]	Rate ratio[m]	Rate difference[n]
NSW	1,725	51,399	524	304.1	269.2	338.9	143.5	140.7	146.3	2.1*	160.6*
Qld[g]	1,898	32,373	964	399.0	353.2	444.8	152.0	148.3	155.8	2.6*	246.9*
WA[h]	1,468	14,684	334	628	543.7	712.3	135.6	130.6	140.5	4.6*	492.4*
SA	470	12,439	105	435.7	339.1	532.4	146.1	140.3	152.0	3.0*	289.6*
NT	1,518	1,181	7	788.9	687.8	889.9	174.5	150.7	198.2	4.5*	614.4*
NSW, Qld, WA, SA and NT[o]	**7,079**	**112,076**	**1,934**	**442.7**	**416.9**	**468.5**	**145.3**	**143.4**	**147.2**	**3.0***	**297.4***

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(b) This table presents data for Avoidable Mortality as defined in the National Healthcare Agreement (Indicator P-16).

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(e) These data exclude 1,934 registered deaths where the Indigenous status was not stated for these causes of death, over the period 2008–2012.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Causes of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 75+.

(k) LCL = lower confidence limit.

(l) UCL = upper confidence limit.

(m) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(n) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(o) Totals exclude those aged 75 years and over.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.24.5: Avoidable mortality, by subcategory, by Indigenous status, persons aged 0–74, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Number			Per cent			Rate per 100,000(j)			
Mortality category	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Rate ratio(k)**	**Rate difference(l)**
Avoidable mortality(m)	7,079	112,076	1,934	75.0	66.3	71.3	442.7	145.3	**3.0***	**297.4***
Primary(n)(o)	*3,728.5*	*61,461.8*	*1,044.7*	*39.5*	*36.3*	*38.5*	*232.9*	*79.4*	*2.9**	*153.6**
Secondary(n)(p)	*1,713.4*	*24,676.8*	*422.1*	*18.2*	*14.6*	*15.6*	*112.0*	*32.0*	*3.5**	*80.0**
Tertiary(n)(q)	*1,631.4*	*25,726.5*	*464.0*	*17.3*	*15.2*	*17.1*	*97.3*	*33.6*	*2.9**	*63.7**
Unavoidable mortality(r)(s)	2,359	57,035	778	25.0	33.7	28.7	150.2	73.4	2.0*	76.8*
Total mortality(t)	**9,438**	**169,111**	**2,712**	**100.0**	**100.0**	**100.0**	**592.9**	**218.7**	**2.7***	**374.2***

(continued)

Table 1.24.5 (continued): Avoidable mortality, by subcategory, by Indigenous status, persons aged 0–74, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) This table presents data for Avoidable Mortality as defined in the National Healthcare Agreement (Indicator P-16). It presents primary, secondary and tertiary weighted data as defined in table 3 of the 2005 Report of the New South Wales Chief Health Officer.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(e) These data exclude 2,712 registered deaths where the Indigenous status was not stated for these causes of death, over the period 2008–2012.

(f) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are ‘final’, they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Causes of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) Directly age-standardised using the 2001 Australian standard population, by 5-year age group up to 74.

(k) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(l) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(m) Per cent = Avoidable mortality divided by Total Mortality multiplied by 100.

(n) Primary, secondary and tertiary weightings by cause do not always add to 100%, therefore primary, secondary and tertiary death counts may not add to the number of Avoidable deaths.

(o) Per cent = Primary Mortality divided by Avoidable Mortality multiplied by 100.

(p) Per cent = Secondary Mortality divided by Avoidable Mortality multiplied by 100.

(q) Per cent = Tertiary Mortality divided by Avoidable Mortality multiplied by 100.

(r) Unavoidable Mortality is all causes other than those specified as Avoidable Mortality.

(s) Per cent = Unavoidable mortality divided by Total Mortality multiplied by 100.

(t) Totals exclude those aged 75 years and over.

Source: ABS and AIHW analysis of National Mortality Database.

Table 1.24.6: Avoidable mortality, by cause of death and Indigenous status, persons aged 0–74, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

	Number			Per cent			Indigenous(e)			Non-Indigenous(e)					
Cause of death	**Indig.(f)**	**Non-Indig.(f)**	**Not stated**	**Indig.(f)**	**Non-Indig.(f)**	**Not stated**	**Rate per 100,000(j)(k)**	**95% LCL(l)**	**95% UCL(m)**	**Rate per 100,000(j)(k)**	**95% LCL(l)**	**95% UCL(m)**	**Rate ratio(n)**	**Rate diff.(o)**	**Rate diff.%(p)**
Ischaemic heart disease	1,312	18,343	362	18.5	16.4	19.7	89.2	77.5	100.9	23.3	22.6	24.1	3.8*	65.9*	22.1
Cancer	1,271	43,881	416	18.0	39.2	22.6	96.9	84.0	109.7	55.4	54.3	56.6	1.7*	41.4*	13.9
Digestive organ cancers (C15–C26)(q)	*407*	*13,509*	*125*	5.7	12.1	6.8	*30.9*	*23.6*	*38.1*	*17.1*	*16.4*	*17.7*	*1.8**	*13.8**	*4.6*
Lung cancer(q)	*462*	*15,565*	*152*	6.5	13.9	8.3	*37.3*	*29.2*	*45.5*	*19.5*	*18.8*	*20.2*	*1.9**	*17.9**	*6.0*
Cervical cancer (C53)(q)	*51*	*552*	*9*	0.7	0.5	0.5	*3.3*	*1.1*	*5.4*	*0.7*	*0.6*	*0.9*	*4.5**	*2.5**	*0.9*
Diabetes	734	3,675	79	10.4	3.3	4.3	56.4	46.5	66.2	4.7	4.3	5.0	12.0*	51.7*	17.4
Suicide	628	8,363	248	8.9	7.5	13.5	23.4	19.0	27.7	11.6	11.1	12.2	2.0*	11.7*	3.9
Road traffic injuries	429	4,247	127	6.1	3.8	6.9	16.6	12.8	20.4	5.9	5.5	6.3	2.8*	10.6*	3.6
Alcohol-related disease	355	3,025	69	5.0	2.7	3.8	20.3	15.4	25.2	3.9	3.6	4.2	5.2*	16.4*	5.5
Cerebrovascular disease	295	6,240	78	4.2	5.6	4.2	21.6	15.6	27.6	8.1	7.6	8.5	2.7*	13.6*	4.6
Selected invasive bacterial and protozoal infections	237	2,351	45	3.3	2.1	2.4	14.3	9.7	18.9	3.1	2.8	3.3	4.7*	11.2*	3.8
Chronic obstructive pulmonary disease(r)	314	5,474	92	4.4	4.9	5.0	321.0	285.5	356.5	109.6	106.7	112.5	2.9*	211.4*	n.a.
Nephritis and nephrosis	239	1,496	22	3.4	1.3	1.2	18.4	12.7	24.0	1.9	1.7	2.2	9.5*	16.4*	5.5
Complications of perinatal period	124	935	32	1.8	0.8	1.7	2.4	1.4	3.3	1.3	1.2	1.5	1.8*	1.0*	0.3
Violence	189	736	18	2.7	0.7	1.0	8.0	5.3	10.7	1.0	0.9	1.2	7.8*	7.0*	2.4
Birth defects	133	1,905	45	1.9	1.7	2.4	3.3	1.9	4.8	2.7	2.4	3.0	1.2*	0.6*	0.2
Rheumatic and other valvular heart disease	92	326	4	1.3	0.3	n.p.	5.3	2.5	8.0	0.4	0.3	0.5	12.4*	4.8*	1.6
Other(s)	727	11,079	298	10.3	9.9	15.4	38.6	31.6	45.6	14.9	14.3	15.5	2.6*	23.7*	8.0
Total(r)	**7,079**	**112,076**	**1,934**	**100.0**	**100.0**	**100.0**	**442.7**	**416.9**	**468.5**	**145.3**	**143.4**	**147.2**	**3.0***	**297.4***	**100.0**

(continued)

Table 1.24.6 (continued): Avoidable mortality, by cause of death and Indigenous status, persons aged 0–74, NSW, Qld, WA, SA and NT, 2008–2012(a)(b)(c)(d)(e)(f)(g)(h)(i)

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the $p < 0.05$ level.

(a) This table presents data for Avoidable Mortality as defined in the National Healthcare Agreement (Indicator P-16).

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(c) Data are presented in 5-year groupings because of small numbers each year. For rate calculations, the numerator is the average of the total number of deaths and the denominator is the mid-point of the population for the time period.

(d) Cells with small values have been randomly assigned to protect the confidentiality of individuals, so some totals will not equal the sum of their components. Cells with a zero value have not been affected.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(f) These data exclude 1,934 registered deaths where the Indigenous status was not stated for these causes of death, over the period 2008–2012.

(g) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Causes of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(h) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(i) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(j) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(k) Directly age-standardised, using the 2001 Australian standard population, by 5-year age group up to 74.

(l) LCL = lower confidence limit.

(m) UCL = upper confidence limit.

(n) Rate ratio is the mortality rate for Indigenous Australians divided by the mortality rate for non-Indigenous Australians.

(o) Rate difference is the mortality rate for Indigenous Australians minus the mortality rate for non-Indigenous Australians.

(p) Rate difference per cent is the rate difference for each specific cause divided by the rate difference for all avoidable causes.

(q) Data for lung cancer, cervical cancer and digestive organ cancers are a subset of the data presented for all cancers.

(r) The avoidable mortality classification includes some causes for only specific age groups. They are: childhood vaccine-preventable diseases (0–14 years), asthma (0–44 years) and chronic obstructive pulmonary disease (COPD, 45–74 years). Rates for COPD are age-specific death rates. Deaths due to childhood-vaccine preventable deaths and asthmas within the specified age groups have been included in the 'other' category, and all three causes have been included in the total.

(s) Other includes all avoidable mortality not specifically detailed in the table.

Source: ABS and AIHW analysis of National Mortality Database.

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Table 1.24.7: Potential years of life lost to amenable mortality by Indigenous status and age group, persons aged 0–74, NSW, Qld, WA, SA and NT, 2008–2012[a][b][c][d][e][f][g][h][i][j][k]

	Number		Per cent	
Age group (years)	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
Less than 1	17,813	158,888	25.6	21.3
1–14	3,521	23,430	5.1	3.1
15–24	2,438	20,743	3.5	2.8
25–44	18,645	117,216	26.8	15.7
45–64	24,031	326,148	34.5	43.8
65–74	3,117	99,050	4.5	13.3
Total[l]	**69,562**	**745,474**	**100.0**	**100.0**

(a) This table presents data for amenable mortality as defined in the National Healthcare Agreement (Indicator P-16).

(b) All causes of death data from 2006 onward are subject to a revisions process—once data for a reference year are 'final', they are no longer revised. Affected data in this table are: 2008–2010 (final), 2011 (revised) and 2012 (preliminary). See Causes of Death, Australia, 2012 (cat.no. 3303.0) Explanatory Notes for further information.

(c) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only, which are considered to have adequate levels of Indigenous identification in mortality data. Data for these jurisdictions over-represent Indigenous populations in less urbanised and more remote locations, and should not be assumed to represent the experience in the other jurisdictions.

(d) Data are presented in 5-year groupings because of small numbers each year.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(f) These data exclude 659 registered deaths where the Indigenous status was not stated over the period 2008–2012.

(g) Care should be taken when interpreting mortality rates for Queensland due to recent changes in the timeliness of birth and death registrations. Queensland deaths data for 2010 have been adjusted to minimise the impact of late registration of deaths on mortality indicators.

(h) WA Indigenous deaths for 2007, 2008 and 2009 corrected for over-reporting.

(i) Population data between Census years are based on assumptions about past and future levels of fertility, mortality and migration, and have a degree of uncertainty.

(j) The avoidable mortality classification separates deaths into two sub-categories: amenable/treatable and preventable. This table only includes data for amenable/treatable deaths. One cause of death which contributes to the total number of amenable deaths is Asthma. In this classification, Asthma is not included for those aged 45 years and over and have therefore been excluded from analysis, and also from the total.

(k) Potential years of life lost have been calculated as years lost from 75 years of age. Potential years of life lost have been rounded to the nearest whole, therefore component figures may not sum to the total.

(l) Excludes those aged 75 years and over.

Source: ABS and AIHW analysis of National Mortality Database.

Data sources and quality

National Mortality Database

Mortality data presented in this report are from the ABS National Mortality Database. The National Mortality Database includes information on the factors that caused death, as well as other information about the deceased person, such as age at death, place of death, country of birth, and where applicable, the circumstances of their death. These data are collected in Australia by the Registrars of Births, Deaths and Marriages in each state and territory. The data are then compiled nationally by the ABS, which codes the data according to the International Classification of Diseases (ICD).

Deaths

The count of deaths for Indigenous Australians can be influenced by the accuracy of identification of Indigenous deaths, late registration of deaths, as a result of coronial inquiry, and changes to death forms and/or processing systems. Due to the small size of the Indigenous population, these factors can significantly impact on trends over time and between jurisdictions.

Queensland deaths

In November 2010, the Queensland Registrar of Births, Deaths and Marriages advised the ABS of an outstanding deaths registration initiative undertaken by the Registry. This initiative resulted in the November 2010 registration of 374 previously unregistered deaths which occurred between 1992 and 2006 (including a few for which a date of death was unknown). Of these, around three-quarters (284) were deaths of Indigenous Australians.

The ABS discussed different methods of adjustment of Queensland death registrations data for 2010 with key stakeholders. Following the discussion, a decision was made by the ABS and key stakeholders to use an adjustment method that added together deaths registered in 2010 for usual residents of Queensland which occurred in 2007, 2008, 2009 and 2010. This method minimises the impact on mortality indicators used in various government reports. However, care should still be taken when interpreting Indigenous death data for Queensland for 2010.

Western Australia deaths

Indigenous deaths registered in Western Australia in 2007, 2008 and 2009 were corrected by the ABS in mid-2012 due to some non-Indigenous deaths being incorrectly recorded as Indigenous for these years. Data presented in this report are based on the corrected data and will differ from mortality data presented in the 2010 Health Performance Framework report which presented data before the ABS corrections.

Indigenous status question

All jurisdictions broadly comply with the standard wording for the Indigenous status question for their death registration forms. However, the response categories tend to differ between a number of jurisdictions, most notably WA provides an additional ‘Unknown’ response category and the NT does not provide clear instructions on how to select both Aboriginal and Torres Strait Islander origin (for example, by ticking both boxes) (ABS & AIHW 2005).

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or reported, or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Indigenous population (ABS 2013a). As a result, the observed differences between Indigenous and non-Indigenous mortality are under-estimates of the true differences. While the identification of Indigenous Australians in deaths data is incomplete in all state and territory registration systems, 5 jurisdictions (New South Wales, Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. Longer-term mortality trend data are presented for these jurisdictions from 1998 onwards. The ABS calculated the identification rate of Indigenous deaths for the period 2011–12 through data linkage between the Census and death registration records to examine differences in reporting of Indigenous status across the 2 datasets (ABS 2013b).

Indigenous Mortality Quality Study

The ABS conducted a number of quality studies based on the 2006 Census of Population and Housing and other data sets as part of the Census Data Enhancement (CDE) project (ABS 2008). The CDE Indigenous Mortality Quality Study linked Census records with death registration records for the 11-month period following the Census and examined differences in the reporting of Indigenous status across the 2 data sets.

For the purpose of this study, the linked record was assumed to be an Indigenous record if a positive response was recorded against the Indigenous status question on either the death registration or the corresponding Census record. Following linkage, the number of death records identified as Indigenous increased from 1,800 to 2,123 records, or from 1.7% to 2.0% of all registered deaths.

According to ABS 2008: 'While 323 additional death records were able to be identified as Indigenous from Census records, more may have been expected if all death records had been linked. A key reason records could not be linked appears to be Census undercount, with a corresponding Census record not existing to link to for many Indigenous death records'.

The results from the study suggested that coverage of Indigenous deaths in death registrations is considerably higher, at least in 2006–07, than previous estimates have indicated. Nationally, the coverage rate was estimated to be 85%. State/territory coverage estimates were: Victoria 74%, New South Wales 76%, South Australia 86%, Queensland 87%, Western Australia 92% and the Northern Territory 99% (ABS 2008). The AIHW is also undertaking a project to develop an Enhanced Mortality Database by linking death registration records to several additional data sources that contain information on Indigenous deaths.

Numerator and denominator

Mortality rates use the count of deaths in the numerator and population estimates in the denominator. Analysis of trends in mortality rates is therefore also influenced by the assumptions made about mortality in the population backcast and projections, which is somewhat circular. The 2011 Census based backcast mortality assumptions were that Indigenous life expectancy at birth at the Australian level increased by 0.2 years per year for males and 0.15 years per year for females for the period 30 June 1996 to 30 June 2006 and then increased by 0.3 years per year for males and 0.15 years per year for females for the

2006–2011 period. Under this assumption, life expectancy at birth in 1996 would be 65.5 years and 71.4 years for Indigenous males and females respectively. Whether Indigenous life expectancy at birth has changed at a faster or slower rate is unknown (ABS 2014).

For more information see
<http://meteor.aihw.gov.au/content/index.phtml/itemId/395084>.

List of symbols used in tables

n.a.	not available
n.p.	not available for publication but included in totals where applicable, unless otherwise indicated
*	represents results with statistically significant differences at the $p < 0.05$ level, between the categories specified in table footnotes

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This report gives the latest information on how Aboriginal and Torres Strait Islander people in Australia are faring according to a range of measures of health status and outcomes, determinants of health and health system performance. Indicators are based on the Aboriginal and Torres Strait Islander Health Performance Framework. The report highlights the main areas of improvement and continuing concern.