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Aboriginal and Torres Strait Islander Health Performance Framework 2010 report

Victoria

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Contents

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Abbreviations

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
WHO	World Health Organization

Symbols

–	nil or rounded to zero
. .	not applicable
n.a.	not available
n.p.	not publishable because of small numbers, confidentiality or other concerns about the quality of the data

Key findings

A summary of the key findings under each tier are outlined below as well as in a Table format in page xi for ease of reference.

Health status and health outcomes

Areas of improvement

The health status of Indigenous people in Victoria is worse than their non-Indigenous counterparts against most health status indicators with the exception of hospitalisations for ear disease among Indigenous children.

- The hospitalisation rates for diseases of the ear and mastoid process among Indigenous children aged 0–14 continued to be below those among other children over the period 2004–05 to 2007–08.

Areas needing further work

Despite making progress in some areas, Indigenous Australians in Victoria are lagging behind in many areas where further improvements need to be made to close the gap in health disadvantage:

- Between 2006 and 2008, live-born babies born to Indigenous mothers were twice as likely to be of low birthweight as those born to non-Indigenous mothers (12.9% compared with 6.3%).
- During the period 2004-05 to 2007-08, the hospitalisation rate for Indigenous people increased by 38%, equal to an average yearly increase in the hospitalisation rate of 28.8 per 1,000.
    - The hospitalisation rate for injury and poisoning among Indigenous people increased by 14%.
    - the hospitalisation rate for circulatory disease showed an increase of 62% for Indigenous people.
    - Over the same period, the hospitalisation rate for mental health-related conditions among Indigenous people showed no significant decline, unlike for other Australians.
- Between 1991 and 2008, there was a 324% increase in the incidence rate of end-stage renal disease (ERSD) among Indigenous people, equal to an average yearly increase of 2.5 cases per 100,000.

Determinants of health

Areas of improvement

Some improvements have been made in key health determinants in recent years in Victoria:

- In 2008, 25% of Indigenous people aged 15 and over were studying.
- From 2005-06 to 2008-09, the rate of Indigenous children who were subjects of child protection substantiations decreased from 63.0 to 48.3 per 1,000 children.
- In 2004-05, 97% of Indigenous people aged 12 and over reported they ate vegetables daily, 89% ate fruit daily and 96% drank milk daily, most commonly whole milk.
- In 2008, 80% of Indigenous infants aged 0-3 had been breastfed.

Areas needing further work

Despite significant improvements as mentioned above, further improvements need to be made in a number of areas to close the gap in health disadvantage:

- In 2007–08, 65% of Indigenous children aged 0–14 lived in households with a daily smoker, compared with 30% for non-Indigenous children.
- The crude imprisonment rate of Indigenous people in Victoria increased by 48% between 2000 and 2009.
- The proportion of Indigenous students achieving the educational benchmarks in years 3, 5 and 7 literacy was much lower than that of non-Indigenous children.
- In 2008, 83% of Indigenous adults, their family members or friends had experienced at least one stressor in the last 12 months compared with 48% of non-Indigenous adults.
- The mean equalised gross weekly household income for Indigenous adults was $635 per week in 2008, compared with $957 for non-Indigenous adults.

Health system performance

Areas of improvement

There have been improvements in health system performance in recent years including:

- In 2004-05, more Indigenous people aged 65 and over had been vaccinated against influenza than non-Indigenous people of the same age (86% and 75% respectively), and against pneumonia (52% and 48% respectively).
- In 2006–07, the state government was estimated to have spent, on average, $3,312 per Indigenous person compared with $1,537 per non-Indigenous person.
- In 2006-08, almost all hospital admitted episodes for Indigenous and other people occurred in accredited hospitals (99.9% and 99.7% respectively).

Areas needing further work

Further improvements are needed for some areas including:

- The proportion of Indigenous children who were fully immunised at age 1 decreased by 6% between 2001 and 2009.
- The proportion of Indigenous women aged 50-69 who participated in the BreastScreen Australia program decreased by 20%.
- Indigenous people hospitalised for potentially preventable conditions increased:
  - the rate of hospitalisations of Indigenous people for preventable acute conditions increased by 24% between 2004-05 and 2007-08, and
  - over the same period, the rate of preventable chronic disease hospitalisation rate among Indigenous people increased by 19%
  - the rate of hospitalisations for vaccine-preventable conditions increased by 81% for Indigenous people over the same period.

Summary of progress against key indicators in the Health Performance Framework, VIC

Health status and health outcomes		Determinants of health		Health system performance	
Improving	**Needs Improvement**	**Improving**	**Needs Improvement**	**Improving**	**Needs Improvement**
Children's hearing loss Hospitalisation rates for diseases of the ear and mastoid process among Indigenous children aged 0–14 were generally below that among other children (2004–05 to 2007–08)	**Low birthweight** Indigenous babies are twice as likely to be of low birthweight as non-Indigenous babies (2006–08) **Hospitalisation** Hospitalisation rate increased by 38% for Indigenous people (2004-05 to 2007-08). **Injury and poisoning** Hospitalisation rate increased by 14% for Indigenous people, by 8% for other people. Gap has widened. (2004-05 to 2007-08) **Circulatory disease** Hospitalisation rate increased significantly by 62% for Indigenous people, by <1% for other people. (2004-05 to 2007-08). **End-stage renal disease** Incidence rates increased by 324% for Indigenous people, by 131% for other people. Gap has widened. (1991 to 2008) **Mental health** Hospitalisation rate increased though not significantly for Indigenous people, and declined by 5% for other people. Gap has widened. (2004-05 to 2007-08).	**Adult education** In 2008, 25% Indigenous people aged 15 and over were studying. This is higher than non-Indigenous people (16%). **Child protection** The rate ratio of Indigenous to other children who were subjects of substantiations decreased from 6.5 to 5.0. Gap has narrowed (2005-06 to 2008-09). **Dietary habits** In 2004-05, 97% of Indigenous people ate vegetables daily, 89% ate fruit daily and 96% drank milk daily. **Teenage pregnancies** In 2005-07, the rate of Indigenous women aged less than 20 years who gave birth in Victoria was lower than the national rate (30 compared with 47 per 1,000 women). **Breastfeeding** In 2008 in Victoria, 80% of Indigenous infants aged 0–3 had ever been breastfed compared with 77% of Indigenous infants of the same age in Australia.	**Environmental tobacco smoke** In 2007–08, 65% Indigenous children aged 0–14 lived in households with a daily smoker, compared with only 30% of non-Indigenous children. **Years 3, 5 and 7 literacy and numeracy** Proportions of Indigenous students in Victoria achieving educational benchmarks are lower than for non-Indigenous students. **Income** Indigenous people aged 18 had a mean income of $635 per week compared with $957 per week for non-Indigenous (2008). **Stressors** In 2008, 83% of Indigenous people aged 18 and over or their family members and close friends, experienced at least one stressor in the last 12 months compared with 48% for non-Indigenous. **Imprisonment** The crude imprisonment rate of Indigenous people increased by 48% (2000 to 2009).	**Adult immunisation** In 2004-05, higher proportions of Indigenous people aged 65 and over had vaccinations against influenza and pneumonia than non-Indigenous at same age. **Hospitalisation accreditation** In 2006-08, almost all hospital admitted episodes for Indigenous (99.9%) and other people (99.7%) occurred in accredited hospitals. **Health expenditure** In 2006–07, the state government was estimated to have spent, on average, $3,312 per Indigenous person compared with $1,537 per non-Indigenous person.	**Childhood immunisation** The proportion of children at 1 year of age who were fully immunised decreased by 6% for Indigenous, no significant changes for non-Indigenous. Gap has widened. (2001 to 2009) **Breastscreening** The proportion of women aged 50–69 participating in the BreastScreen Australia program decreased by 20% for Indigenous women. Gap has widened. (2003-04 to 2007-08) **Vaccine-preventable conditions** Hospitalisation rate increased by 81% for Indigenous people, no significant changes for other people. Gap has widened. (2004-05 to 2007-08) **Potentially preventable acute conditions** Hospitalisation rate increased by 24% for Indigenous people, by 9% for other people. Gap has widened. (2004-05 to 2007-08) **Preventable chronic conditions** Hospitalisation rate increased by 19% for Indigenous people, by 11% for other people. Gap has widened. (2004-05 to 2007-08)

Introduction

This report provides information on a range of indicators on health status, determinants and the health system performance in relation to Aboriginal and Torres Strait Islander people in Victoria. The report is based on the Aboriginal and Torres Strait Islander Health Performance Framework 2010 report, detailed analysis, the third in a series of reports against the Aboriginal and Torres Strait Islander Health Performance Framework (HPF). Analysis presented in this report includes both jurisdiction-specific measures and their comparison with national measures.

The HPF comprises three tiers:

Tier 1—health status and health outcomes. This covers prevalence of health conditions (for example circulatory disease, diabetes), human function (for example disability), life expectancy and well-being 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, social and emotional wellbeing.

Tier 2—determinants of health. This covers determinants of health which focus on factors outside the health system that impact on 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 behaviours) 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 systems performance. This covers the performance of the health system including population health, primary health care and secondary/tertiary care services. Six domains are covered: effectiveness of health services, responsiveness of health services to Aboriginal and Torres Strait Islander communities and individuals, accessibility of services, 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, the health workforce and expenditure.

The tiers and domains of the HPF and selected measures are shown in Figure 1. There are currently 71 indicators that can be reported against at national level but not all can be reported for Victoria due to data availability and data quality issues. Information on why these indicators were selected can be found in the Aboriginal and Torres Strait Islander Health Performance Framework 2010 policy report (AHMAC 2011).

Health Status and Outcomes (Tier 1)		
Health Conditions 1.01 Low birthweight infants 1.02 Top reasons for hospitalisation 1.03 Hospitalisation for injury and poisoning 1.04 Hospitalisation for pneumonia 1.05 Circulatory disease 1.06 Acute rheumatic fever & rheumatic heart disease * 1.07 High blood pressure 1.08 Diabetes 1.09 End-stage renal disease 1.10 Decayed, missing, filled teeth* 1.11 HIV/AIDS, hepatitis C and sexually transmissible infections 1.12 Children's hearing loss	**Human Function** 1.13 Disability 1.14 Community functioning	**Deaths** 1.19 Infant mortality rate* 1.20 Prenatal mortality* 1.21 Sudden infant death syndrome* 1.22 All-causes age-standardised deaths rates* 1.23 Leading causes of mortality* 1.24 Maternal mortality* 1.25 Avoidable and preventable deaths*
	Life Expectancy & Wellbeing 1.15 Perceived health status 1.16 Social and emotional wellbeing 1.17 Life expectancy at birth 1.18 Median age at death *	

Determinants of Health (Tier 2)		
Environmental Factors 2.01 Access to functional housing with Utilities 2.02 Overcrowding in housing 2.03 Environmental tobacco smoke	**Community Capacity** *Demography* 2.11 Dependency ratio 2.12 Single-parent families by age group* *Safety and Crime* 2.13 Community safety 2.14 Contact with the criminal justice system 2.15 Child protection *Other* 2.16 Transport 2.17 Indigenous people with access to their traditional lands	**Health Behaviours** *Tobacco, alcohol and other drug use* 2.18 Tobacco use 2.19 Tobacco smoking during pregnancy* 2.20 Risky and high-risk alcohol consumption 2.21 Drug and other substance use including inhalants *Physical activity* 2.22 Level of physical activity *Nutrition* 2.23 Dietary behaviours 2.24 Breastfeeding practices *Other health behaviours* 2.25 Unsafe sexual practices
Socioeconomic Factors 2.04 Educational participation and attainment of Aboriginal and Torres Strait Islander adults 2.05 Years 10 and 12 retention and attainment 2.06 Year 3, 5 and 7 literacy and numeracy 2.07 Employment status including CDEP participation 2.08 Income 2.09 Housing tenure type 2.10 Index of disparity		**Person-related Factors** 2.24 Prevalence of overweight and obesity

Health System Performance (Tier 3)		
Effective/Appropriate/Efficient 3.01 Antenatal care* 3.02 Immunisation (child and adult) 3.03 Early detection and early treatment (including cancer screening) 3.04 Chronic disease management* 3.05 Differential access to key hospital procedures 3.06 Ambulatory care sensitive hospital admissions 3.07 Health promotion*	**Accessible** 3.12 Access to services by types of service compared to need 3.13 Access to prescription medicines* 3.14 Access to afterhours primary health care	**Capable** 3.17 Accreditation 3.18 Aboriginal and Torres Strait Islander people in Tertiary Education for health related disciplines
Responsive 3.08 Discharge against medical advice 3.09 Access to mental health services 3.10 Aboriginal and Torres Strait Islander Australians in the health workforce 3.11 Competent governance	**Continuous** 3.15 Regular GP or health service 3.16 Care planning for client with chronic diseases	**Sustainable** 3.19 Expenditure on Aboriginal and Torres Strait Islander health compared to need 3.20 Recruitment and retention of clinical and management staff (including GPs)

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

* Measures for which Victoria data are unavailable, or data are not of sufficient quality for reporting.

Notes: The Safe domain is measured within the National Health Performance Committee framework.

Demographic information

In 2010, there were an estimated 36,761 Aboriginal and Torres Strait Islander people in Victoria, accounting for 6.5% of Australia's Indigenous population. Indigenous people represent 0.7% of the Victorian population, lower than the proportion of Indigenous people in the total Australian population (2.6%).

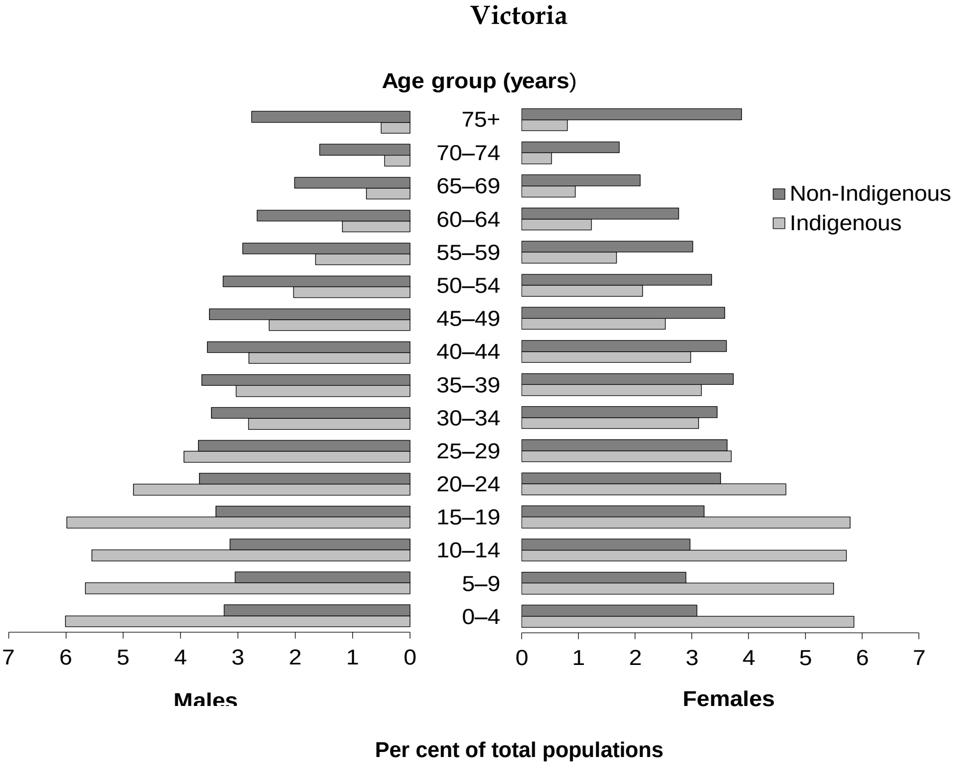
Table 1: Estimated resident population by Indigenous status, Victoria and Australia, 2010

	Indigenous		**Non-Indigenous**		**Total**			
	No.	**%**	**No.**	**%**	**No.**	**%**	**% Indig.**	**% Non-Indig.**
Victoria	36,761	6.5	5,402,251	25.2	5,439,012	24.7	0.7	99.3
Australia[(a)]	**563,101**	**100.0**	**21,427,910**	**100.0**	**21,991,011**	**100.0**	**2.6**	**97.4**

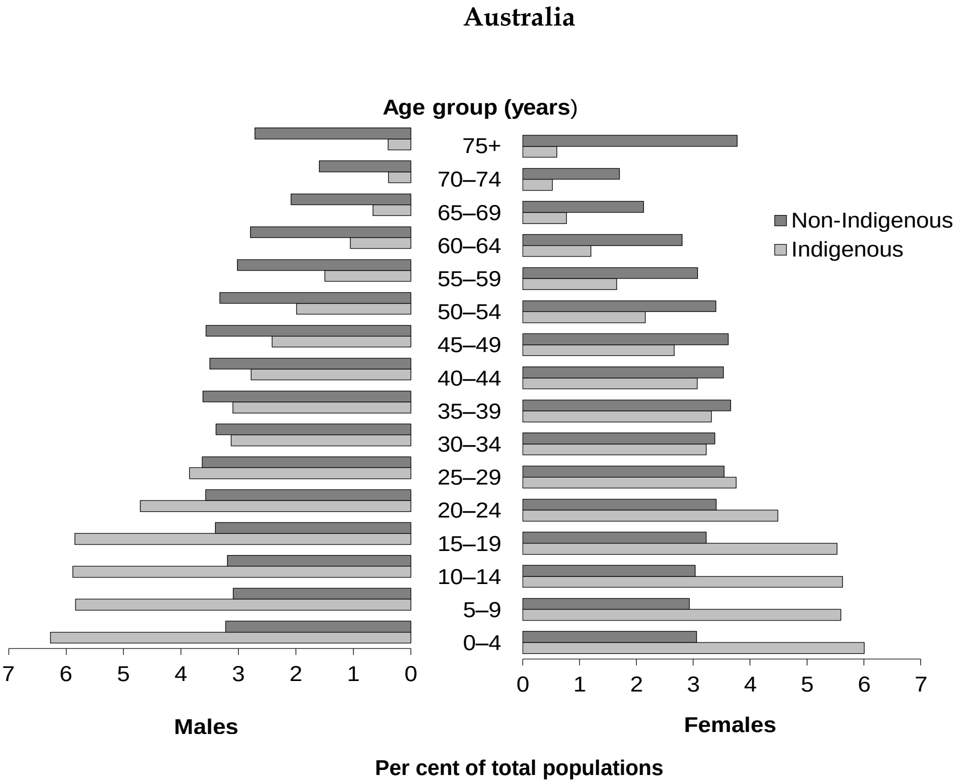
(a) Includes territories other than New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania, the Northern Territory and the Australian Capital Territory.

Source: AIHW analysis of ABS population estimates based on 2006 Census.

Aboriginal and Torres Strait Islander people have an age structure that is significantly younger than that of other Australians. For example, in Victoria, Aboriginal and Torres Strait Islander people aged less than 15 constitute 34.3% of the Indigenous population, whereas this age group represents about 18.5% of the total population. Conversely, those aged 65 and over comprise only 4.0% of the Indigenous population, compared with 14.0% of the total Victoria population (Figure 2).



Victoria



Australia

Source: AIHW analyses of ABS population estimates based on 2006 Census

Figure 2: Population profile, by Indigenous status, age and sex, Victoria and Australia, 2010

In Victoria, more than four-fifths of Aboriginal and Torres Strait Islander people live in *Major cities* (49.6%) and *Inner regional* (34.9%) areas. Only around 15.5% live in *Outer regional* and *Remote areas.* In comparison, about three-quarters of the total Indigenous population in Australia live in *Major cities* (32.1%), *Inner regional* (21.4%) and *Outer regional areas* (21.9%), with just under a quarter in *Remote* (9%) and *Very remote areas* (15%).

Table 2: Estimated resident population by remoteness area and Indigenous status, Victoria and Australia, 2006

	Indigenous		Non-Indigenous		Total			
	No.	Per cent	No.	Per cent	No.	Per cent	Per cent Indig.	Per cent Non-Indig.
				Victoria				
Major cities	16,629	49.6	3,817,616	75.0	3,834,245	74.8	0.4	99.6
Inner regional	11,694	34.9	1,025,456	20.1	1,037,150	20.2	1.1	98.9
Outer regional and remote	5,194	15.5	249,951	4.9	255,145	5.0	2.0	98.0
Victoria	**33,517**	**100.0**	**5,093,023**	**100.0**	**5,126,540**	**100.0**	**0.7**	**99.3**
				Australia				
Major cities	165,804	32.1	13,996,454	69.4	14,162,258	68.4	1.2	98.8
Inner regional	110,643	21.4	3,974,764	19.7	4,085,407	19.7	2.7	97.3
Outer regional	113,280	21.9	1,854,024	9.2	1,967,304	9.5	5.8	94.2
Remote	47,852	9.3	267,199	1.3	315,051	1.5	15.2	84.8
Very remote	79,464	15.4	86,017	0.4	165,481	0.8	48.0	52.0
Australia	**517,043**	**100.0**	**20,180,837**	**100.0**	**20,697,880**	**100.0**	**2.5**	**97.5**

Source: AIHW analysis of ABS population estimates based on 2006 Census.

Data sources and methodology

Data in this report come from a number of administrative data sets and surveys. A description of all sources is presented at Appendix 1.

Health-related administrative data sets include the Australian Institute of Health and Welfare (AIHW) National Hospital Morbidity Database, the AIHW National Perinatal Data Collection, Australia and New Zealand Dialysis and Transplant Registry and the National Notifiable Diseases Surveillance System. Administrative data related to education include the ABS National Schools Statistics Collection, DEEWR Higher Educations Statistics Collection and the National Centre for Vocational Education Research database; and community services related data include the AIHW Community Mental Health Care Database and the AIHW National Child Protection Data collections. Administrative data related to other government services and programs such as the Service Activity Reporting Database, Australian Childhood Immunisation Register and Medicare databases have also been used.

Surveys that were used to obtain data include Indigenous specific surveys such as the National Aboriginal and Torres Strait Islander Health Survey, and the National Aboriginal and Torres Strait Islander Social Survey. Data from the Census of Population and Housing have also been used.

Age-standardised rates, rate differences and ratios have been used in many of the indicators to show how Indigenous population fare compared with other Australians. All age-standardised rates and rate ratios have been calculated using the direct standardisation method and the 2001 Australian population as the standard population.

Time series analyses have used linear regression analysis to determine whether there have been significant increases or decreases in the observed rates. Many of the tables also include a * to indicate that rates for the Indigenous and non-Indigenous populations are statistically different from each other at the $p < 0.05$ level.

Data limitations

There are a number of limitations of data in this report that should be noted. The main issue in most administrative data collections is the under-identification of Aboriginal and Torres Strait Islander peoples. Under-identification is a major problem in mortality, hospital morbidity and communicable disease data, particularly in some states and territories. Data analysis has therefore been limited to jurisdictions with adequate identification of Indigenous people. Appendix 1 presents a brief description of each data source and a comprehensive data quality statement covering the data sources and specific issues to be noted.

For recent hospital separations, New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory are considered as having data of sufficient quality to be included in the analyses. For longer term hospital separations, data from only Queensland, Western Australia, South Australia and the Northern Territory are used. Longer term mortality trend data are limited to three jurisdictions—Western Australia, South Australia and the Northern Territory, which have over 10 years of adequate identification of Indigenous deaths in their recording systems. Queensland data from 1998 and NSW data from 2001 onwards are considered to be of adequate quality for mortality analyses.

Data on communicable diseases from the National Notifiable Disease Surveillance System are assessed with a varying level of completeness across diseases and jurisdictions. Victoria had insufficient Indigenous identification for chlamydia, but adequate identification for syphilis, gonorrhoea and hepatitis C.

The incompleteness of Indigenous identification means the number of hospital separations, deaths and disease notifications recorded as Indigenous are an underestimate of the true level of morbidity and mortality. As a result, the observed differences between the Indigenous and non-Indigenous populations are underestimates of the true differences.

Surveys are also subject to a number of data limitations such as bias in responses. Under-identification can be an issue for some surveys. Survey data are also subject to sampling and non-sampling errors. In most tables 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.

Population data

Indigenous population data are required when computing rates from administrative data collections. The Indigenous estimated resident population (ERP) figures used in this report are based on the 2006 Census (ABS 2009b). The Census enumerated the Indigenous population from responses to a question on a person's Indigenous status. The Indigenous

ERP for 2006 is computed using this enumerated figure, and adjusted for undercount based on results from the PES as well as for non-response to the Indigenous status question (ABS 2009b). Population numbers for other years are projected based on assumed future levels of fertility, mortality and migration (ABS 2009b).

The use of Indigenous ERP based on the 2006 Census showed a greater impact on mortality time series which showed vastly different results to those published in previous national reports such as the Aboriginal and Torres Strait Islander Health Performance Framework. The implications of using 2006 ERP are discussed in Box 1.

Structure of this report

Chapter 1 presents analyses for Tier 1—health status and health outcomes; Chapter 2 presents analyses for Tier 2—determinants of health status, and Chapter 3 presents analyses for Tier 3—health system performance. The layout for each indicator is constant and includes a definition according to the technical specifications followed by analyses undertaken. For each indicator, jurisdiction-specific data are analysed in comparison with national data, or data from a group of jurisdictions with sufficient data quality. Where possible, analyses are presented by age, sex and Indigenous status. Time trends are also presented for years that have adequate identification of Indigenous people in their recording systems.

Box 1: Effect of changing from 2001 to 2006 Census based Indigenous population denominator

The 2010 Aboriginal and Torres Strait Islander Health Performance Framework report uses ABS experimental estimates of the Indigenous resident population based on the 2006 Census (referred to as 2006 ERP) as the denominator when calculating rates from a range of data sources (see Appendix 1). Previously published data in 2006 and 2008 Aboriginal and Torres Strait Islander Health Performance Framework reports used a denominator based on the 2001 Census estimates (referred to as 2001 ERP).

Rates based on 2006 ERP are different from those based on the 2001 ERP, often resulting in a significant closing of the gap between Indigenous and non-Indigenous Australians in measures such as mortality. However, the two sets of rates are not comparable. While the greatest impact of 2006 ERP was seen in mortality rates, the rates based on other administrative data were also affected.

The main factor contributing to the change is the increase in the estimated Indigenous population between the 2001 and 2006 Census based ERPs, resulting in lower rates for Indigenous Australians. The growth in Indigenous population between 2001 and 2006 is about 12%, compared with about 6% for the total Australian population. Some of this growth may be attributable to changes in Indigenous identification.

According to the ABS, by extending the Census post enumeration survey to more remote areas, the post 2006 Census adjustment provides a more accurate estimate of Indigenous population than previous estimates.

The ABS also used the findings from the 2006 Census and mortality data enhancement project to produce a revised backcast Indigenous population series. For backcast estimates, it was assumed that Indigenous male and female life expectancy at birth would increase by 0.2 years per year between 1986 and 2006 (this assumes Indigenous life expectancy at birth of 63.1 years for males and 68.8 years for females in 1986). This resulted in fewer Indigenous people between 1986 and 1999 and more people from 2000 to 2006.

Similar adjustments have not been made to numerator data which also contribute to the differences in rates based on 2006 ERP.

Health status and outcomes (Tier 1)

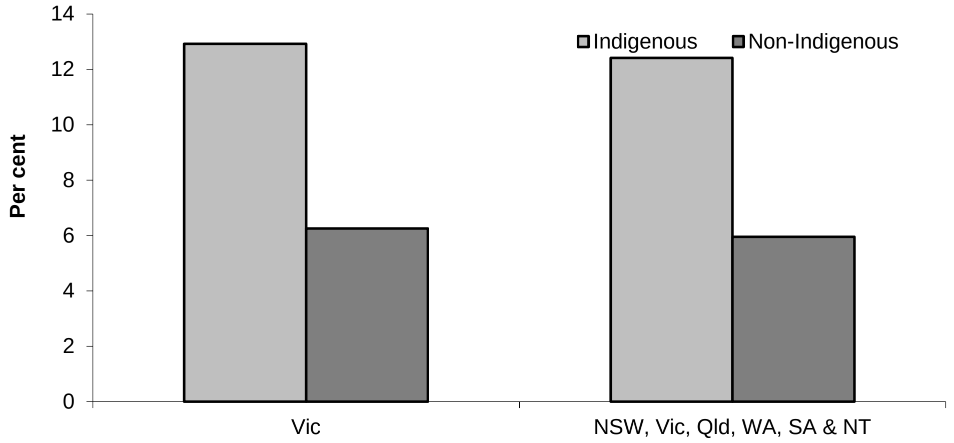
1.01 Low birthweight infants

The incidence of low birthweight among liveborn babies of Aboriginal and Torres Strait Islander mothers

Incidence: *The number of new cases (of an illness or event, and so on) occurring during a given period.*

Low birthweight by Indigenous status

- From 2006 to 2008 in Victoria, live-born babies born to Indigenous mothers were twice as likely (12.9% compared with 6.3%) to be of low birthweight (that is less than 2,500 grams) than live-born babies born to non-Indigenous mothers.
- These proportions were similar to those reported for low birthweight babies born to Indigenous and non-Indigenous mothers in Australia (12.4% compared with 6.0%).



(a) Data are by place of usual residence of the mother. In 2000-2004, usual residence of the mother was allocated from postcode. From 2005 onwards, data for state of usual residence supplied directly.

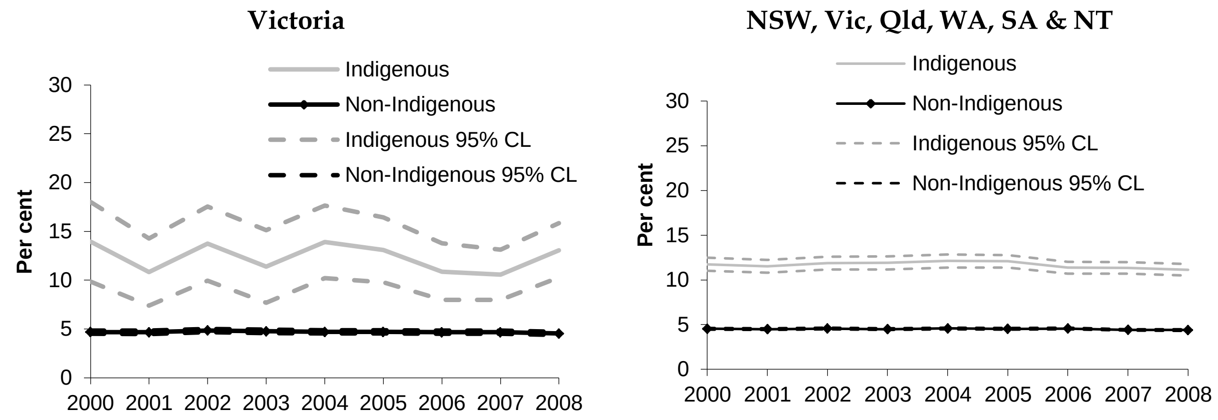
Note: Vic residents who gave birth in Tasmania and the Australian Capital Territory were excluded as data from these jurisdictions are not considered stable enough to be included in trend analyses because of small population size or data quality over the reporting period (AIHW: Leeds et al. 2007).

Source: AIHW analysis of the National Perinatal Epidemiology and Statistics Unit (NPESU) National Perinatal Data Collection (unpublished).

Figure 1.01.1: Low birthweight rate (proportion) by Indigenous status of mother, Victoria and NSW, Vic, Qld, WA, SA and NT combined, 2006-08

Low birthweight trends

- From 2000 to 2008 in Victoria, the proportion of low birthweight babies born to Indigenous and other mothers did not change significantly.
- The rate ratio and rate difference between low birthweight babies born to Indigenous and non-Indigenous mothers in Victoria also did not change significantly over the same period.
- Similarly, in NSW, Vic, Qld, WA, SA & NT combined over the same period, there was no significant change in the proportion of low birthweight babies born to Indigenous mothers or non-Indigenous mothers.



(a) Data are by place of usual residence of the mother. In 2000-2004, usual residence of the mother was allocated from postcode. From 2005 onwards, data for state of usual residence supplied directly.

Note: Vic residents who gave birth in Tasmania and the Australian Capital Territory were excluded as data from these jurisdictions are not considered stable enough to be included in trend analyses because of small population size or data quality over the reporting period (AIHW: Leeds et al. 2007).

Source: AIHW analyses of NPSU National Perinatal Data Collection (unpublished).

Figure 1.01.2: Low birthweight babies per 100 singleton live-born babies, by Indigenous status of mother, Victoria and NSW, Vic, Qld, WA, SA & NT combined, 2000–2008

Table 1.01.1: Low birthweight rate (proportion), ratio and difference between singleton live-born babies of Indigenous and other mothers, Victoria and NSW, Vic, Qld, WA, SA & NT combined, 2000-2008(a)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Annual change(b)
					Victoria					
Rate per 100 live births (%)										
Indigenous	13.9	10.8	13.7	11.4	13.9	13.1	10.9	10.6	13.1	-0.14
Non-Indigenous	4.7	4.7	4.8	4.8	4.7	4.7	4.7	4.7	4.5	-0.02
Rate ratio	3.0	2.3	2.8	2.4	3.0	2.8	2.3	2.3	2.9	-0.02
Rate difference	9.3	6.2	8.9	6.6	9.2	8.4	6.2	5.9	8.5	-0.12
					NSW, Vic, Qld, WA, SA & NT					
Rate per 100 live births (%)										
Indigenous	11.7	11.5	11.9	11.9	12.1	12.1	11.4	11.3	11.1	-0.06
Non-Indigenous	4.5	4.5	4.6	4.5	4.6	4.5	4.6	4.4	4.4	-0.01
Rate ratio	2.6	2.6	2.6	2.6	2.6	2.7	2.5	2.6	2.5	-0.01
Rate difference	7.2	7.0	7.3	7.4	7.5	7.5	6.8	6.9	6.7	-0.05

* Represents results with statistically significant increases or decreases at the $p < 0.05$ level over the period 2000-2008.

(a) Data are by place of usual residence of the mother. In 2000-2004, usual residence of the mother was allocated from postcode. From 2005 onwards, data for state of usual residence supplied directly.

(b) Average annual change in rate, rate ratio, and rate difference of low birthweight babies determined using linear regression analysis.

Note: Vic residents who gave birth in Tasmania and the Australian Capital Territory were excluded as data from these jurisdictions are not considered stable enough to be included in trend analyses because of small population size or data quality over the reporting period (AIHW: Leeds et al. 2007).

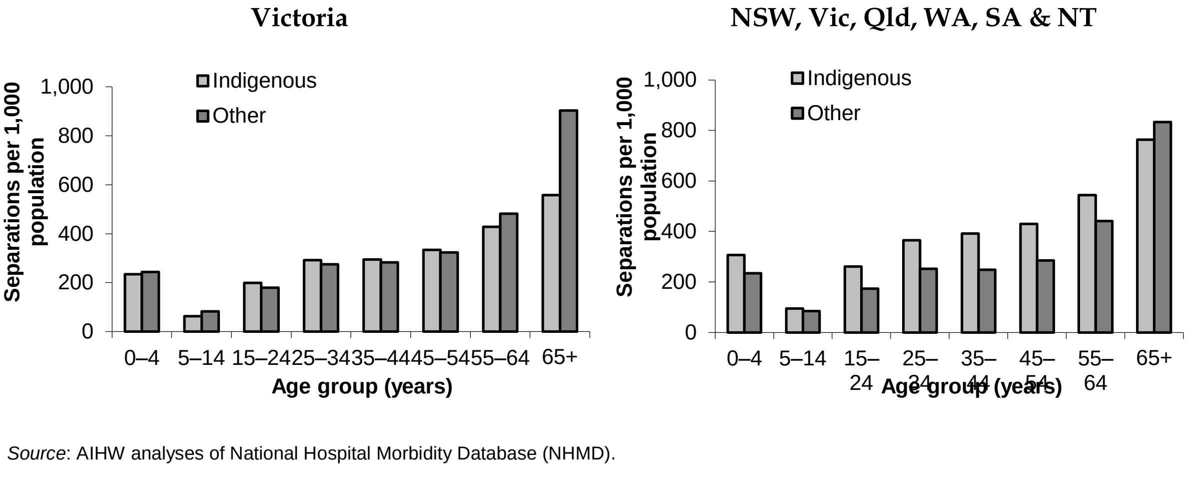
Source: AIHW analysis of NPESU National Perinatal Data Collection (unpublished).

1.02 Top reasons for hospitalisation

Hospitalisations for the leading ICD-10-AM categories for Aboriginal and Torres Strait Islander people expressed as a rate by age group, age-standardised rate and rate ratio

Hospitalisations by age

- From July 2006 to June 2008 in Victoria, there were 4,192,890 hospitalisations, 0.5% of which were Indigenous people.
- Indigenous people were hospitalised at 1.3 times the rate of other people in Victoria. In the six jurisdictions combined, Indigenous people were hospitalised at 2.3 times the rate of other people.
- Excluding dialysis, (due to the frequent admissions for the same disease) Indigenous people in Victoria were hospitalised at 0.9 times the rate of other people. In the six jurisdictions combined, Indigenous people were hospitalised at 1.3 times the rate of other people.
- From July 2006 to June 2008 in Victoria, when hospitalisations for dialysis are excluded, Indigenous people aged 0–4, 5–14, 55–64 and 65+ had lower hospitalisation rates than other people, while Indigenous people in other age groups had higher hospitalisation rates than other people.
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, when hospitalisations for dialysis are excluded, Indigenous people had higher hospitalisation rates than other people across all age groups with the exception of those aged 65 and over.
- For both Victoria alone, and the six jurisdictions combined, hospitalisation rates were highest in the 65 and over age group and lowest among those aged 5–14, for both Indigenous and other people.

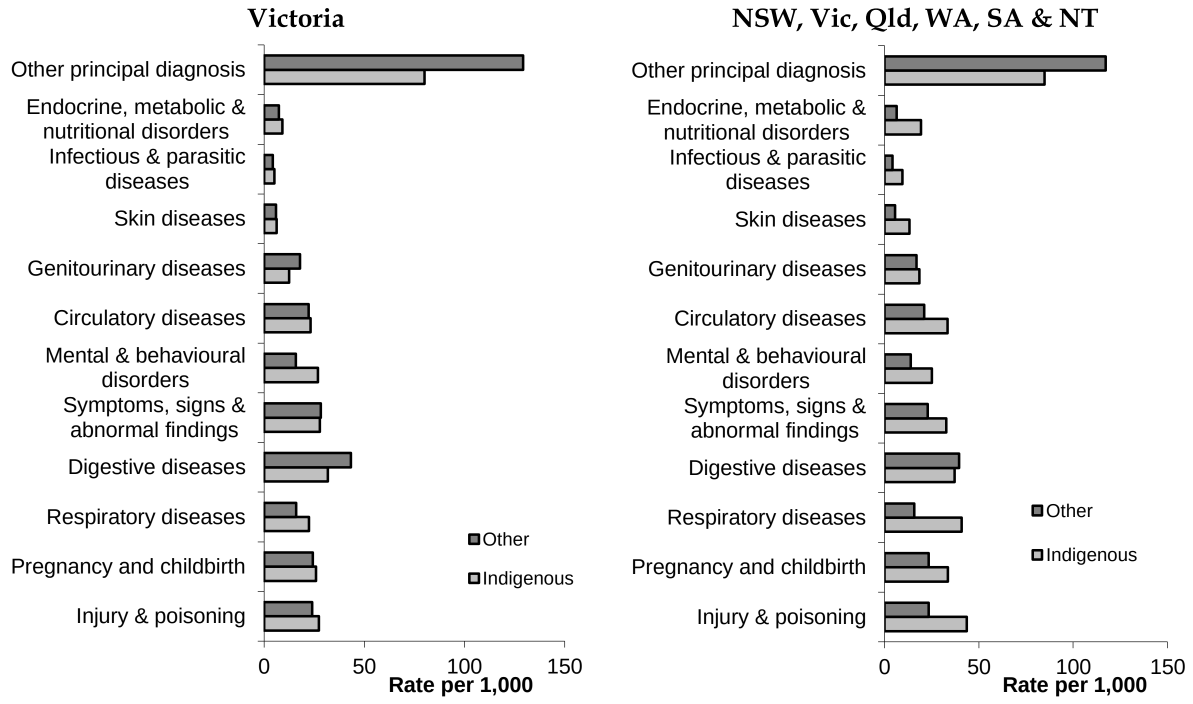


Source: AIHW analyses of National Hospital Morbidity Database (NHMD).

Figure 1.02.1: Age specific hospitalisation rates (excluding dialysis), by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

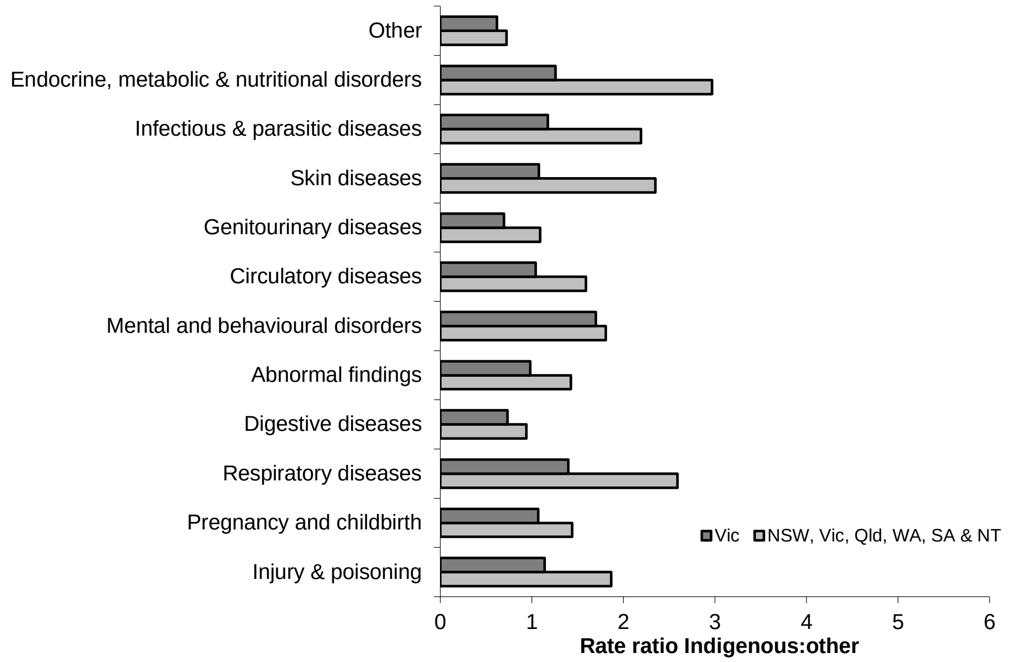
Hospitalisations by principal diagnosis

- From July 2006 to June 2008, the most common principal diagnosis among Indigenous people in Victoria was digestive diseases followed by abnormal findings. In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, the most common principal diagnosis was injury and poisoning, followed by respiratory diseases.
- The greatest differences in hospitalisation rates between Indigenous and other people in Victoria were for mental and behaviour disorders, and respiratory diseases. Indigenous people were hospitalised at 1.7 and 1.4 times the rate of other people for these conditions.
- Hospitalisation rates for Indigenous people in Victoria were lower than for Indigenous people in the six jurisdictions combined for most principal diagnoses (Figure 1.02.2).
- Rate ratios between Indigenous and other Australian hospitalisation rates were lower in Victoria than in the six jurisdictions combined for all principal diagnoses (Figure 1.02.3).



Source: AIHW analyses of NHMD.

Figure 1.02.2: Hospitalisation rates by principal diagnosis and Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008



Source: AIHW analyses of NHMD.

Figure 1.02.3: Hospitalisation rate ratios by principal diagnosis, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Hospitalisation trends

- From 2004-05 to 2007-08, the hospitalisation rate for Indigenous people in Victoria was lower than the rate for other Australians.
- There was a significant increase of 38% in hospitalisation rates for Indigenous people in Victoria from 2004–05 to 2007–08. The fitted trend implies an average yearly increase in hospitalisation rates of 28.8 per 1,000.
- There was a significant increase of 4% in hospitalisation rates for other people in Victoria over the same period.
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, there were significant increases in hospitalisation rates among Indigenous and other people from 2004–05 to 2007-08 (an average yearly increase of 10.6 per 1,000 for Indigenous people and 4.2 per 1,000 for other people).

Source: AIHW analyses of NHMD.

Figure 1.02.4: Trends in hospitalisation rates (excluding dialysis) by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, 2004–05 to 2007–08

1.03 Hospitalisation for injury and poisoning

The number of hospitalisations with a principal diagnosis of injury and poisoning for Aboriginal and Torres Strait Islander people expressed as a rate by age group, age-standardised rate and rate ratio

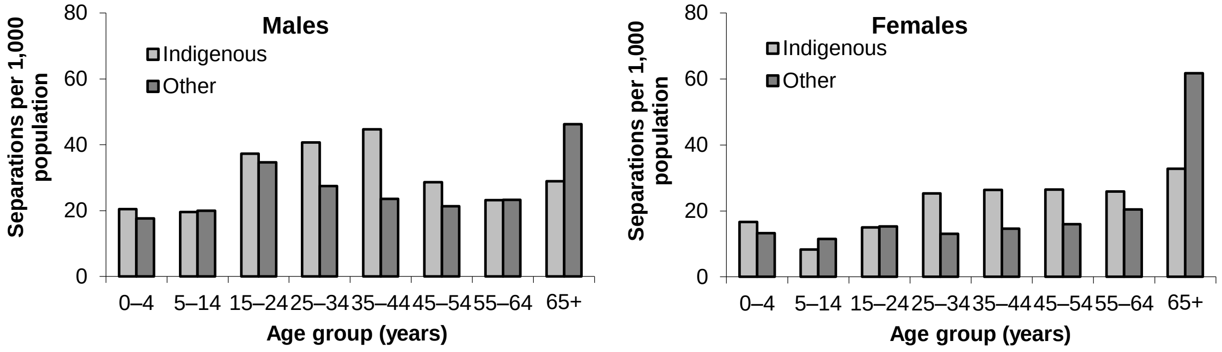
Hospitalisations by age and sex

- From July 2006 to June 2008, Indigenous males and females in Victoria had higher hospitalisation rates for injury and poisoning than other males and females across all age groups with the exception of the 65 and over age group for males and the 5–14, 15–24 and 65 and over age groups for females.
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, Indigenous males and females had higher hospitalisation rates for injury and poisoning than other males and females across all age groups with the exception of those aged 65 and over.
- In Victoria, the greatest difference in hospitalisation rates for injury and poisoning occurred in the 35–44 year age group for males and the 25–34 year age group for females. Indigenous males and females were hospitalised at around twice (1.9 times) the rate of other males and females in these age groups.
- For Indigenous males in Victoria, hospitalisation rates were highest among those aged 35–44, while for Indigenous females, rates were highest among those aged 65 and over.

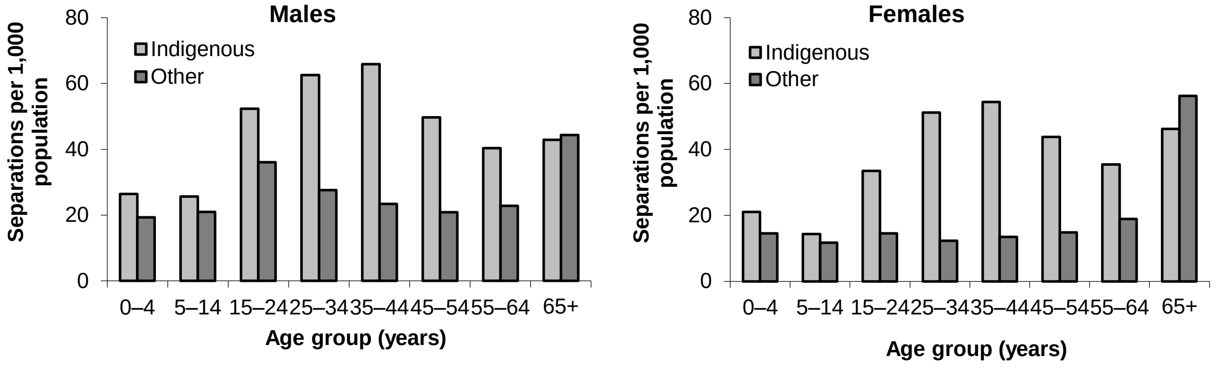
Hospitalisations by external cause of injury and poisoning

- From July 2006 to June 2008, in Victoria, of all hospitalisations with a principal diagnosis of injury and poisoning, accidental falls were the most common reason for hospitalisation for both Indigenous males (19%) and Indigenous females (22%), followed by exposure to inanimate mechanical force (17%) for males and medical or surgical complications (15%) for females. In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, assault was the most common cause of hospitalisation for Indigenous males and females with a principal diagnosis of injury and poisoning followed by accidental falls.
- The greatest difference in hospitalisation rates for external causes of injury and poisoning between Indigenous and other males in Victoria was for intentional self-harm, whereas for females it was for assault. Indigenous males were hospitalised for intentional self-harm at four times the rate of other males and Indigenous females were hospitalised for assault at nine times the rate of other females.
- In the six jurisdictions combined, the greatest differences in hospitalisation rates for external causes of injury and poisoning between Indigenous and other males and females were for assault, where indigenous males were hospitalised at 7 times the rate and indigenous females at 36 times the rate.

Victoria



NSW, Vic, Qld, WA, SA & NT



Source: AIHW analyses of NHMD.

Figure 1.03.1: Age specific hospitalisation rates for principal diagnosis of injury and poisoning by sex, Aboriginal and Torres Strait Islander peoples and other Australians, Victoria and NSW, Vic, Qld, WA, SA & NT, July 2006 to June 2008

Table 1.03.1: Hospitalisations for external causes of injury and poisoning for Aboriginal and Torres Strait Islander people by sex, Victoria and NSW, Vic, Qld, WA, SA and NT combined, July 2006 to June 2008(a)(b)(c)(d)

	Males				Females				People			
External cause	**No.**	**%(e)**	**No. per 1,000(f)**	**Ratio(g)**	**No.**	**%(e)**	**No. per 1,000(f)**	**Ratio(g)**	**No.**	**%(e)**	**No. per 1,000(f)**	**Ratio(g)**
						Victoria						
Assault	169	16.3	5.2	3.5*	79	12.2	2.6	9.0*	248	14.7	3.9	4.3*
Accidental falls	199	19.2	6.8	1.0	143	22.0	5.7	0.7*	342	20.3	6.4	0.8*
Exposure to inanimate mechanical forces	172	16.6	4.3	1.0	59	9.1	1.4	1.0	231	13.7	2.9	1.0
Transport accidents	105	10.1	2.7	0.7*	61	9.4	2.2	1.2	166	9.8	2.5	0.9
Medical/ surgical complications	80	7.7	3.8	0.9	99	15.2	4.5	1.1	179	10.6	4.1	1.0
Other accidental exposures(h)	80	7.7	2.2	0.7*	33	5.1	1.0	0.5*	113	6.7	1.6	0.6*
Exposure to animate mechanical forces	54	5.2	1.4	1.4*	26	4.0	0.7	1.9*	80	4.7	1.0	1.5*
Intentional self-harm	86	8.3	2.9	3.7*	88	13.5	2.7	1.8*	174	10.3	2.8	2.5*
Exposure to electric current/smoke/ fire/animals/ nature(i)	35	3.4	1.0	1.8*	24	3.7	0.7	2.4*	59	3.5	0.8	2.0*
Accidental poisoning by and exposure to noxious substances	27	2.6	0.6	1.4	20	3.1	0.5	1.2	47	2.8	0.6	1.3
Other external causes(j)	28	2.7	0.9	2.4*	18	2.8	0.5	1.2*	46	2.7	0.7	1.8*
Total (all categories)(k)	**1,036**	**100.0**	**31.8**	**1.2***	**650**	**100.0**	**22.6**	**1.0**	**1,686**	**100.0**	**27.3**	**1.1***

(continued)

Table 1.03.1 (continued): Hospitalisations for external causes of injury and poisoning for Aboriginal and Torres Strait Islander people by sex, Victoria and NSW, Vic, Qld, WA, SA and NT combined, July 2006 to June 2008[(a)(b)(c)(d)]

	Males				Females				People			
External cause	No.	%[(e)]	No. per 1,000[(f)]	Ratio[(g)]	No.	%[(e)]	No. per 1,000[(f)]	Ratio[(g)]	No.	%[(e)]	No. per 1,000[(f)]	Ratio[(g)]
					NSW, Vic, Qld, WA, SA & NT							
Assault	5,003	22.5	10.8	7.0*	5,309	30.7	10.9	35.5*	10,312	26.1	10.9	11.6*
Accidental falls	3,936	17.7	9.2	1.4*	3,130	18.1	8.7	1.2*	7,066	17.9	9.1	1.3*
Exposure to inanimate mechanical forces	3,285	14.8	6.0	1.4*	1,405	8.1	2.5	1.9*	4,690	11.9	4.2	1.5*
Transport accidents	2,569	11.5	4.8	1.2*	1,154	6.7	2.2	1.4*	3,723	9.4	3.5	1.3*
Medical/ surgical complications	1,939	8.7	6.1	1.4*	2,208	12.8	6.6	1.8*	4,147	10.5	6.4	1.6*
Other accidental exposures[(h)]	1,627	7.3	3.4	1.0	969	5.6	2.2	1.3*	2,596	6.6	2.8	1.1*
Exposure to animate mechanical forces	1,106	5.0	2.0	2.0*	529	3.1	1.0	2.6*	1,635	4.1	1.5	2.2*
Intentional self-harm	1,077	4.8	2.4	2.7*	1408	8.1	2.8	2.0*	2485	6.3	2.6	2.3*
Exposure to electric current/smoke/ fire/animals/ nature[(i)]	940	4.2	1.8	2.5*	491	2.8	0.9	2.5*	1431	3.6	1.3	2.5*
Accidental poisoning by and exposure to noxious substances	410	1.8	0.7	1.6*	382	2.2	0.8	1.6*	792	2.0	0.8	1.6*
Other external causes[(j)]	334	1.5	0.7	2.5*	309	1.8	0.6	2.5*	643	1.6	0.7	2.5*
Total (all categories)[(k)]	**22,263**	**100.0**	**47.9**	**1.7***	**17,311**	**100.0**	**39.3**	**2.1***	**39,574**	**100**	**43.6**	**1.9***

(continued)

Table 1.03.1 (continued): Hospitalisations for external causes of injury and poisoning for Aboriginal and Torres Strait Islander people by sex, Victoria and NSW, Vic, Qld, WA, SA and NT combined, July 2006 to June 2008 (a)(b)(c)(d)

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

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

(b) Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), 4th Edition (National Centre for Classification in Health 2004). Cause of injury is based on the first reported external causes where the principle diagnosis was ‘injury, poisoning and certain other consequences of external causes’. ICD-10-AM codes V01-Y98.

(c) Financial year reporting.

(d) Data are reported by state/territory of usual residence of the patient hospitalised and are for New South Wales, Victoria, Western Australia, South Australia, the Northern Territory and Queensland only. These six jurisdictions are considered to have adequate levels of Indigenous identification, although the level of accuracy varies by jurisdiction and hospital. Data for these six jurisdictions over-represent Indigenous populations in less urbanised and more remote locations. Hospitalisation data for six jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(e) Percentage of male, female and total hospitalisations of Indigenous Australians from 2004-05 to 2005–06.

(f) Directly age-standardised using the Australian 2001 Standard population.

(g) Rate ratio Indigenous: Other.

(h) 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),

(i) 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)

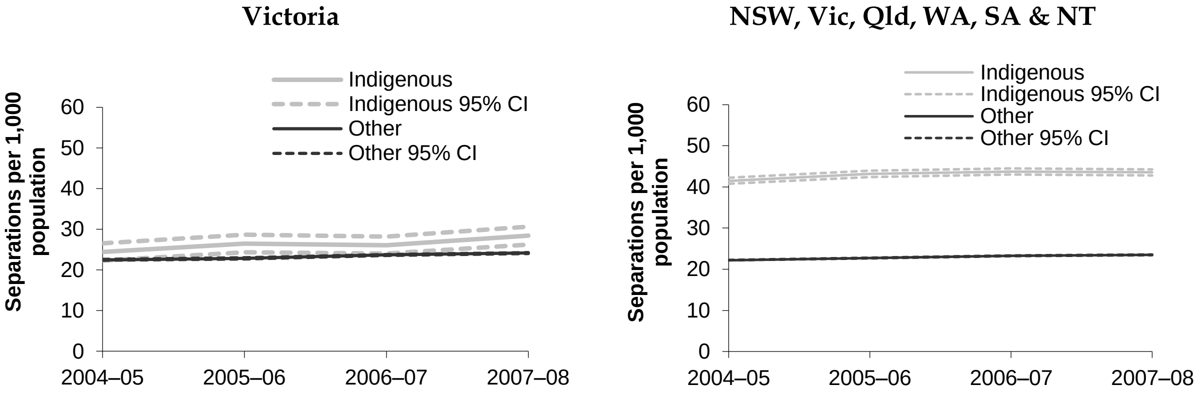
(j) Includes event of undetermined intent (Y10-Y34), legal intervention and operation of war (Y35-Y36), sequelae of external causes of morbidity and mortality (Y85-Y89), supplementary factors classified elsewhere (Y9-Y98).

(k) Includes injuries where no external cause was reported.

Source: AIHW analyses of NHMD.

Hospitalisation trends

- In Victoria, there were significant increases in the hospitalisation rates for injury and poisoning among both Indigenous (by 14%) and other people (by 8%) from 2004–05 to 2007–08. The fitted trend implies an average yearly increase in the rate of 1.2 per 1,000 for Indigenous people, and 0.6 per 1,000 for other people.
- There was no significant change in the hospitalisation rate ratio or rate difference between Indigenous and other people for injury and poisoning in Victoria (an average yearly increase of 0.02 in the rate ratio and 0.6 per 1,000 in the rate difference).
- The hospitalisation rates for injury and poisoning increased significantly among Indigenous and other people in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined from 2004–05 to 2007–08 (an average yearly increase of 0.7 per 1,000 for Indigenous people, and 0.4 per 1,000 for other people).



Source: AIHW analyses of NHMD.

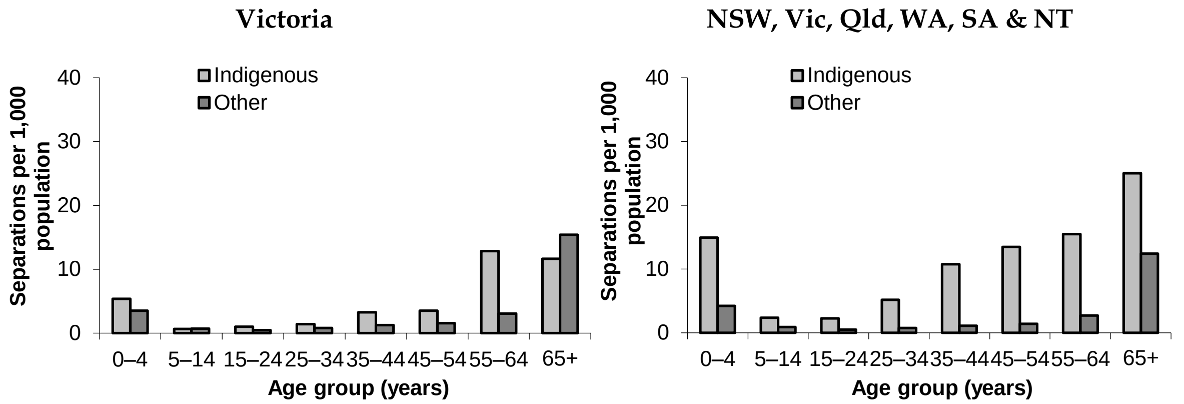
Figure 1.03.2: Hospitalisation rates for injury and poisoning, Aboriginal and Torres Strait Islander peoples and other Australians, Victoria and NSW, Vic, Qld, WA, SA & NT combined, 2004–05 to 2007–08

1.04 Hospitalisation for pneumonia

The number of hospitalisations with a principal diagnosis of pneumonia for Aboriginal and Torres Strait Islander people expressed as a rate by age group, age-standardised rate and ratio

Hospitalisations by age

- From July 2006 to June 2008, Indigenous people in Victoria had higher hospitalisation rates for pneumonia than other people across all age groups with the exception of those aged 5-14 and 65 and over. In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, Indigenous people had higher hospitalisation rates for pneumonia than other people across all age groups.
- The greatest difference in hospitalisation rates for pneumonia in Victoria was in the 55–64 year age group, where Indigenous people were hospitalised at 4.2 times the rate of other people.
- For both Indigenous and other people in Victoria and in the six jurisdictions combined, hospitalisation rates for pneumonia were highest among those aged 55–46 and over and lowest among those aged 5–14 and 15–24.
- Hospitalisation rates for pneumonia were lower for Indigenous people in Victoria than for Indigenous people in the six jurisdictions combined, across all age groups.



Source: AIHW analyses of NHMD.

Figure 1.04.1: Age specific hospitalisation rates for pneumonia, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Hospitalisations by sex

- From July 2006 to June 2008, about 55% of Indigenous people in Victoria who were hospitalised for pneumonia were males, and 45% were females.
- Indigenous people in Victoria were hospitalised for pneumonia at 1.5 times the rate of other people. In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, Indigenous people were hospitalised for pneumonia at four times the rate of other people.

- Hospitalisation rates for pneumonia were slightly higher for Indigenous males than Indigenous females in Victoria and in the six jurisdictions combined.

Table 1.04.1: Hospitalisations for pneumonia for Aboriginal and Torres Strait Islander peoples, by sex, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008(a)(b)(c)

	Vic			NSW, Vic, Qld, WA, SA & NT[(d)]		
	Number	Rate per 1,000[(e)]	Ratio[(f)]	Number	Rate per 1,000[(e)]	Ratio[(f)]
Males	113	5.3	1.5*	3,987	11.5	3.6*
Females	94	3.9	1.5*	3,892	10.5	4.2*
People	207	4.6	1.5*	7,943	11.0	3.9*

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

(a) Data are from public and most private hospitals. Excludes private hospitals from the Northern Territory.

(b) Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM), 4th Edition (National Centre for Classification in Health 2004). ICD-10-AM codes J12–J18.

(c) Financial year reporting.

(d) Data are reported by state/territory of usual residence of the patient hospitalised and are for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory only. These six jurisdictions are considered to have adequate levels of Indigenous identification, although the level of accuracy varies by jurisdiction and hospital. Data for these six jurisdictions over-represent Indigenous populations in less urbanised and more remote locations. Hospitalisation data for six jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

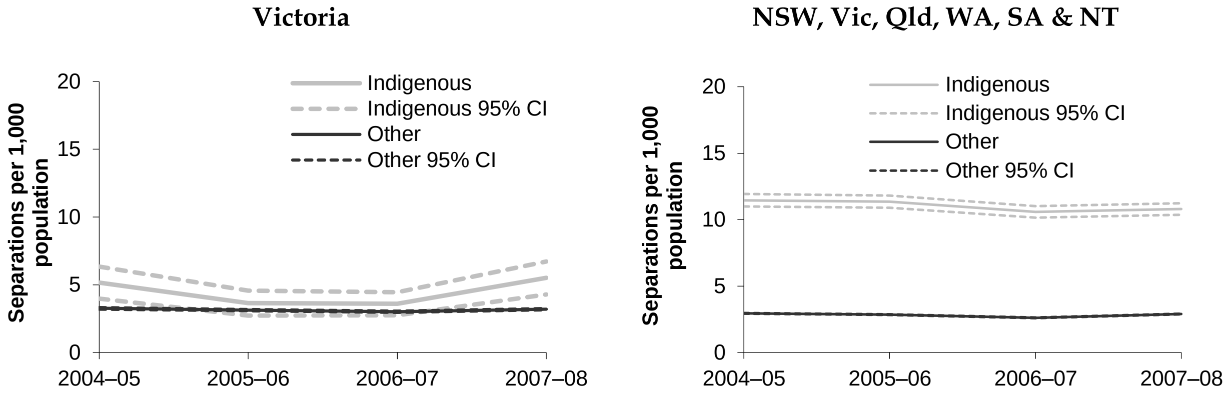
(e) Directly age-standardised using the Australian 2001 Standard population.

(f) Rate ratio Indigenous: Other.

Source: AIHW analyses of NHMD.

Hospitalisation trends

- There was no significant change in the hospitalisation rate for pneumonia among Indigenous people in Victoria from 2004–05 to 2007–08. The fitted trend implies an average yearly increase of 0.1 hospitalisations per 1,000 population; however, this change was not statistically significant.
- There was no significant change in the hospitalisation rate for pneumonia among other people in Victoria over the same period.
- There were no significant changes in the hospitalisation rate ratios and rate differences between Indigenous and other people in Victoria for pneumonia (average yearly increase of 0.05 in the rate ratio and 0.1 per 1,000 in the rate difference from 2004–05 to 2007–08).
- Over the same period, there was a significant decline in the hospitalisation rate for pneumonia among Indigenous people in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined; however, there was no significant change among other people.



Source: AIHW analyses of NHMD.

Figure 1.04.2: Hospitalisation rates for pneumonia, Aboriginal and Torres Strait Islander peoples and other Australians, Victoria and NSW, Vic, Qld, WA, SA & NT combined, 2004–05 to 2007–08

1.05 Circulatory disease

Prevalence, incidence and number of hospital separations with a principal diagnosis of circulatory disease for Aboriginal and Torres Strait Islander people expressed as a rate by age group, age-standardised rate and rate ratio

Prevalence: *The number or proportion (of cases, instances, and so forth) present in a population at a given time.*

Self-reported prevalence

- In 2004-05 in Victoria, 11% of Indigenous males and 18% of Indigenous females reported heart or circulatory conditions as a long-term condition. This compared with 10% and 14% of Indigenous males and females in Australia (Table 1.05.1).
- After adjusting for differences in age structure between the Indigenous and non-Indigenous populations, Indigenous people in Victoria were more likely than non-Indigenous people to report heart and circulatory conditions (25% compared with 17%).
- Prevalence of heart and circulatory conditions was highest among Indigenous people aged 55 and over (around 57% in Victoria and 54% in Australia). In Victoria, the greatest difference in prevalence rates between Indigenous and non-Indigenous people was in the 0-4 and 35-44 year age groups.

Table 1.05.1: Number and proportion of people reporting heart and circulatory conditions, by age, sex and Indigenous status, Victoria and Australia, 2004–05

	Indigenous			Non-Indigenous		
	Males	Females	People	Males	Females	People
			Victoria			
			Number			
0-4	58	334	392	697	0	697
5-14	0	38	38	7,806	1,056	8,862
15-24	178	163	341	15,159	9,823	24,982
25-34	78	152	230	17,017	36,378	53,395
35-44	520	988	1,508	33,307	47,757	81,064
45-54	187	491	678	58,752	94,238	152,990
55+	613	590	1,203	248,651	299,594	548,245
Total	**1,635**	**2,756**	**4,391**	**381,389**	**488,847**	**870,236**

(continued)

Table 1.05.1 (continued): Number and proportion of people reporting heart and circulatory conditions, by age, sex and Indigenous status, Victoria and Australia, 2004–05

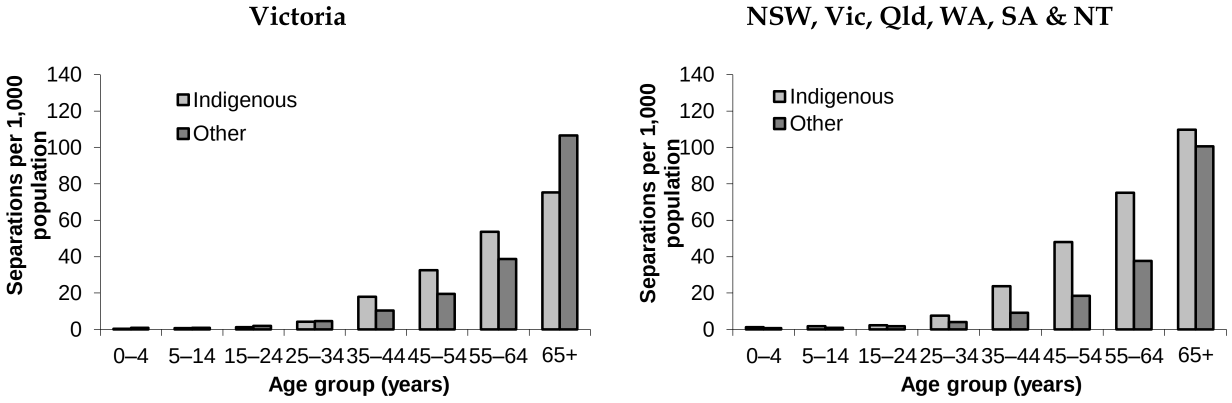
	Indigenous			Non-Indigenous		
	Males	**Females**	**People**	**Males**	**Females**	**People**
			Victoria			
			Proportion			
0-4	3.3	19.2	11.3	0.4	0.0	0.2
5-14	0.0	1.1	0.5	2.4	0.3	1.4
15-24	6.2	5.5	5.9	4.5	3.0	3.7
25-34	3.7	6.7	5.3	4.7	10.0	7.4
35-44	31.2	49.3	41.1	9.1	12.7	10.9
45-54	14.6	38.2	26.4	17.7	27.6	22.7
55+	62.5	52.1	56.9	46.0	49.9	48.0
Total	**11.4**	**18.4**	**15.0**	**15.8**	**19.8**	**17.8**
Total age-standardised[(a)]	**22.1**	**27.4**	**24.8**	**15.6**	**18.6**	**17.2**
			Australia			
			Number			
0-4	471	962	1,433	7,511	5,024	12,535
5-14	725	558	1,283	23,915	12,920	36,835
15-24	1,037	1,963	3,000	35,797	45,996	81,793
25-34	2,518	5,101	7,618	77,067	141,316	218,384
35-44	4,978	7,273	12,250	144,104	213,600	357,704
45-54	5,381	7,044	12,425	262,723	341,746	604,469
55+	6,880	11,006	17,885	993,128	1,167,302	2,160,430
Total	**21,989**	**33,906**	**55,895**	**1,544,245**	**1,927,905**	**3,472,149**
			Proportion			
0-4	1.5	3.3	2.4	1.2	0.9	1.0
5-14	1.2	1.0	1.1	1.8	1.0	1.4
15-24	2.3	4.2	3.3	2.7	3.6	3.1
25-34	7.7	13.7	10.9	5.6	10.1	7.9
35-44	18.3	22.8	20.7	10.0	14.6	12.3
45-54	28.6	33.9	31.4	19.6	25.0	22.3
55+	45.3	61.2	53.9	45.8	49.5	47.7
Total	**9.5**	**14.0**	**11.8**	**16.1**	**19.9**	**18.0**
Total age-standardised[(a)]	**18.4**	**24.6**	**21.7**	**15.8**	**18.7**	**17.3**

(a) Directly age-standardised proportions to the 2001 Australian standard population.

Source: AIHW analyses of National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) 2004-05 and National Health Survey (NHS) 2004-05.

Hospitalisations by age

- From July 2006 to June 2008 in Victoria, other people had higher hospitalisation rates for circulatory disease than Indigenous people in the 0–4, 5-14, 15-24, 25-34, and 65 and over age groups. Indigenous people had higher rates than other people among those aged 35-44, 45-54 and 55-64.
- The greatest difference in hospitalisation rates occurred in the 35–44 and 45–54 year age groups where Indigenous people were hospitalised at almost twice the rate of other people in these age groups.
- Hospitalisation rates for circulatory diseases increased with age for both Indigenous and other people in Victoria.
- Hospitalisation rates for circulatory diseases were lower for Indigenous people in Victoria than for Indigenous people in the six jurisdictions combined, across all age groups.



Source: AIHW analyses of NHMD.

Figure 1.05.1: Age specific hospitalisation rates for circulatory diseases, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Hospitalisations by principal diagnosis

- From July 2006 to June 2008, in both Victoria and in the six jurisdictions combined, of all hospitalisations with a principal diagnosis of diseases of the circulatory system, ischaemic heart disease was the most common reason for hospitalisation among Aboriginal and Torres Strait Islander peoples (49% in Victoria and 44% in the six jurisdictions) (Table 1.05.2).
- Indigenous males in Victoria were hospitalised for circulatory disease at lower rates than other males in Victoria (ratio of 0.8), while Indigenous females in Victoria were hospitalised for circulatory diseases at higher rates (ratio of 1.3).
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, Indigenous males were hospitalised at 1.4 times the rate, and Indigenous females at 1.8 the rate, of other males and females.

- Aboriginal and Torres Strait Islander people in Victoria were hospitalised for rheumatic heart disease at 1.5 times the rate of other Australians. This compared with 6.9 times the rate of other people in the six jurisdictions combined.

Table 1.05.2: Hospitalisations of circulatory disease by principal diagnosis for Aboriginal and Torres Strait Islander people - age-standardised rates and rate ratios by sex, Victoria and NSW, Vic, Qld, WA, SA and NT combined, July 2006 to June 2008 [(a)(b)(c)(d)]

	Males				Females				People			
Principal diagnosis	**No.**	**%[(e)]**	**No. per 1,000[(f)]**	**Ratio[(g)]**	**No.**	**%[(e)]**	**No. per 1,000[(f)]**	**Ratio[(g)]**	**No.**	**%[(e)]**	**No. per 1,000[(f)]**	**Ratio[(g)]**
					Victoria							
Ischaemic heart disease	192	49.9	11.1	1.1	205	48.6	11.4	2.6*	397	49.2	11.2	1.6*
Acute myocardial infarction	72	18.7	4.0	1.1	79	18.7	4.1	2.6*	151	18.7	4.0	1.6*
Other heart disease	88	22.9	6.1	0.8*	99	23.5	5.9	1.0	187	23.2	6.0	0.9
Cerebrovascular disease	37	9.6	2.6	1.1	38	9.0	2.5	1.5*	75	9.3	2.6	1.3*
Stroke	34	8.8	2.4	1.3	33	7.8	2.3	1.6*	67	8.3	2.3	1.4*
Rheumatic heart disease	3	0.8	0.1	1.2	4	0.9	0.2	1.8	7	0.9	0.1	1.5
Hypertension disease	6	1.6	0.2	1.0	8	1.9	0.4	1.1	14	1.7	0.3	1.1
Other circulatory diseases[(h)]	59	15.3	2.9	0.5*	68	16.1	3.0	0.6*	127	15.7	3.0	0.5*
Total	**385**	**100.0**	**22.9**	**0.8***	**422**	**100.0**	**23.5**	**1.3***	**807**	**100.0**	**23.2**	**1.0**

(continued)

Table 1.05.2 (continued): Hospitalisations of circulatory disease by principal diagnosis for Aboriginal and Torres Strait Islander people - age-standardised rates and rate ratios by sex, Victoria and NSW, Vic, Qld, WA, SA and NT combined, July 2006 to June 2008(a)(b)(c)(d)

	Males				Females				People			
Principal diagnosis	**No.**	**%(e)**	**No. per 1,000(f)**	**Ratio(g)**	**No.**	**%(e)**	**No. per 1,000(f)**	**Ratio(g)**	**No.**	**%(e)**	**No. per 1,000(f)**	**Ratio(g)**
NSW, Vic, Qld, WA, SA & NT												
Ischaemic heart disease	4,069	47.1	17.2	1.7*	3,143	39.8	12.4	2.8*	7,212	43.6	14.6	2.1*
Acute myocardial infarction	1,742	_20.2_	_7.2_	_2.2*_	1,129	_14.3_	_4.6_	_3.1*_	2,871	_17.4_	_5.8_	_2.5*_
Other heart disease	2,516	29.2	11.5	1.5*	2,469	31.3	10.2	1.9*	4,985	30.2	10.8	1.7*
Cerebrovascular disease	646	7.5	3.5	1.6*	683	8.6	3.0	1.9*	1,329	8.0	3.2	1.8*
Stroke	557	_6.5_	_3.0_	_1.7*_	603	_7.6_	_2.8_	_2.1*_	1,160	_7.0_	_2.9_	_1.9*_
Rheumatic heart disease	274	3.2	0.5	5.3*	428	5.4	0.9	8.2*	702	4.2	0.7	6.9*
Hypertension disease	200	2.3	0.7	2.6*	269	3.4	1.0	2.5*	469	2.8	0.8	2.5*
Other circulatory diseases(h)	925	10.7	3.4	0.6*	908	11.5	3.1	0.6*	1,833	11.1	3.2	0.6*
Total	**8,630**	**100.0**	**36.8**	**1.4***	**7,900**	**100.0**	**30.5**	**1.8***	**16,530**	**100.0**	**33.4**	**1.6***

(continued)

Table 1.05.2 (continued): Hospitalisations of circulatory disease by principal diagnosis for Aboriginal and Torres Strait Islander people - age-standardised rates and rate ratios by sex, Victoria and NSW, Vic, Qld, WA, SA and NT combined, July 2006 to June 2008 (a)(b)(c)(d)

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

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

(b) Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) 4th Edition (National Centre for Classification in Health 2004). ICD-10-AM codes I00-I99.

(c) Financial year reporting.

(d) Data are reported by state/territory of usual residence of the patient hospitalised and are for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory only. These six jurisdictions are considered to have adequate Indigenous identification, although the level of accuracy varies by jurisdiction and hospital. Data for these six jurisdictions over-represent Indigenous populations in less urbanised and more remote locations. Hospitalisation data for six jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(e) Percentage of male, female and total hospitalisations of Indigenous Australians from 2006-07 to 2008–09.

(f) Directly age-standardised using the Australian 2001 Standard population.

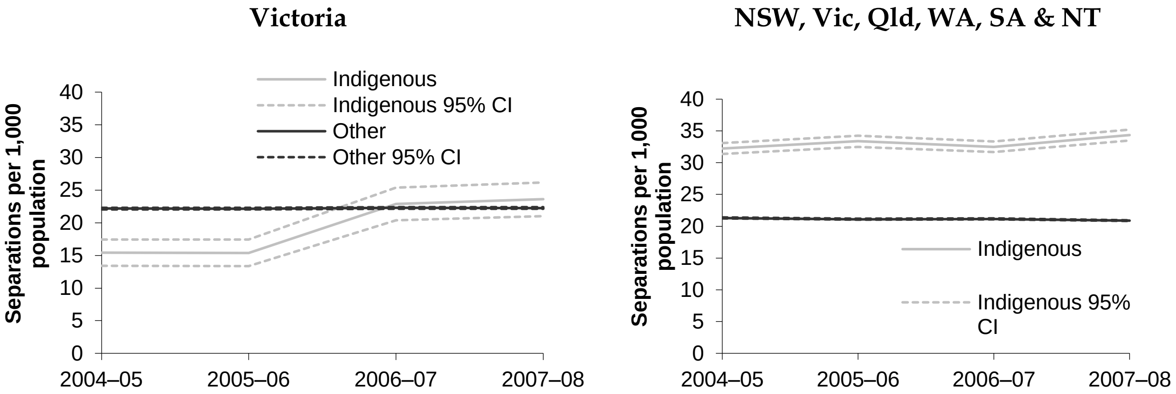
(g) Rate Ratio Indigenous: Other.

(h) Includes disease of arteries, arterioles and capillaries, diseases of veins, lymphatic vessels and lymph nodes and other unspecified disorders of the circulatory system.

Source: AIHW analyses of NHMD.

Hospitalisation trends

- In 2004-05 and 2005-06, the hospitalisation rate for circulatory disease among Indigenous people in Victoria was lower than the rate among other people, while in 2006-07 and 2007-08, the rate among Indigenous people was slightly higher than among other people.
- In Victoria, there was a significant increase of 62% in the hospitalisation rate for circulatory disease among Indigenous people from 2004–05 to 2007–08. The fitted trend implies an average yearly increase in the rate of 3.2 per 1,000.
- There was a non-significant increase in the hospitalisation rate for circulatory disease among other people in Victoria for the same period.
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, there was no significant change in the hospitalisation rate for circulatory disease among Indigenous people from 2004–05 to 2007–08 but there was a significant decline in the hospitalisation rate among other people. There were no significant changes in the rate ratio or the rate difference over this period.



Source: AIHW analyses of NHMD.

Figure 1.05.2: Hospitalisation rates for circulatory diseases, Aboriginal and Torres Strait Islander peoples and other Australians, Victoria and NSW, Vic, Qld, WA, SA & NT combined, 2004–05 to 2007–08

1.07 High blood pressure

The prevalence of hypertension among Aboriginal and Torres Strait Islander Australians expressed as a rate by age group, age-standardised rate and ratio

***Crude prevalence rates**: The number or proportion (of cases, instances, and so forth) present in a population at a given time, unadjusted for age differences across the Indigenous and non-Indigenous populations.*

Self-reported prevalence

- In 2004–05 in Victoria, after adjusting for differences in age structure between the Indigenous and non-Indigenous populations, about 13% of Indigenous males and 18% of Indigenous females reported high blood pressure or hypertension compared with 10% of non-Indigenous males and 12% of non-Indigenous females. These percentages are similar to those reported for Australia.
- In both Victoria and Australia, and for both Indigenous and non-Indigenous people, high blood pressure or hypertension was most prevalent among those aged 55 and over. In Victoria, 47% of Indigenous males and 44% of Indigenous females in this age group reported high blood pressure/hypertension compared with 33% and 37% of non-Indigenous males and females respectively.
- In 2004–05, the crude prevalence rate of high blood pressure or hypertension among Indigenous males in Victoria (5%) was slightly lower than that for Australia (7%). The prevalence rate among Indigenous females (10%) in Victoria was slightly higher than that for Australia (8%).
- Prevalence of high blood pressure or hypertension was higher for Indigenous females than Indigenous males in Victoria and Australia.

Hospitalisations

Hospitalisations by age

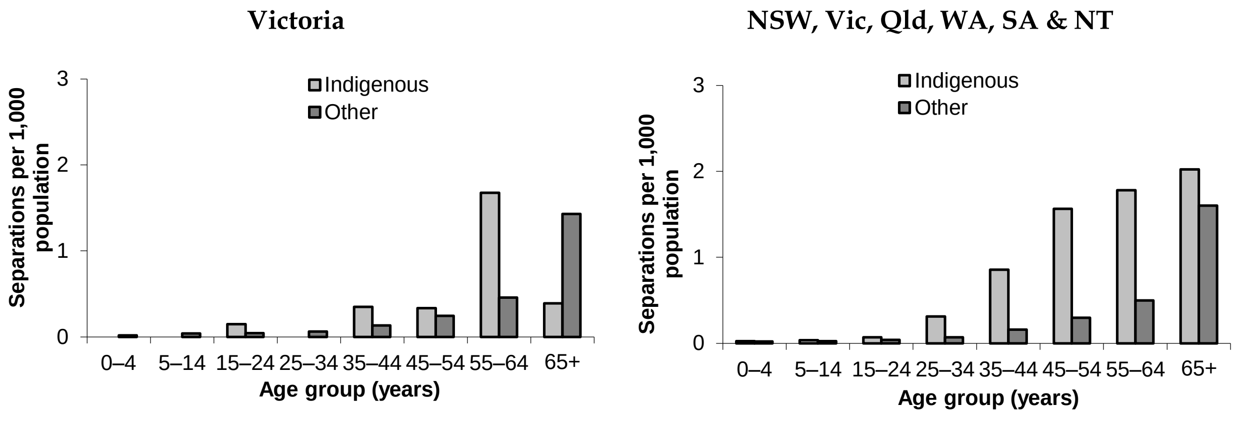
- From July 2006 to June 2008 in Victoria, Indigenous people had higher hospitalisation rates for hypertensive disease than other people across all age groups except for those aged 0–4, 5–14, 25-34, and 65 and over.
- Indigenous people in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined had higher hospitalisation rates than other people across all age groups.
- In Victoria, the greatest difference in rates occurred in the 55–64 year age group where Indigenous people were hospitalised at more than 3.5 times the rate of other people in this age group.
- In Victoria, hospitalisation rates for hypertensive disease for Indigenous people were highest in the 55–64 year age group, whereas for other people they were highest in the 65 and over age group. In the six jurisdictions combined, hospitalisation rates for hypertensive disease generally increased with age and were highest in the 65 and over age group for both Indigenous and other people.

Table 1.07.1: People reporting high blood pressure or hypertension, by Indigenous status, age group and sex, Victoria and Australia, 2004-05

	Male		Female	
Age group	Indigenous (%)	Other (%)	Indigenous (%)	Other (%)
		Victoria		
25-34	–	2	2	2
35-44	11	5	27	3
45-54	9	13	21	16
55+	47	33	44	37
Total	**5**	**10**	**10**	**12**
Total age-standardised[(a)]	**13**	**10**	**18**	**12**
		Australia		
25-34	4	3	5	2
35-44	14	6	11	4
45-54	22	15	24	13
55+	39	32	46	36
Total	**7**	**10**	**8**	**12**
Total age-standardised[(a)]	**14**	**10**	**16**	**10**

(a) Age-standardised proportions.

Source: ABS and AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.



Source: AIHW analyses of NHMD.

Figure 1.07.1: Age specific hospitalisation rates for principal diagnosis of hypertensive disease, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

1.08 Diabetes

Prevalence of diabetes for Aboriginal and Torres Strait Islander people expressed as a rate by age group, age-standardised rate and ratio

Self-reported prevalence

- In 2004–05 in Victoria, after adjusting for differences in age structure between the Indigenous and non-Indigenous populations, about 11% of Indigenous people reported diabetes or high sugar levels compared with 4% of non-Indigenous people. In the same period in Australia, 13% of Indigenous people and 4% of non-Indigenous people reported diabetes or high sugar levels.
- In both Victoria and Australia, and for both Indigenous Australians and non-Indigenous Australians, prevalence of diabetes increased with age. For Indigenous people in Victoria, prevalence of diabetes increased from 1% among those aged 25–34 to 35% among those aged 55 and over. Correspondingly, for non-Indigenous people in Victoria, prevalence of diabetes increased from 1% among those aged 25–34 to 10% among those aged 55 and over.
- In 2004–05, the crude prevalence rates of diabetes/high blood sugar among Indigenous people in Victoria (4% for males and 6% for females) were slightly lower than for Indigenous people in Australia (6% for males and 7% for females).
- For both Victoria and Australia, the prevalence of diabetes/high blood sugar among Indigenous females was slightly higher than among Indigenous males.

Table 1.08.1: People reporting diabetes/high sugar levels, by Indigenous status and age group, Victoria and Australia, 2004-05

	Victoria		Australia	
Age group	**Indigenous (%)**	**Non-Indigenous (%)**	**Indigenous (%)**	**Non-Indigenous (%)**
25-34	0.6	1.1	4.4	0.8
35-44	4.7	2.3	10.1	2.3
45-54	13.7	3.9	21.0	4.1
55+	35.1	10.5	33.4	11.8
Total age-standardised[(a)]	**10.5**	**3.5**	**12.6**	**3.7**

(a) Total is directly age-standardised proportion.

Source: AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.

Table 1.08.2: Aboriginal and Torres Strait Islander peoples reporting diabetes/high sugar levels, by sex, Victoria and Australia, 2004-05

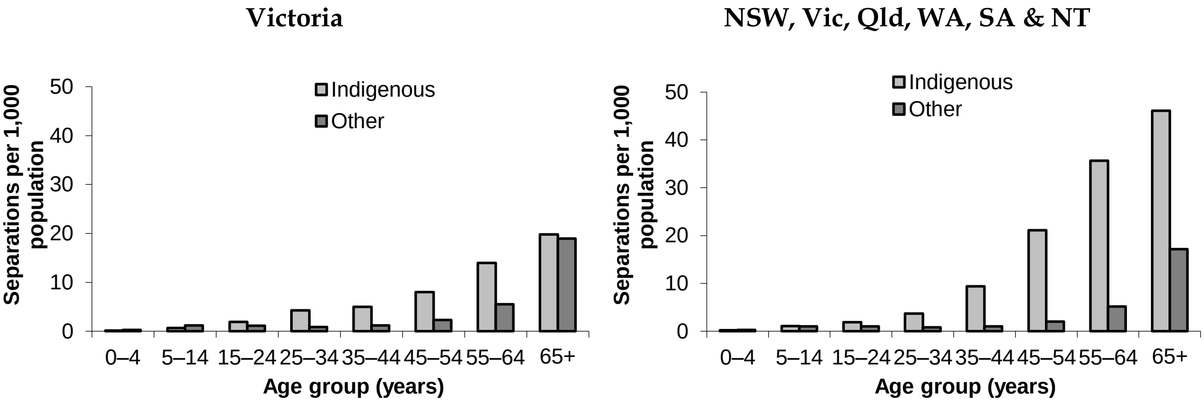
	Male	Female	Total
	%	%	%
Victoria	3.5	5.5	4.6
Australia	**5.5**	**7.1**	**6.3**

Source: AIHW analyses of NATSIHS 2004–05.

Hospitalisations

Hospitalisations by age

- From July 2006 to June 2008, in Victoria, Indigenous people had much higher hospitalisation rates for diabetes than other people in all age groups from 15–24 onwards. The greatest difference in rates occurred in the 25–34 year age group where Indigenous people were hospitalised at 4.9 times the rate of other people.
- Similarly, Indigenous people from New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined had higher rates of hospitalisation for diabetes than other people in all age groups from 5–14 onwards. The greatest difference in rates occurred in the 45–54 year age group where Indigenous people were hospitalised at 11 times the rate of other people.
- Hospitalisation rates for diabetes for Indigenous people in Victoria were lower than those for Indigenous people in the six jurisdictions combined, in all age groups except those aged 15-24 and 25-34.

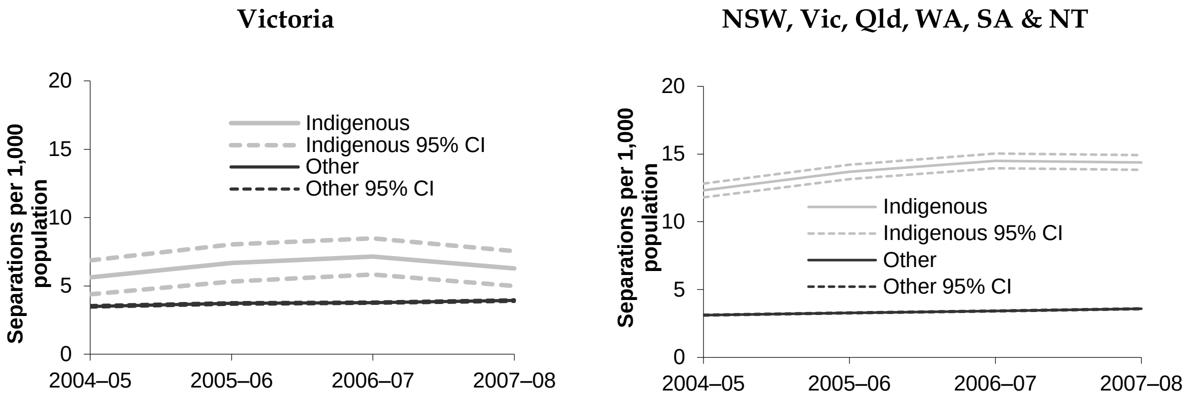


Source: AIHW analyses of NHMD.

Figure 1.08.1: Age specific hospitalisation rates for diabetes, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Hospitalisation trends

- In Victoria, there was a significant increase in hospitalisation rates for diabetes among other people from 2004–05 to 2007–08. There was no significant change among Indigenous people.
- Over the same period, hospitalisation rates for diabetes increased significantly among Indigenous and other people in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined (average yearly increase of 0.7 hospitalisations per 1,000 Indigenous people, and 0.2 per 1,000 for other people).
- The rate difference between Indigenous and non-Indigenous in the six jurisdictions also increased significantly from 2004–05 to 2007–08 (average yearly increase 0.5 hospitalisations per 1,000).



Source: AIHW analyses of NHMD.

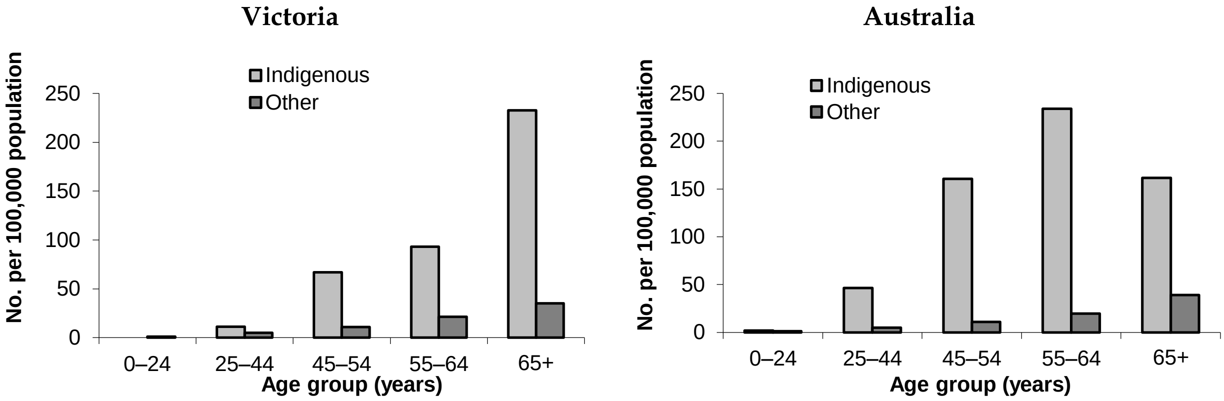
Figure 1.08.2: Hospitalisation rates for diabetes, Aboriginal and Torres Strait Islander peoples and other Australians, Victoria and NSW, Vic, Qld, WA, SA & NT combined, 2004–05 to 2007–08

1.09 End-stage renal disease

The number of Aboriginal and Torres Strait Islander people with a principal diagnosis of end stage renal disease as registered by the Australia and New Zealand Dialysis and Transplant Registry (ANZDATA); expressed as a rate by age group, age-standardised rate and ratio

Incidence by age

- Between 2006 and 2008 in Victoria, the incidence rate of ESRD for Indigenous people was higher than for non-Indigenous people across all age groups except those aged 0-24. The greatest differences in incidence rates occurred among those aged 45–54 and 65 and over where Indigenous people were about 6.5 times more likely to be registered for ESRD treatment than non-Indigenous people.
- In Victoria, incidence of ESRD was highest among those aged 65 and over for both Indigenous and non-Indigenous people. In Australia, incidence of ESRD was highest among those aged 55-65 for Indigenous people and among those aged 65 and over for non-Indigenous people.

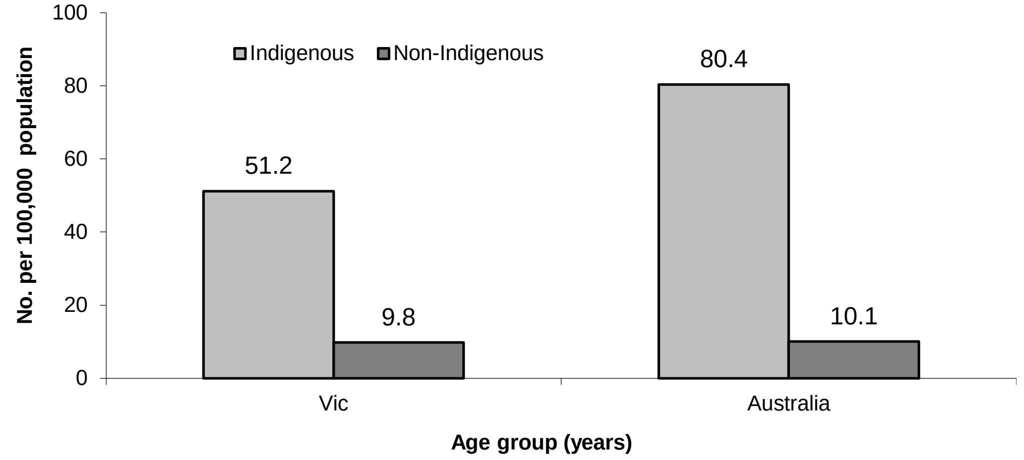


Source: AIHW analyses of Australian and New Zealand Dialysis and Transplant Registry.

Figure 1.09.1: Age specific incidence rates of treated end-stage renal disease by Indigenous status and age group, Victoria and Australia, 2006–2008

Incidence by Indigenous status

- Between 2006 and 2008, Indigenous people in Victoria were 5 times more likely to be registered with ESRD than non-Indigenous people. This was lower than the rate ratio for Australia (8).
- The incidence rate of ESRD was lower for Indigenous people in Victoria than for Indigenous people in Australia (51 compared with 80 per 100,000). For non-Indigenous people, however, incidence rates were similar in Victoria to those throughout Australia.

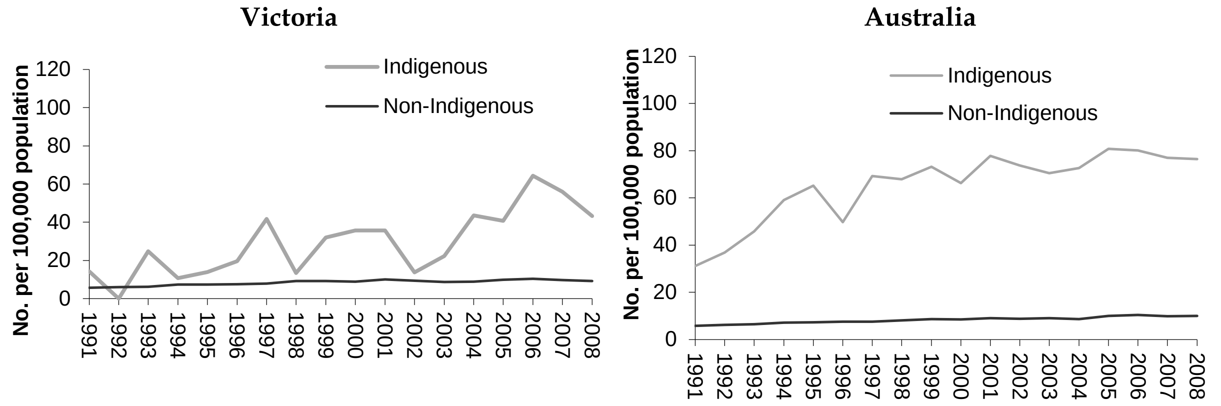


Source: AIHW analyses of Australian and New Zealand Dialysis and Transplant Registry.

Figure 1.09.2: Age-standardised incidence rates of treated end-stage renal disease by Indigenous status, Victoria and Australia, 2006–2008

Time trends

- From 1991 to 2008, there were significant increases in incidence rates of ESRD among Indigenous people in Victoria, with an average yearly increase of 2.5 cases per 100,000 population, equivalent to a 324% increase for the period.
- There were also significant increases in incidence rates of ESRD among non-Indigenous people in Victoria but this was not as rapid, averaging 0.2 per 100,000 population per year equivalent to a 131% increase for the period.
- These changes resulted in a significant increase in the rate ratios and rate differences between Indigenous and non-Indigenous people in Victoria for ESRD from 1991 to 2008. The rate ratio increased by an average of 0.2 per year, and the rate difference by an average of 2.2 per 100,000 population per year.
- From 1991 to 2008, there were significant increases in the incidence rate of ESRD for Indigenous and non-Indigenous people in Australia. The rate increased by an average of 2.4 per 100,000 population per year for Indigenous people, and 0.2 per 100,000 for non-Indigenous.
- There was no significant change in the incidence rate ratio between Indigenous and non-Indigenous people in Australia from 1991 to 2008 but there was a significant increase in the rate difference with an average yearly increase of 2.1 per 100,000 population.



Source: AIHW analyses of Australian and New Zealand Dialysis and Transplant Registry.

Figure 1.09.3: Age-standardised incidence rates of treated end-stage renal disease by Indigenous status, Victoria and Australia, 1991–2008

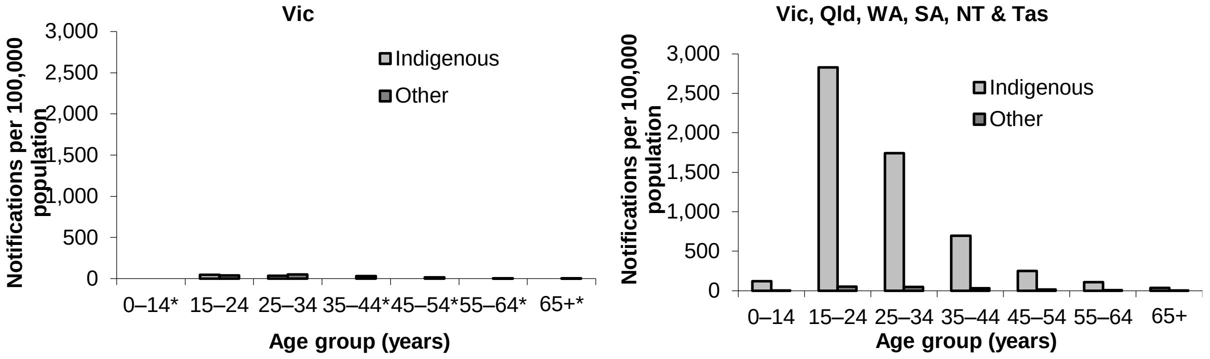
1.11 Hepatitis C and sexually transmissible infections

The rate of notified sexually transmissible infections for chlamydia, donovanosis, gonorrhoea, syphilis, and hepatitis C for Aboriginal and Torres Strait Islander people expressed as a rate by age group, gender, age-standardised rate and ratio

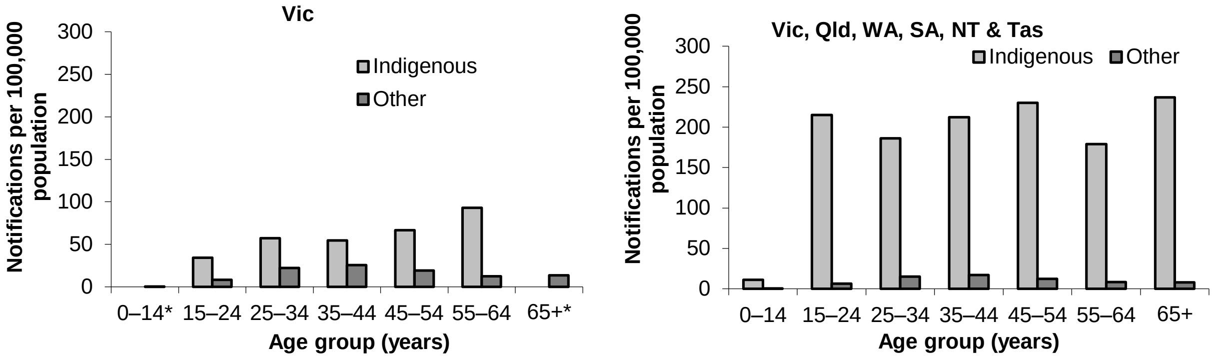
Notifications by age

- From 2006 to 2008 in Victoria, notification rates for gonorrhoea and syphilis were generally higher among Indigenous people than among other people.
- For Indigenous people in Victoria, notification rates for gonorrhoea were highest among those aged 15–24 and notification rates for syphilis were highest among those aged 55–64.
- The greatest difference in rates between Indigenous and other people in Victoria was in the 55-64 year age group for syphilis and the 15-24 year group for gonorrhoea.
- Notification rates for syphilis and gonorrhoea for Indigenous people in Victoria were lower than for Indigenous people in Victoria, Queensland, Western Australia, South Australia, Northern Territory and Tasmania combined for all age groups.

Gonorrhoea



Syphilis



* Data excluded due to small numbers.

Notes

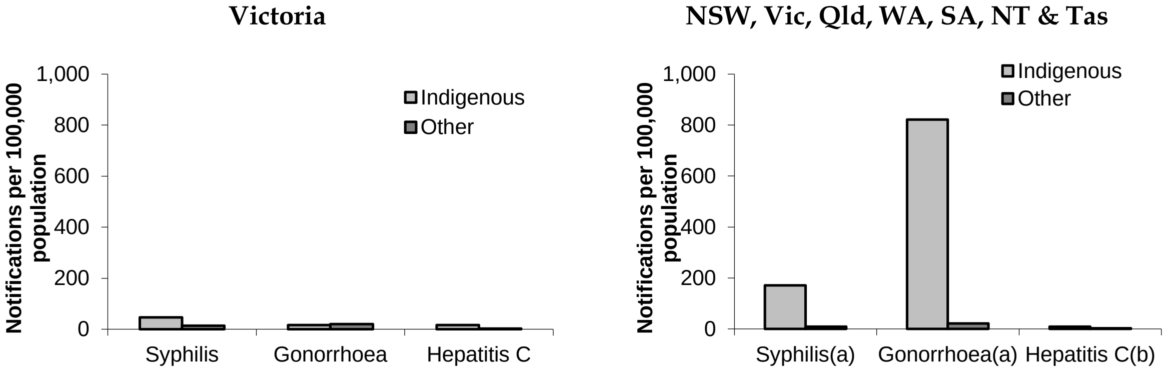
1. Data for Gonorrhoea and Syphilis refer to Victoria, Queensland, Western Australia, South Australia, Northern Territory and Tasmania only.
2. Data for Hepatitis C is excluded due to small numbers.
3. The Gonorrhoea graphs for Vic and Vic, Qld, WA, SA, NT and Tas combined have different scales.

Source: AIHW analyses of National Notifiable Disease Surveillance System (NNDSS).

Figure 1.11.1: Age specific notification rates per 100,000 for gonorrhoea and syphilis, by Indigenous status, Vic and Vic, Qld, WA, SA, NT & Tas combined, 2006–08

Notifications by Indigenous status

- From 2006 to 08, notification rates for syphilis and hepatitis C were higher for Aboriginal and Torres Strait Islander people than for other people in Victoria.
- Syphilis notification rates among Indigenous people in Victoria were more than three times those for other people, gonorrhoea notification rates were similar, and notification rates for hepatitis C were five times the rates among other people.
- From 2006 to 2008, syphilis and gonorrhoea were more common among Aboriginal and Torres Strait Islander people than other people in Victoria, Queensland, Western Australia, South Australia, the Northern Territory and Tasmania combined.
- Notification rates for syphilis and gonorrhoea for Indigenous people were lower in Victoria than in Victoria, Queensland, Western Australia, South Australia, Tasmania and the Northern Territory combined. Notification rates for Hepatitis C were higher in Victoria than in New South Wales, Victoria, Western Australia, South Australia, Tasmania and the Northern Territory combined.



(a) Data are for Tas, NT, Qld, SA, Vic and WA.

(b) Data are for NSW, Vic, WA, SA, Tas and NT.

Note: The graph for NSW, Vic, Qld, WA, SA, NT and Tas combined has a different scale than the graph for Victoria.

Source: AIHW analyses of NNDSS.

Figure 1.11.2: Age-standardised notification rates per 100,000 for syphilis, gonorrhoea and Hepatitis C, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA, NT & Tas combined, 2006–2008

1.12 Children's hearing loss

This indicator includes a number of measures of children's hearing 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

Self-reported prevalence

- The proportion of Indigenous children with ear and hearing problems was lower in Victoria (6%) compared to that reported nationally (9%).
- The reported prevalence of total or partial hearing loss as a ear and hearing problem was 1.2% among Indigenous children in Victoria while this was over twice that nationally (2.8%).

Table 1.12.1: Proportion of Indigenous children reporting ear/hearing problems, Victoria and Australia, 2008

Type of ear/hearing problem	Victoria	Australia
	Per cent	
Total has ear/hearing problems[(a)]	*5.6*	*8.6*
Total or partial hearing loss	1.2[(a)]	2.8
Runny ears or glue ear (Otitis media)	1.7[(a)]	3.1
Other	2.6[(a)]	2.7
Does not have ear/hearing problems	94.4	91.4
Total[(c)]	**100.0**	**100.0**
Total number	**12,186**	**191,543**
Not known	1.3[(a)]	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.

Prevalence by age and sex

- In 2004–05, about 8% of Indigenous children aged 0–14 in Victoria were found to have ear or hearing problems compared with 10% of Indigenous children in Australia.
- For non-Indigenous children, the rate was much the same in Victoria and in Australia (around 3%).
- In Victoria, diseases of the ear and mastoid were more prevalent among Indigenous children aged 5–14 than among Indigenous children aged 0–4 (11% compared with 3%).
- Complete/partial deafness or hearing loss and otitis media were more prevalent among Indigenous children than non-Indigenous children. In Victoria, about 5% of Indigenous children aged 0–14 reported complete or partial hearing loss or deafness compared with 2% of non-Indigenous children, and 2% of Indigenous children reported otitis media compared with 1% of non-Indigenous children.

Table 1.12.2: Diseases of the ear and mastoid reported for children aged 0-14, by Indigenous status, Victoria and Australia, 2004-05

	0-4 years		5-14 years		Total 0-14 years	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	%	%	%	%	%	%
			Victoria			
Complete/ partial deafness or hearing loss	1.9	1.0	6.4	1.7	4.9	1.5
Otitis media	0.5	1.7	3.2	1.2	2.3	1.4
Other diseases of the ear and mastoid	0.5	0.0	1.8	0.7	1.4	0.5
Total	**3.0**	**2.6**	**10.7**	**3.6**	**8.2**	**3.3**
			Australia			
Complete/ partial deafness or hearing loss	1.8	0.5	5.9	1.6	4.5	1.2
Otitis media	3.6	1.8	4.7	1.4	4.4	1.5
Other diseases of the ear and mastoid	0.4	0.1	1.5	0.5	1.2	0.4
Total	**5.5**	**2.3**	**11.5**	**3.4**	**9.5**	**3.0**

Source: ABS and AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.

- In Victoria in 2004–05, prevalence of diseases of the ear and mastoid process among Indigenous boys aged 0–14 (11%) was more than twice that for Indigenous girls of the same age group (5%).
- In Australia, prevalence of diseases of the ear and mastoid process was similar for Indigenous boys and girls aged 0-14.

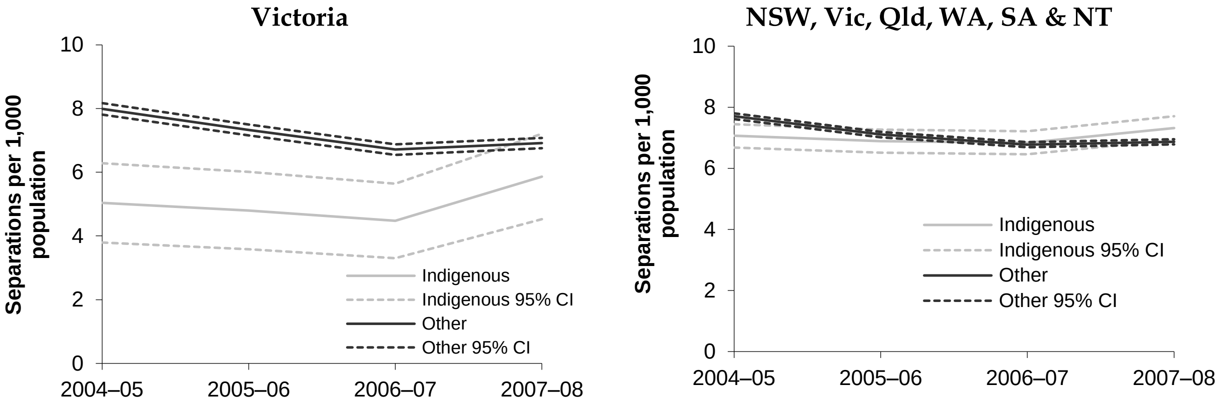
Table 1.12.3: Diseases of the ear and mastoid reported for Aboriginal and Torres Strait Islander children aged 0-14 years, by sex, Victoria and Australia, 2004-05

	Males	Females
	%	%
Victoria	11	5
Australia	**10**	**9**

Source: ABS and AIHW analyses of NATSIHS 2004–05.

Hospitalisation trends

- From 2004–05 to 2007–08 in Victoria, the hospitalisation rates for diseases of the ear and mastoid process among Indigenous children aged 0–14 were generally below those for other children. .
- For Indigenous children aged 0–14, there were no significant changes in hospitalisation rates for diseases of the ear and mastoid process over the same period, but there was a significant decline for other children (average yearly decline of 0.4 hospitalisations per 1,000).
- From 2004–05 to 2007–08 in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, hospitalisation rates for diseases of the ear and mastoid process among Indigenous children aged 0–14 showed no significant change, but there was a significant decline for other children (average yearly decline of 0.3 hospitalisations per 1,000).



Source: AIHW analyses of NHMD.

Figure 1.12.1: Hospitalisation rates for Indigenous and other children aged 0-14 from diseases of the ear and mastoid, Victoria and Qld, WA, SA & NT combined, 2004–05 to 2007–08

1.13 Disability

The prevalence of disability among Aboriginal and Torres Strait Islander people, including children with special needs

Self-reported prevalence

- In 2008, in Victoria, Indigenous Australians aged 18 and over had higher rates of disability than their non-Indigenous counterparts (a rate ratio of 1.6) (Table 1.13.1). This is similar to the pattern seen nationally.
- The proportion of Indigenous Australians reporting a profound or severe core-activity limitation was over twice that of non-Indigenous Australians in Victoria.

Table 1.13.1: Disability status, by Indigenous status and state/territory, persons aged 18 years and over in non-remote areas, 2008, age standardised rates

	Profound/ severe core activity limitation	Has unspecified limitation or restriction	*Total with disability or long-term health condition*	No disability or long-term health condition	Total
			Victoria (Per cent)		
Indigenous	11.5*	52.3*	*63.7**	36.3*	100
Non-Indigenous	4.9*	36.3*	*41.2**	58.8*	100
Ratio	2.4	1.4	*1.6*	0.6	
			Australia (Per cent)		
Indigenous	10.3	48.5*	*58.9**	41.1*	100
Non-Indigenous	4.7	36.5*	*41.2**	58.8*	100
Ratio	2.2	1.3	*1.4*	0.7	

*Differences between Indigenous and non-Indigenous rates are statistically significant for these categories.

Note:

1. Proportions are age-standardised.

2. This variable is only appropriate for comparison with other surveys where the population is limited to non-remote areas, where questions on mental illness were included.

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

Sources: NATSISS 2008 and NHS 07-08.

1.14 Community functioning

Analyses of factors associated with community functioning for Indigenous Australians

Community and individual aspects contributing to community functioning scores

The following statements refer to Table 1.14.1 which presents data for variables contributing to community functioning as collected in 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS).

Power to control choices and options

- In 2002 in Victoria, about 82% of Indigenous people reported no stressors related to discrimination or racism and 47% could visit their homelands.
- More than one quarter (31%) of Indigenous people were involved with an Aboriginal and Torres Strait Islander organisation and 88% had support in a time of crisis.

Connectedness to family land and history

- About 63% of Indigenous Australians in Victoria reported recognition of their homeland.
- About 83% of Indigenous people aged 15 and over reported they were not removed from their natural family and 33% reported that their relatives were not removed from their natural family.

Health, chronic disease and substance use

- About 42% of Indigenous people aged 15 and over in Victoria reported excellent or very good health.
- About 83% of Indigenous people had not drunk alcohol at risky/high-risk levels in the last 12 months and 62% had not used illicit substances in the last 12 months.

Culture

- The majority (53%) of Indigenous people in Victoria participated in at least one cultural event in the last 12 months and 8% spoke an Aboriginal or Torres Strait Islander language.

Identity

- About 48% of Indigenous people in Victoria identified with a tribal group or clan.

Continuing employment

- In 2002, about 4% of Indigenous people in Victoria were employed in Community Development Employment Projects (CDEP) and a further 42% were employed (not in CDEP).

Education

- About 19% of Indigenous people aged 15 and over in Victoria completed Year 12 and 45% of Indigenous people aged 25–64 had a non-school qualification.

Infrastructure and community

- About 62% of Indigenous people in Victoria were living in a dwelling that had no major structural problems and 85% in a dwelling that was not overcrowded.
- About 88% of Indigenous people had a working telephone, 66% had used a computer in the last 12 months and 53% had used the internet in the last 12 months.
- Over half (61%) of Indigenous people aged 15 and over reported having access to a motor vehicle.

Coping within the internal world and external world

- About 24% of Indigenous people in Victoria reported no community problems and 18% reported experiencing no stressors in the last 12 months.
- Almost three-quarters (70%) of Indigenous people reported they were not a victim of physical violence in the last 12 months and 76% did not need legal services in the last 12 months.

Structure and routine

- About 66% of Indigenous people in Victoria reported living in only one dwelling in the last 12 months.
- About 52% of Indigenous people reported they did not have a cash flow problem.

Income

- About one quarter (29%) of Indigenous people aged 15 and over in Victoria were in the third quintile or above of equivalised household income.
- About 34% of Indigenous people reported that government support was not the main source of income during the last 2 years and 48% could raise $2,000 within a week.

Table 1.14.1: Variables contributing to community functioning, Indigenous people aged 15 and over, Victoria and Australia, 2002

	Victoria	Aust
Themes and community infrastructure	%	%
Power to control choices and options		
No stressors reported for discrimination/racism	81.6	82.3
Can visit homelands	46.6	46.2
Has support in a time of crisis	88.0	90.4
Involvement with Aboriginal/Torres Strait Islander organisation	30.5	26.1
Work allows for cultural responsibilities - can meet responsibilities	16.8	22.3
Used strategies to meet living expenses	49.4	48.5
Connectedness to family land and history		
Access to traditional lands		
Recognition of homelands	63.3	69.6
Lives in homelands	14.5	21.9
Removal		
Respondent not removed from natural family	82.8	87.2
Relatives not removed from natural family	32.7	44.4
Health, chronic disease and substance use		
Self-assessed health status excellent or very good	41.8	44.1
Has no disability or long term health condition	55.7	63.5
Not a regular smoker(a)	48.2	50.7
Has not drunk alcohol in last 12 months at risky/high-risk levels(b)	82.6	84.1
Has not used substances illicitly in last 12 months(c)	62.2	70.7
Culture		
Protection and maintenance of culture:		
Main language spoken at home is Aboriginal language/ Torres Strait Islander Language	*1	12.0
Speaks an Aboriginal/Torres Strait Islander language	7.8	21.1
Participating in cultural events		
Attended Aboriginal and Torres Strait Islander cultural event in last 12 months		
Attended funeral	28.8	46.6
Attended ceremony	15.6	23.5
Attended sports carnival	16.3	29.8
Attended festival/carnival involving arts, crafts, music or dance	26.3	35.7
Sub-total attended in last 12 months	53.2	68.1
Identity		
Identification with tribal group or language group/clan	47.9	54.1
Continuing employment		
Employed in CDEP	3.5	12.1
Employed not in CDEP	42.4	34.1

(continued)

Table 1.14.1 (continued): Variables contributing to community functioning, Indigenous people aged 15 and over, Victoria and Australia 2002

	Victoria	Aust
Themes and community infrastructure	%	%
Education		
Year 12 highest year of school completed[(d)]	19	18
Subtotal people 15 years and over not at school	*100*	*100*
Has a non-school qualification[(e)]	45	32
Subtotal people aged 25-64 years	100.0	100.0
Having a role		
Has done volunteer work for an organisation in the last 12 months	37.2	27.6
Expected to have the same employment in 12 months	38.7	40.6
Infrastructure of community		
Housing		
Living in a dwelling that has no major structural problems	62.3	60.4
Living in a dwelling that is not overcrowded (Canadian Occupancy standard)	85.0	74.0
Working household facilities for:		
washing people	100.0	98.6
washing clothes and bedding	98.0	98.1
Storing/preparing foods	97.2	92.3
Sewerage facilities	98.8	98.1
Communication services		
Has working telephone	87.6	71.3
Used computer in last 12 months	65.8	55.5
Used internet in last 12 months	52.6	41.0
Transport		
Access to motor vehicles	61.2	54.6
Can easily get to places needed	71.6	70.1
Main reasons for not using public transport:		
Prefer to use own transport	34.6	29.2
No service available	11.4	29.1
No service available/convenient time	6.9	4.3
Cost considerations	*1	1.2
Other(f)	8.4	6.9
Coping within the internal world and external world/ role models		
Community problems		
No community problems reported	23.9	25.3
Community problems reported, but less than three types	34.2	28.8
No problems reported for theft	56.1	57.0
No problems reported for alcohol	77.5	66.5
No problems reported for illicit drugs	72.3	67.7

(Continued)

Table 1.14.1 (continued): Variables contributing to community functioning, Indigenous people aged 15 and over, Victoria and Australia 2002

	Victoria	Aust
Themes and community infrastructure	%	%
No problems reported for family violence	87.1	78.8
No problems reported for assault	86.9	80.1
No problems reported for sexual assault	94.9	91.9
Subtotal no. of people who reported a community problem	72.5	73.6
Stressors		
No stressors reported in last 12 months	18.3	17.7
Less than three types of stressors reported in the last 12 months[(g)]	57	56
No stressors reported for death of a family member or close friend	60.0	54.3
No stressors reported for serious illness of disability	67.2	69.2
No stressors reported for not able to get a job	74.7	73.0
No stressors reported for witness to violence	87.7	84.3
No stressors reported for member of family sent to jail/currently in jail	84.6	80.5
Subtotal no. of people who reported a stressor	81.7	82.3
Crime and Justice		
Not a victim of physical or threatened violence in the last 12 months	69.7	75.7
Did not need legal services in the last 12 months	75.9	77.1
Did not use legal services in the last 12 months	80.1	80.2
Not arrested by police in the last 5 years	83.0	83.6
Not incarcerated in the last 5 years	93.3	92.9
Structure and routine		
Has no difficulties communicating with service providers in English(h)	87.8	86.9
In the last 12 months has lived in only one dwelling	66.3	69.1
No days without money for basic living expenses in the last 12 months(i)	52.8	56.3
No days without money for basic living expenses in the last 2 weeks(i)	64.5	68.2
Did not have a cash flow problem(i)	51.5	45.9
Income		
Equivalised gross household income		
3rd quintile or above	28.7	24.6
Main current source of personal income		
CDEP	*3	10.3
Other wages/salaries	33.1	29.0
Government pensions and allowances	52.1	50.2
Total in labour force	57.5	60.0
Other sources[(j)]	5.4	3.1
Government support was not the main source of income during the last 2 years	33.9	40.0

(continued)

Table 1.14.1 (continued): Variables contributing to community functioning, Indigenous people aged 15 and over, Victoria and Australia 2002

	Victoria	Aust
Themes and community infrastructure	%	%
Household financial stress and cash flow problems		
Has a bank account	97.0	94.2
Could raise $2000 within a week	48.0	40.6
Total people aged 15 and over	**17,440**	**282,205**

* Estimate has a relative standard error of 25% to 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) Excludes regular smoker and not stated.
(b) Excludes high-risk, medium risk and not status.
(c) Excludes non response, not stated and has used substance in the last 12 months.
(d) Proportion of subtotal people aged 15 years and over, but not at school.
(e) Proportion of subtotal people aged 25-64 years.
(f) Includes takes too long, concerned about own personal safety, racial discrimination and other.
(g) Includes values of zero to less than three.
(h) Excludes with assistance.
(i) Non community responses only.
(j) Excludes not stated.

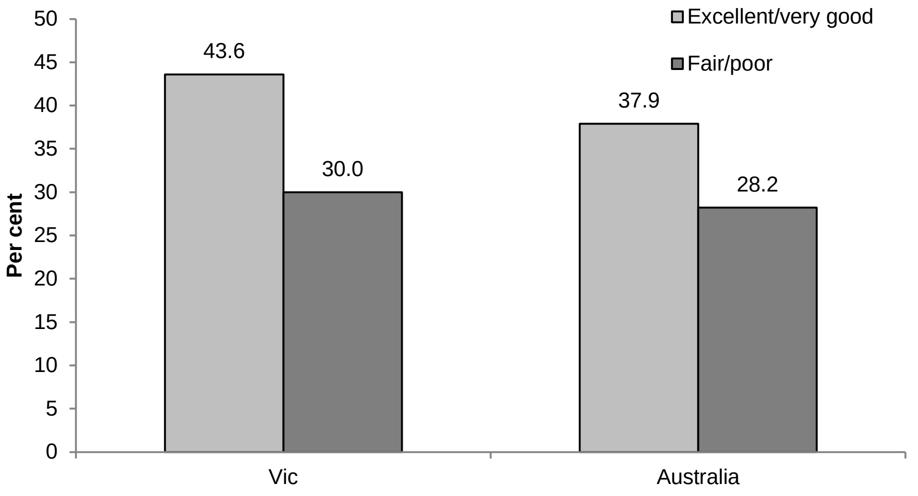
Source: AIHW and ABS analyses of National Aboriginal and Torres Strait Islander Social Survey (NATSISS) 2002.

1.15 Perceived health status

Self-reported, self-assessed health status of Aboriginal and Torres Strait Islander Australians

Self-assessed health status

- The proportion of Indigenous people aged 15 and over reporting excellent or very good health was higher in Victoria than in Australia (44% compared with 38%). A higher proportion of Indigenous people aged 15 and over in Victoria reported fair or poor health (30%) than in Australia (28%).

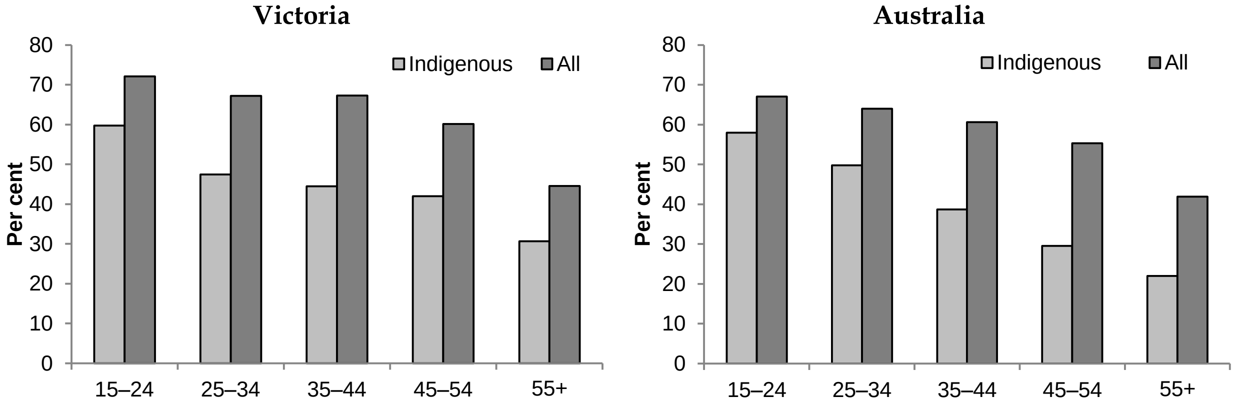


Source: ABS and AIHW analysis of 2008 NATSISS and NHS 2007–08.

Figure 1.15.1: Self-assessed health status, Indigenous people aged 15 and over, Victoria and Australia, 2007–08

Self-assessed health status by age

- In Victoria and in Australia, Indigenous people were less likely to report excellent or very good health than non-Indigenous people across all age groups.
- In Victoria, the proportion of Indigenous people reporting excellent or very good health generally decreased with age, being highest among those aged 15–24 (60%), and lowest among those aged 55 and over (31%). A similar pattern was evident for Australia with 58% of Indigenous people aged 15-24 and 22% aged 55 and over reporting excellent or very good health.

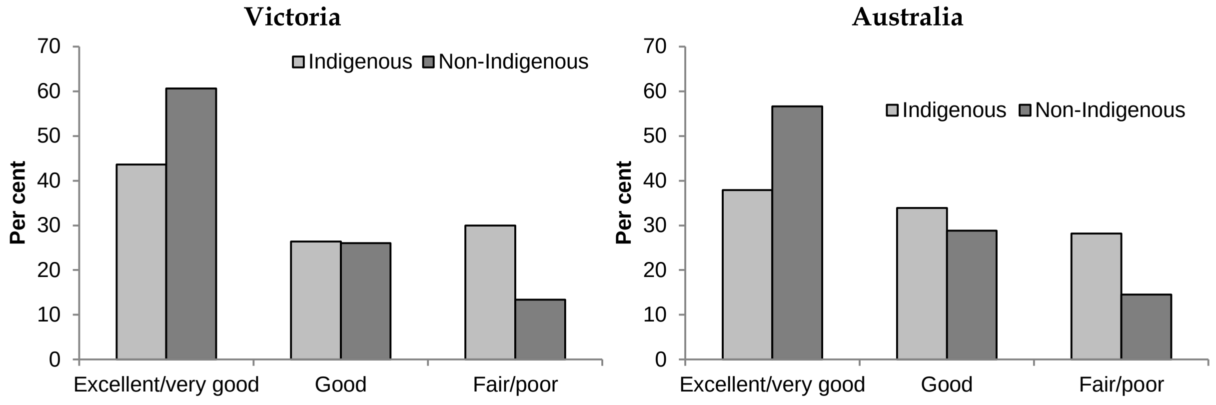


Source: AIHW analyses of NATSISS 2008 and NHS 2007–08.

Figure 1.15.2: Self-assessed health status as 'Very Good' or Excellent' , by age group, Indigenous Australians and all Australians, Victoria and Australia, 2007–08

Self-assessed health status by Indigenous status (age-standardised)

- In 2007–08 in both Victoria and Australia, after adjusting for differences in age structure between the Indigenous and non-Indigenous populations, Indigenous people were about twice as likely as non-Indigenous people to report their health as fair or poor (2.0 times for Victoria and 1.9 times for Australia).
- In Victoria, a similar proportion of Indigenous people and non-Indigenous people reported their health as good (about 26%) but Indigenous people were less likely than non-Indigenous people to report it as very good or excellent. In Australia, Indigenous people were less likely to report their health as excellent or very good, or good.
- About 44% of Indigenous people in Victoria aged 15 and over reported their health as being very good or excellent, 26% as good and 30% as fair or poor.



Source: ABS and AIHW analyses of NATSISS 2008 and NHS 2007–08.

Figure 1.15.3: Self-assessed health status (age adjusted), people aged 15 and over, by Indigenous status, Victoria and Australia, 2007–08

1.16 Social and emotional wellbeing

The social and emotional wellbeing of Aboriginal and Torres Strait Islander peoples expressed as a percentage by age group, age-standardised rate and ratio

Hospitalisations

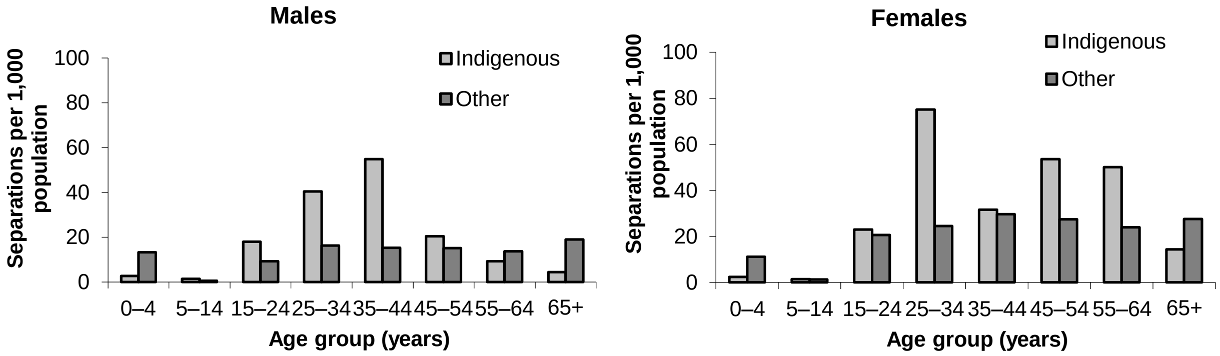
Hospitalisations by age and sex

- From July 2006 to June 2008 in Victoria, Indigenous males and females had higher hospitalisation rates for mental health-related conditions than other males and females across all age groups except the 0–4 and 65 and over age groups for males and females, and the 55–64 year age group for males.
- For Indigenous males in Victoria, the hospitalisation rate for mental health-related conditions was highest among those aged 35–44. For Indigenous females, the highest rate was among those aged 25–34. The same pattern was evident for Indigenous males and females in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined.
- The greatest difference in hospitalisation rates for mental health related conditions between Indigenous and other males in Victoria was in the 35–44 year group, where Indigenous males were hospitalised at 3.6 times the rate of other males. The greatest difference between Indigenous and other females was in the 25-34 year group where Indigenous females were hospitalised at 3.1 times that of other females.

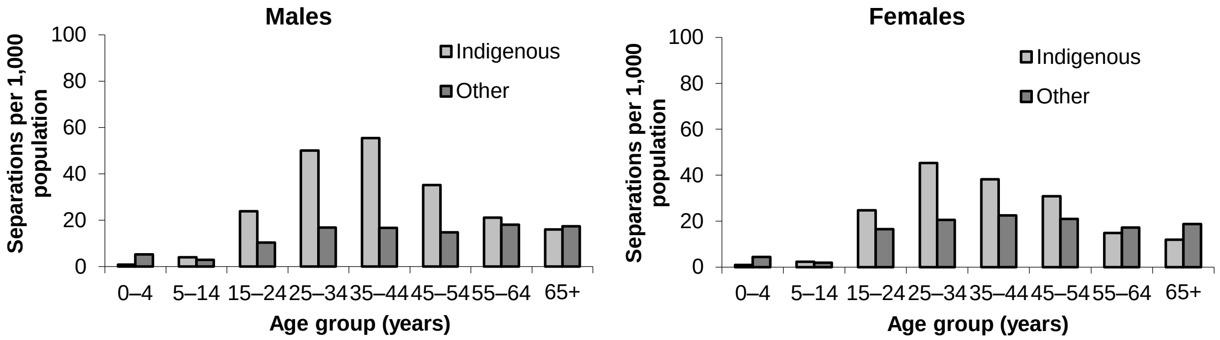
Hospitalisations by Indigenous status

- From July 2006 to June 2008, Indigenous males in Victoria were 1.7 times as likely, and Indigenous females 1.6 times as likely, to be hospitalised for mental health-related conditions as other males and females in Victoria.
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, Indigenous males were twice as likely and Indigenous females 1.5 times, as likely to be hospitalised for mental health-related conditions as other males and females.

Victoria



NSW, Vic, Qld, WA, SA & NT



Source: AIHW analyses of NHMD.

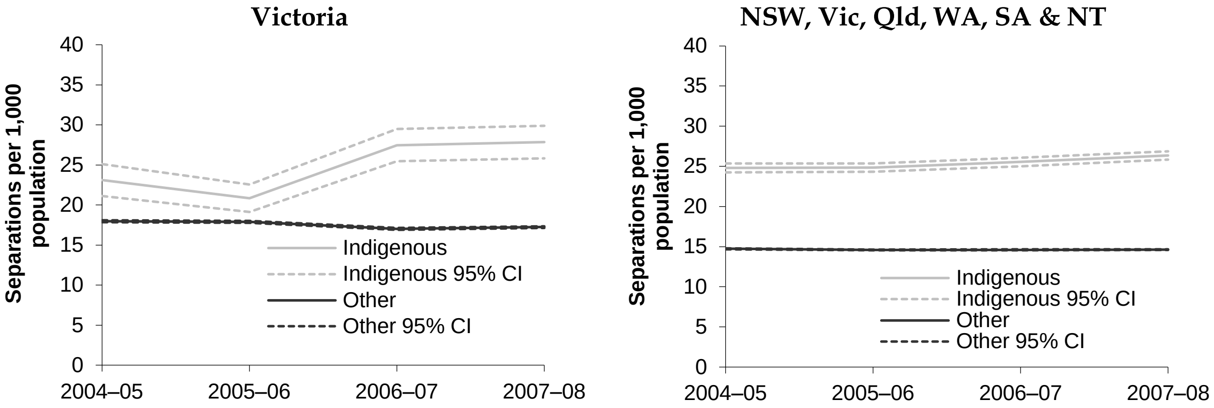
Figure 1.16.1: Age-specific hospitalisation rates for mental health-related conditions, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Source: AIHW analyses of NHMD.

Figure 1.16.2: Age-standardised hospitalisation rates for mental health-related conditions, by Indigenous status and sex, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Hospitalisation trends

- From 2004–05 to 2007–08, there were no significant changes in hospitalisation rates for mental health-related conditions among Indigenous people in Victoria. . Over the same period, there was a significant (5%) decline in the hospitalisation rates for mental health-related conditions among other people, with an average yearly decrease of 0.3 hospitalisations per 1,000 population.
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, there was a significant increase in hospitalisation rates for mental health-related conditions among Indigenous people over the same period. There was no significant change in hospitalisation rates for other people.
- There were no significant changes in the hospitalisation rate ratios for mental-health related conditions between Indigenous and other people in Victoria, but there was a significant increase in the rate ratio in the six jurisdictions combined.



Source: AIHW analyses of NHMD.

Figure 1.16.3: Hospitalisation rates from mental health-related conditions by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, 2004–05 to 2007–08

Determinants of Health (Tier 2)

2.01 Access to functional housing with utilities

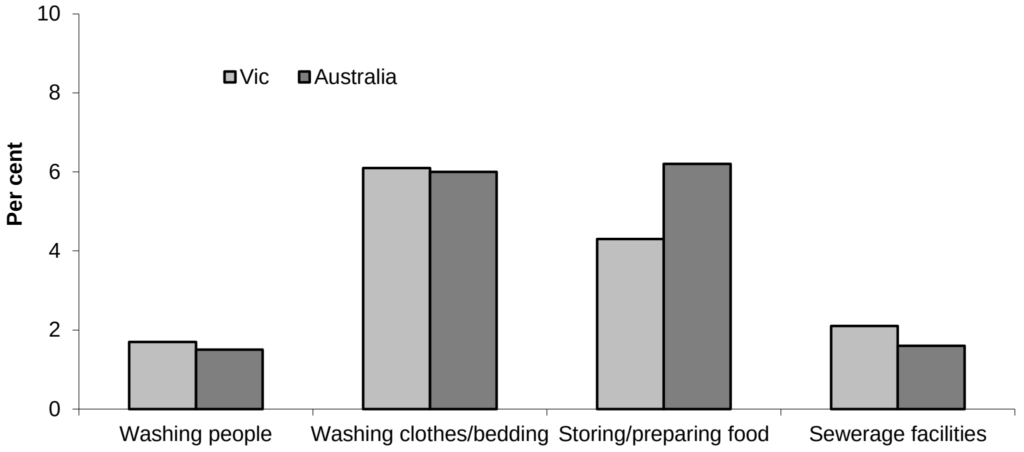
Connection to water, sewerage and electricity services in Indigenous communities and functionality of Indigenous housing facilities required to support healthy living practices

Discrete Indigenous communities

Reliable data are not available for this indicator.

Healthy living practices

- In 2008 in Victoria, 1.7% of Indigenous households reported that they did not have working facilities for washing people, 6.1% did not have facilities for washing clothes/bedding, 4.3% did not have facilities for storing/preparing food, and 2.1% did not have working sewerage systems.
- In 2008 in Australia, 1.5% of Indigenous households reported that they did not have working facilities for washing people, 6% did not have facilities for washing clothes/bedding, 6.2% did not have facilities for storing/preparing food, and 1.6% did not have working sewerage systems.



Note: Excludes households for which information about working facilities was not reported.

Source: AIHW analyses of NATSISS 2008.

Figure 2.01.1: Percentage of Indigenous households reporting lack of working facilities for each of the first 4 Health Living Practices, Victoria and Australia, 2008

2.02 Overcrowding in housing

The proportion of Aboriginal and Torres Strait Islander people living in overcrowded households

Data presented for this indicator are based on the Canadian National Occupancy Standard of housing overcrowding, the measure most widely used in Australia. This standard specifies the number of bedrooms required in a dwelling based on the numbers, age, sex and relationships of household members. Households that require one more bedroom to meet the standard are considered to experience 'a moderate degree of overcrowding', whereas households requiring two or more additional bedrooms are said to experience a 'high degree of overcrowding'.

The Canadian National Occupancy Standard states that:

- there should be no more than two persons per bedroom
- a household of one unattached individual may reasonably occupy a bed-sit (that is, have no bedroom)
- parents or couples may share a bedroom
- children younger than 5 of different sexes may reasonably share a bedroom
- children 5 years of age or over of the opposite sex should not share a bedroom
- children younger than 18 and of the same sex may reasonably share a bedroom
- single household members aged 18 or over should have a separate bedroom (AIHW 2005).

- In 2008 in Victoria, about 11% of Indigenous people aged 15 and over were living in overcrowded households compared with 4% of non-Indigenous people. In Australia, 25% of Indigenous people were living in overcrowded households (Figure 2.02.1).
- In 2006 in Victoria, overcrowding varied by tenure type with 16% of Indigenous households in housing co-operative, community or church group housing overcrowded. This compared with 12% of Indigenous households in state or territory housing authority housing, 10% of private and other renters and 6% of home owners or buyers (Table 2.02.1).

(a) Based on Canadian National Occupancy Standard for Housing Appropriateness.

(b) People in households for which housing utilisation could be determined.

Source: NATSISS 2008, Survey of Income and Housing (SIH) 2007-08.

Figure 2.02.1: Proportion of people aged 15 and over living in overcrowded housing, by Indigenous status, Victoria and Australia, 2008

Table 2.02.1: Number and proportion of overcrowded households by Indigenous status, using the Canadian National Occupancy Standard, by tenure type, Victoria and Australia, 2006

	Indigenous		Non-Indigenous	
Tenure type	**Victoria**	**Australia[(a)]**	**Victoria**	**Australia[(a)]**
No. of overcrowded Indigenous households				
Home owner/buyer	318	3,687	27,167	94,314
Renter				
State or territory housing authority	323	4,970	3,338	12,692
Housing co-operative/community/church group	50	5,567	199	1,188
Private and other(b)	411	5,337	19,276	81,134
Not stated	12	233	255	1,091
Total rented	*796*	*16,107*	*23,068*	*96,105*
Other tenure types(c)	40	752	1,244	5,086
Total dwellings(d)	**1,170**	**20,734**	**52,334**	**198,151**
Proportion of overcrowded households(e) (%)				
Home owner/buyer	6.0	6.9	2.2	2.0
Renter				
State or territory housing authority	12.3	15.9	6.7	4.9
Housing co-operative/community/church group	15.6	39.9	3.0	3.6
Private and other(b)	10.1	11.4	5.7	5.6
Not stated	13.3	19.0	7.0	6.3
Total rented	*11.2*	*17.3*	*5.8*	*5.5*
Other tenure types(c)	11.4	18.1	3.8	3.5
Total dwellings(d)	**9.0**	**13.6**	**3.1**	**3.0**

(a) Includes Other territories.

(b) Includes dwellings being rented from a real estate agent, parent/other relative or other person, dwellings being rented through a 'Residential park (includes caravan parks and marinas)', 'Employer-government (includes Defence Housing Authority)' and 'Employer-other employer' (private).

(c) Includes dwellings being purchased under a rent/buy scheme, occupied rent-free, occupied under a life tenure type and other tenure type nfd.

(d) Includes tenure type not stated.

(e) Proportions have been calculated on all occupied private dwellings excluding those where number of bedrooms was not stated.

Note: Households are considered overcrowded if one or more additional bedroom is required to satisfy the Canadian National Occupancy Standard.

Source: ABS and AIHW analyses of 2006 Census data.

2.03 Environmental tobacco smoke

The number and proportion of Aboriginal and Torres Strait Islander children aged 0–14 years who live in households with regular smokers

Children living in households with smokers

- In 2007–08 in Victoria, around 65% of Indigenous children aged 0–14 lived in households with a daily smoker, compared with 30% of non-Indigenous children of the same age (Table 2.03.1).
- In the same period nationally, around 65% of Indigenous children aged 0–14 lived in households with a daily smoker, compared with 32% of non-Indigenous children.
- In Victoria, about 21% of Indigenous children aged 0–14 were living in households with a daily smoker who smoked at home indoors compared with 5% of non-Indigenous children of the same age. Nationally, the proportions were 22% for Indigenous children and 7% for non-Indigenous children.

Table 2.03.1: Children aged 0–14 living in households with smokers, by Indigenous status of children, Victoria and Australia, 2008 and 2007–08

			Victoria	Australia
Proportion of children living with daily smoker(s)[(a)]	Indigenous	%	65.0	65.1
	Non-Indigenous	%	29.6	32.2
	Rate ratio		2.2*	2.0*
Proportion of children with daily smoker who smokes at home indoors in household[(a)]	Indigenous	%	21.4	21.6
	Non-Indigenous	%	5.1	6.6
	Rate ratio		4.2*	3.3*
Total number of children aged 0-14[(b)]	**Indigenous**	**No.**	**12,430**	**193,249**
	Non-Indigenous	**No.**	**970,599**	**3,907,621**

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons.

(a) Proportions exclude not stated responses.

(b) Includes households in which the smoking status of members was not stated.

Source: ABS and AIHW analysis of NATSISS 2008 and NHS 2007–08.

2.04 Years 3, 5 and 7 literacy and numeracy

The proportion of Year 3, 5 and 7 students achieving national benchmarks for literacy and numeracy achievement

Reading

- In Victoria in 2009, about 87% of Indigenous students achieved the Year 3 reading benchmark compared with 96% of non-Indigenous students; 85% the Year 5 benchmark compared with 95% of non-Indigenous students; 84% the Year 7 benchmark compared with 96% of non-Indigenous students; and 79% the Year 9 benchmark compared with 95% of non-Indigenous students. These proportions were higher than for Indigenous students nationally.

Writing

- In Victoria in 2009, about 91% of Indigenous students achieved the Year 3 writing benchmark compared with 97% of non-Indigenous students; 84% the Year 5 benchmark compared with 95% of non-Indigenous students; 80% the Year 7 benchmark compared with 94% of non-Indigenous students; and 69% the Year 9 benchmark compared with 91% of non-Indigenous students. These proportions were higher than for Indigenous students nationally.

Spelling

- In Victoria in 2009, about 85% of Indigenous students achieved the Year 3 spelling benchmark compared with 95% of non-Indigenous students; 85% the Year 5 benchmark compared with 95% of non-Indigenous students; 81% the Year 7 benchmark compared with 94% of non-Indigenous students; and 73% the Year 9 benchmark compared with 91% of non-Indigenous students. These proportions were higher than for Indigenous students nationally.

Grammar and punctuation

- In Victoria in 2009, about 86% of Indigenous students achieved the Year 3 grammar and punctuation benchmark compared with 96% of non-Indigenous students; 84% the Year 5 benchmark compared with 95% of non-Indigenous students; 79% the Year 7 benchmark compared with 95% of non-Indigenous students; and 70% the Year 9 benchmark compared with 93% of non-Indigenous students. These proportions were higher than for Indigenous students nationally.

Numeracy

- In Victoria in 2009, about 89% of Indigenous students achieved the Year 3 numeracy benchmark compared with 96% of non-Indigenous students; 87% the Year 5 benchmark compared with 96% of non-Indigenous students; 85% the Year 7 numeracy benchmark compared with 96% of non-Indigenous students; and 84% the Year 9 benchmark compared with 97% of non-Indigenous students. These proportions were higher than those for Indigenous students nationally.

Table 2.04.1: Proportion of Year 3, 5, 7 and 9 students at or above the national minimum standard for reading, writing, spelling, grammar & punctuation, and numeracy, by Indigenous status, Victoria and Australia, 2008–2009(a)

	Victoria									
	Indigenous					Non-Indigenous				
	Reading	Writing	Spelling	Grammar & punctuation	Numeracy	Reading	Writing	Spelling	Grammar & punctuation	Numeracy
Year 3										
2008	88.1	92.1	84.3	87.7	93.0	95.6	96.6	95.8	95.6	96.8
2009	87.2	90.7	85.0	86.2	89.4	95.8	96.9	95.0	95.5	96.1
Year 5										
2008	83.0	82.7	85.0	84.1	83.3	94.0	94.3	94.4	95.1	95.0
2009	84.8	84.1	84.8	84.0	86.9	94.6	95.1	94.8	95.2	95.9
Year 7										
2008	85.5	77.6	81.7	76.1	87.9	96.1	93.8	94.6	94.1	96.8
2009	84.4	80.1	81.4	78.5	85.4	95.7	94.0	93.9	94.5	96.3
Year 9										
2008	79.9	68.9	71.6	68.8	78.4	95.0	90.6	91.3	92.2	95.5
2009	79.3	68.6	72.8	70.4	83.8	94.7	90.8	91.3	93.1	96.7

(continued)

Table 2.04.1 (continued): Proportion of Year 3, 5, 7 and 9 students at or above the national minimum standard for reading, writing, spelling, grammar & punctuation, and numeracy, by Indigenous status, Victoria and Australia, 2008–2009[(a)]

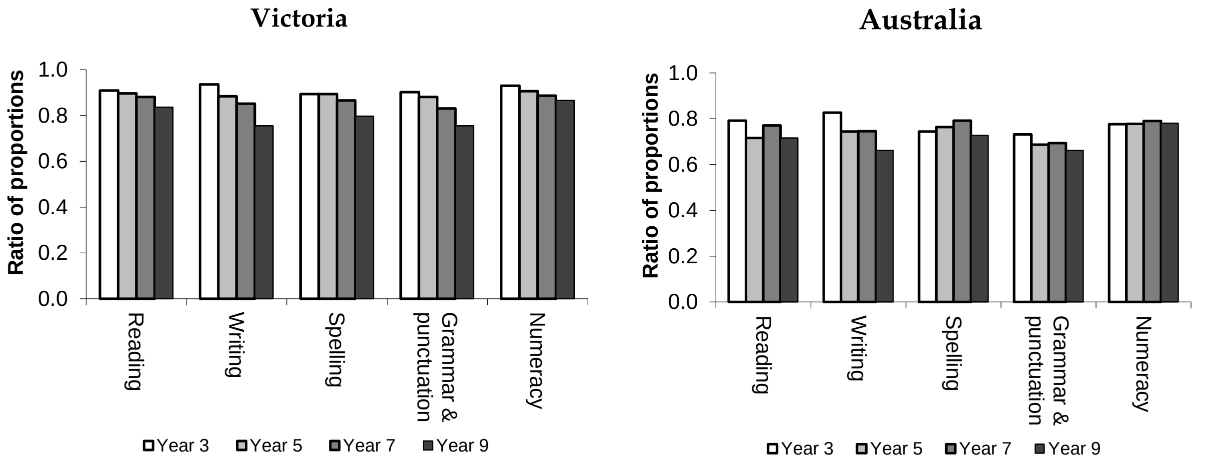
	Australia									
	Indigenous					Non-Indigenous				
	Reading	Writing	Spelling	Grammar & punctuation	Numeracy	Reading	Writing	Spelling	Grammar & punctuation	Numeracy
Year 3										
2008	68.3	78.8	69.2	65.3	78.6	93.5	96.4	93.9	93.3	96.0
2009	75.1	79.9	69.6	68.7	74.0	94.8	96.6	93.5	93.8	95.2
Year 5										
2008	63.4	69.7	69.7	64.1	69.2	92.6	93.9	93.0	93.5	94.0
2009	66.7	70.1	71.5	64.3	74.2	93.1	94.2	93.6	93.6	95.3
Year 7										
2008	71.9	67.9	71.8	62.7	78.6	95.4	93.2	93.6	93.2	96.4
2009	73.2	69.9	74.3	64.9	75.8	95.0	93.7	93.8	93.5	95.8
Year 9										
2008	70.7	59.7	67.8	60.7	72.5	94.2	88.8	91.0	91.5	94.8
2009	67.0	59.0	66.1	60.8	75.0	93.5	89.2	90.9	91.8	96.0

(a) Equating the 2008 NAPLAN results with the 2009 results is a complex procedure and involves some degree of statistical error. For this reason, there may be minor fluctuations in the average NAPLAN test results from year to year when, in reality, the level of student achievement has remained essentially the same. It is only when there is a meaningful change in the results from one year to the next, or when there is a consistent trend over several years, that statements about improvement or decline in levels of achievement can be made confidently. Some caution is required when interpreting changes in the performance across 2008 and 2009 (MCEECDYA 2009).

Source: Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) 2008; MCEECDYA 2009.

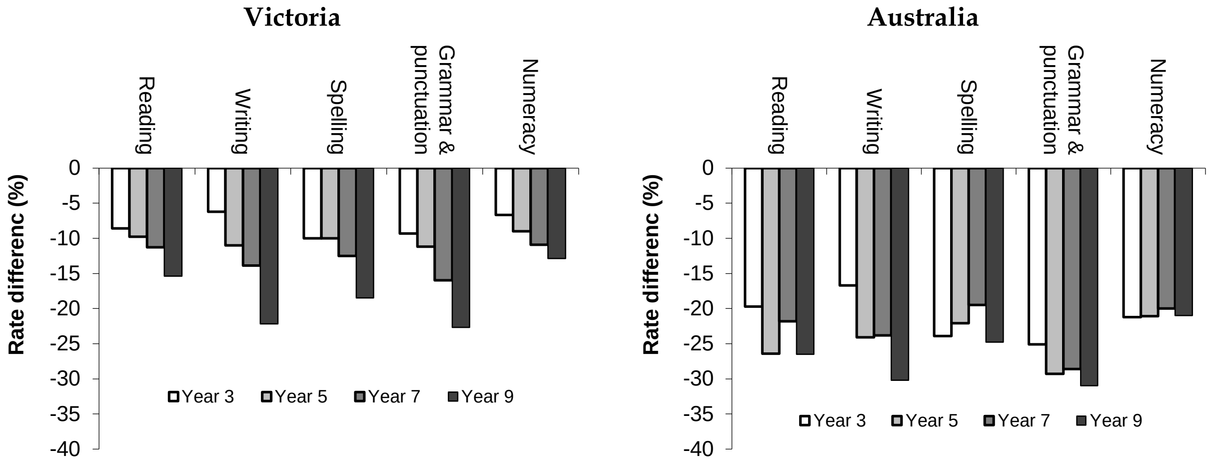
Ratio and difference of proportions

- Compared with the proportion of non-Indigenous students achieving educational benchmarks, the relative reading, writing, spelling, grammar and punctuation, and numeracy achievements of Indigenous students in Victoria were generally higher than those of Indigenous students across Australia.
- When compared with non-Indigenous students, achievement levels of Indigenous students were lowest for writing and grammar/punctuation in Year 9 for Victoria (ratio of 0.68 for both, and rate difference of -28% and -29% respectively). A similar pattern was observed for Indigenous students in Australia (ratio of 0.66 for both writing and grammar/punctuation in Year 9, and difference of -30% and -31% for writing and grammar/punctuation in Year 9 respectively).



Source: AIHW analyses of MCEECDYA 2009.

Figure 2.04.1: Ratio of proportion of Indigenous students achieving literacy and numeracy benchmarks to corresponding proportion of non-Indigenous students, Victoria and Australia, 2009


Victoria

Australia

Source: AIHW analyses of MCEECDYA 2009.

Figure 2.04.2: Difference between proportion of Indigenous students achieving literacy and numeracy benchmarks and corresponding proportion of non-Indigenous students, Victoria and Australia, 2009

2.05 Years 10 and 12 retention and attainment

Years 10 and 12 retention rates and Year 12 attainment rates for Aboriginal and Torres Strait Islander people

Apparent retention rates are the percentage of full-time students of a given cohort group who continue from the beginning of secondary schooling to a specified year level. The term apparent is used as the retention rate does not account for students repeating a year of school or migrating in or out of the Australian school student population or between states/territories. All full-time students enrolled at a school, including 'VET in Schools' students are included in retention calculations.

Year 10 and 12 apparent retention rates

- Year 10 students as a proportion of the corresponding cohort from the first year of secondary schooling (Year 7/8);
- Year 12 students as a proportion of the corresponding cohort from the first year of secondary schooling (Year 7/8) or as a proportion of the corresponding cohort from Year 10.

Year 12 attainment rate

- The proportion of Year 11 students who went on to achieve a Year 12 certificate.

Apparent retention rates and attainment rates

- In 2009 in Victoria, the apparent retention rate of full-time Indigenous students from Year 7/8 to Year 10 was 81% for males and 80% for females compared with 99% for non-Indigenous males and 102% for non-Indigenous females. Year 7/8 to Year 10 retention rates of Indigenous full-time students were lower in Victoria than nationally.
- In the same year in Victoria, the apparent retention rate of full-time Indigenous students from Year 7/8 to Year 11 was 59% for males and 67% for females, compared with 90% for non-Indigenous males and 97% for non-Indigenous females. Year 7/8 to Year 11 retention rates of Indigenous full-time students were slightly higher in Victoria than the national average.
- The apparent retention rate of full-time Indigenous students in Victoria from Year 7/8 to Year 12 was much lower than for non-Indigenous students—36% for Indigenous males and 51% for Indigenous females compared with 74% for non-Indigenous males and 87% for non-Indigenous females. Year 7/8 to Year 12 apparent retention rates were similar for Victoria and nationally.
- Similarly, the apparent retention rate of full-time Indigenous students in Victoria from Year 10 to Year 12 was much lower for Indigenous (43% for males and 55% for females compared with 76% and 87% for non-Indigenous males and females).
- In 2009, about 61% of Indigenous male Year 11 students and 66% of Indigenous female year 11 students in Victoria went on to achieve a Year 12 certificate. This compared with 83% and 89% of non-Indigenous male and female Year 11 students. The proportion that went on to achieve a Year 12 certificate was slightly lower in Victoria than nationally.

Table 2.05.1: Apparent retention and attainment rates, by Indigenous status and sex, Victoria and Australia, 2009(a)(b)(c)

	Victoria		Australia	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	%	%	%	%
Year 7/8 to Year 10(d)				
Males	81.2	98.6	89.6	99.2
Females	79.6	101.9	92.3	101.1
Year 7/8 to Year 11(d)				
Males	59.2	90.0	67.5	88.9
Females	67.2	97.4	71.6	94.8
Year 7/8 to Year 12(d)				
Males	35.8	74.3	41.5	72.1
Females	50.9	87.0	49.5	82.7
Year 10 to Year 12(e)				
Males	42.5	76.3	46.1	73.1
Females	55.1	86.7	54.3	82.5
Year 11 to Year 12(f)				
Males	61.4	83.4	64.2	83.7
Females	65.8	89.1	69.6	88.5

(a) Although most students are recorded, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the number of Aboriginal and Torres Strait Islander students. In addition, the standard Indigenous status question has not yet been implemented in some jurisdictions.

(b) The following factors have not been taken into account in these statistics: students repeating a year of education, migration and other net changes to the school population, enrolment policies (including year starting high school which contributes to different age/grade structures between states and territories), inter-sector transfer and interstate movements of students.

(c) The inclusion or exclusion of part-time students can also have a significant effect on apparent retention rates.

(d) Retention rate = Year 10, 11 or 12 students as a proportion of the corresponding cohort from the first year of secondary schooling (Year 7/8).

(e) Retention rate = Year 12 students as a proportion of the corresponding cohort from Year 10.

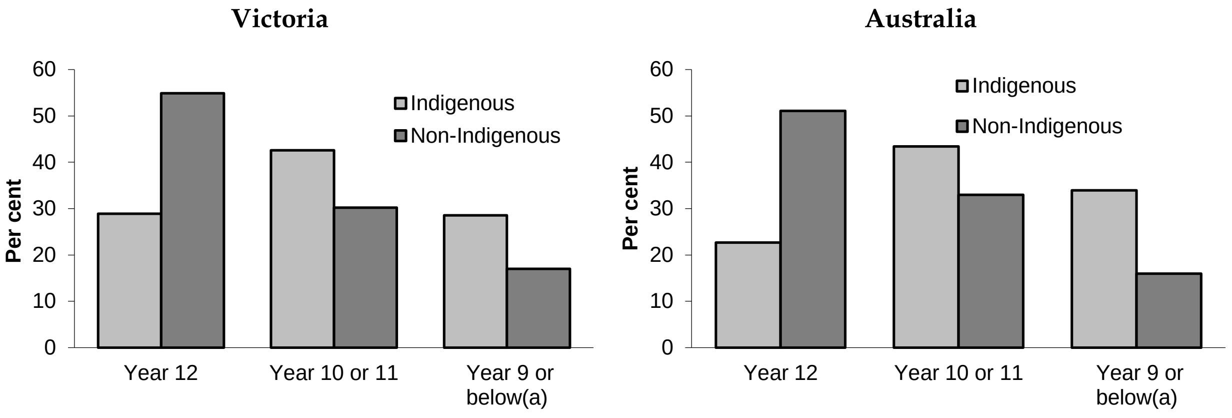
(f) Retention rate = Year 12 students as a proportion of the corresponding cohort from Year 11.

Source: ABS 2010; ABS and AIHW analysis of National Schools Statistics Collection (NSSC).

2.06 Educational participation and attainment of Aboriginal and Torres Strait Islander adults

Educational participation (people undertaking formal education or training) and educational attainment (people who have completed a particular level of school education or non-school qualification)

- In 2008 in Victoria, a higher proportion of Indigenous people aged 15 and over was currently studying than non-Indigenous people (25% compared with 16%). Nationally, 19% of Indigenous people and 16% of non-Indigenous people aged 15 and over were studying (Table 2.06.1).
- A higher proportion of Indigenous people from Victoria and Australia attended secondary school or a technical institution in 2008 than non-Indigenous people; however the proportion of Indigenous Australians who attended a university or other higher education was lower than non-Indigenous Australians (Table 2.06.1).
- In Victoria in 2008, non-Indigenous people aged 18 and over were more likely than Indigenous people to have completed Year 12 (55% compared with 29%). In contrast, a higher proportion of Indigenous adults reported that the highest year of school completed was Year 9 or below than non-Indigenous adults (29% compared with 17%). The proportion of Indigenous Australians who completed Year 12 was higher in Victoria than for Australia (29% compared with 23%) (Figure 2.06.1).
- In 2008 in Victoria, 57% of Indigenous people aged 25-64 had a non-school qualification compared with 62% of non-Indigenous people. The most commonly held qualification for Indigenous people was a certificate course and for non-Indigenous people a bachelor degree (Table 2.06.2).



(a) Includes people who never attended school.

Source: ABS and AIHW analysis of NATSISS 2008.

Figure 2.06.1: Highest level of school completed, by Indigenous status, people aged 18 and over, Victoria and Australia, 2008

Table 2.06.1: Educational institution currently attended, by Indigenous status, people aged 15 and over, Victoria and Australia, 2008

	Educational participation		Secondary school	TAFE/technical college/business college/industry skills centre	University/other higher education	Total currently studying[a]	Not studying	Total[a]	Total number
Victoria	Indigenous	%	9.3*	8.1*	5.2	25.0*	75.0*	100	21,938
	Non-Indigenous	%	4.4*	4.6*	6.1	16.1*	83.9*	100	4,157,596
	Rate ratio[b]		2.1	1.8	0.9	1.6	0.9	. .	. .
Australia	Indigenous	%	8.4*	6.0*	2.7*	19.0*	81.0*	100.0	327,101
	Non-Indigenous	%	4.2*	4.6*	5.6*	15.6*	84.4*	100.0	16,374,202
	Rate ratio[b]		2.0	1.3	0.5	1.2	1.0	. .	. .

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons.

(a) Includes other educational institution, not further defined.

(b) Indigenous rate divided by non-Indigenous rate.

Source: ABS and AIHW analysis of NATSISS 2008.

Table 2.06.2: Whether has a non-school qualification, by Indigenous status, people aged 25–64, Victoria and Australia, 2008

Highest non-school qualification[a]			Bachelor degree or above[b]	Advanced diploma/ diploma	Certificate	Total with non-school qualification[c]	Does not have a non-school qualification	Total	Total number of people
Victoria	Indigenous	%	10.8*	9.3	32.3*	57.4*	42.6	100.0	13,668
	Non-Indigenous	%	26.4*	11.4	22.3*	61.6*	38.4	100.0	2,769,652
	Rate ratio		0.4	0.8	1.4	0.9	1.1	1.0	. .
Australia	Indigenous	%	6.5*	5.6*	24.7	40.2*	59.9*	100.0	207,342
	Non-Indigenous	%	24.9*	9.8*	24.9	61.4*	38.6*	100.0	10,997,331
	Rate ratio		0.3	0.6	1.0	0.7	1.6	1.0	. .

* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons.

(a) As classified to the ABS Classification of Qualifications.

(b) Includes bachelor degree, doctorate, masters, graduate diploma, and graduate certificate.

(c) Includes people with a non-school qualification undetermined.

Source: NATSISS 2008 and NHS 2007–08.

2.07 Employment status including Community Development Employment Projects (CDEP) participation

The employment status of Aboriginal and Torres Strait Islander peoples aged 15–64

The CDEP program helps Indigenous job seekers gain the skills, training and capabilities to find sustainable employment and improves the economic and social well-being of communities.

- In 2008 in Victoria, the labour force participation rate for Indigenous people aged 15–64 was estimated to be 66%, with 17% of those in the labour force unemployed and looking for full- or part-time work. In comparison, the labour force participation rate for non-Indigenous people was 79%, with 3% of non-Indigenous participants unemployed (Figure 2.07.1).
- In 2008 across Australia, the labour force participation rate for Indigenous people aged 15–64 was estimated to be 65%, with 17% of those in the labour force unemployed. The labour force participation rate nationally was 79% for non-Indigenous people, with 4% of participants unemployed.
- In Victoria in 2008, about 55% of Indigenous people aged 15–64 were employed (0.5% in CDEP and 54.6% in non-CDEP) and 11% were unemployed. Of the non-Indigenous population, 54% were employed and 11% were unemployed (Table 2.07.1).
- In Australia in 2008, around 54% of Indigenous people aged 15–64 were employed (6% in CDEP and 48% in non-CDEP) and 11% were unemployed. Of the non-Indigenous population, 76% were employed and 3% were unemployed.

Source: NATSISS 2008 and NHS 2007–08.

Figure 2.07.1: Unemployment and Labour Force Participation Rates, people aged 15-64, by Indigenous status, Victoria and Australia, 2008

Table 2.07.1: Labour force status of people aged 15–64, by Indigenous status, Victoria and Australia, 2008

	Victoria		Australia	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	%	%	%	%
In the labour force				
Employed CDEP	*0.5	. .	5.6	. .
Employed non-CDEP	54.6	. .	48.2	. .
Total employed	*55.1*	*77.0*	*53.8*	*76.0*
Unemployed	11.1	2.4	10.7	2.9
Not in the labour force	33.8	20.6	35.5	21.1
Total	**100.0**	**100.0**	**100.0**	**100.0**

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

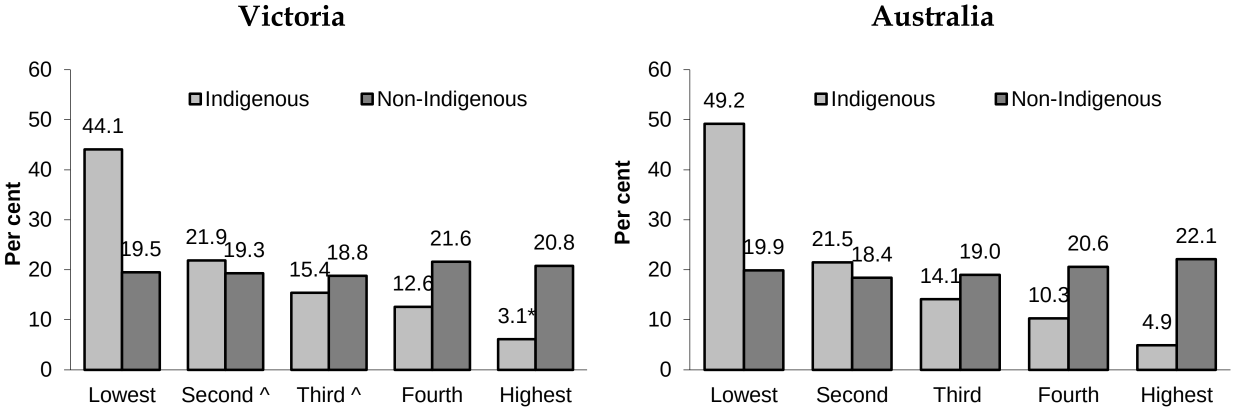
Source: NATSISS 2008 and NHS 2007–08.

2.08 Income

Equivalised gross household and individual income of Aboriginal and Torres Strait Islander people

Equivalised income is the amount of income available per person after adjusting for household size.

- In 2008 in Victoria, 44% of Indigenous people aged 18 and over were in the lowest quintile of equivalised gross weekly household income and 6% were in the highest. For non-Indigenous people, the proportion was similar across all five quintiles of equivalised gross weekly household income, with 20% in the lowest and 21% in the highest (Figure 2.08.1).
- This same pattern was evident nationally, with 50% of Indigenous people aged 18 and over in the lowest quintile and 5% in the highest. For non-Indigenous people nationally, 20% were in the lowest quintile and 22% in the highest.
- In 2008 in Victoria, the mean equivalised gross weekly household income for Indigenous people aged 18 and over was $635 per week compared with $957 per week for non-Indigenous people. Nationally, it was $580 for Indigenous people compared with $983 for non-Indigenous people (Figure 2.08.2).



^ Difference between rates for Indigenous and non-Indigenous Australians are NOT statistically significant for these categories.

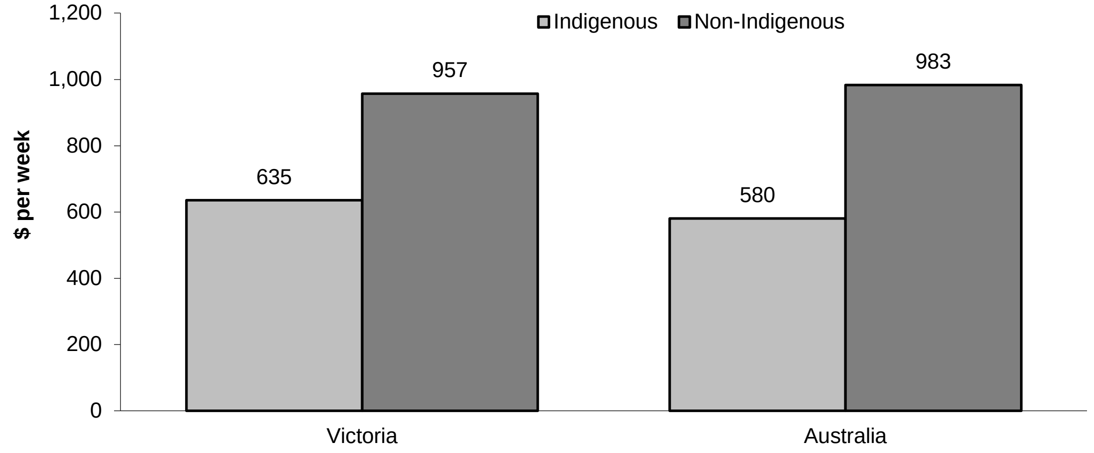
(a) Equivalised gross household income quintile boundaries for Indigenous Australians are: first (0 to $435); second ($436 to $686); third ($687 to $952); fourth ($953 to $1,380); and fifth ($1,381 or more).

(b) Equivalised gross household income quintile boundaries for non-Indigenous Australians are: first (0 to $423); second ($424 to $666); third ($667 to $925); fourth ($926 to $1,341); and fifth ($1,342 or more).

(c) Proportions excluding people whose gross household income is not stated.

Source: NATSISS 2008 and SIH 2007–08.

Figure 2.08.1: Proportion of people aged 18 and over in each equivalised gross weekly household income quintile[(a)(b)(c)], by Indigenous status, Victoria and Australia, 2008



Source: NATSISS 2008 and SIH 2007–08.

Figure 2.08.2: Mean equivalised gross household income ($ per week), by Indigenous status, people aged 18 and over, Victoria and Australia, 2008

2.09 Housing tenure type

The tenure status of a person's occupancy of a residence: owning without a mortgage; owning with a mortgage; renting public housing; renting community housing; and renting privately

- In 2008 in Victoria, about 44% of Indigenous people aged 18 and over owned or were buying their own home, 28% were private and other renters, and 28% were renters of some form of social housing (state or territory housing authority/housing cooperative or church group/Indigenous housing organisation or community housing). This compared with 68% of non-Indigenous people aged 18 and over who owned or were buying their home, 24% private and other renters, and 2% renters of some form of social housing (Table 2.09.1).
- A higher proportion of Indigenous households in Victoria were home owners or buyers than Indigenous households nationally (43% compared with 33%) and a lower proportion of Indigenous households in Victoria were renters of Indigenous housing organisation or community housing than Indigenous households nationally (6% compared with 10%).

Table 2.09.1: Proportion of households and people[(a)], by tenure type and Indigenous status, Victoria and Australia, 2008

	Victoria		Australia	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	People[(a)]			
Home owners				
Owned without a mortgage	10.5	29.0	8.7	27.3
Being bought	33.5	38.9	20.5	37.9
Total home owners	*44.0*	*67.9*	*29.2*	*65.2*
Renters				
Private and other renter[(b)]	^27.6	^23.6	29.3	25.3
State/territory housing authority	19.4	2.2	23.2	2.9
Housing co-operative or church group	**^0.8	*^0.2	^0.6	^0.3
Indigenous Housing Organisation/ Community housing	7.2	. .	15.9	. .
Total renters[(c)]	*55.2*	*26.0*	*69.2*	*28.5*
Other tenure types[(d)]	*0.8	6.1	1.6	6.3
Total[(e)]	**100.0**	**100.0**	**100.0**	**100.0**
Total number[(e)]	**19,079**	**3,966,725**	**289,327**	**15,553,828**
	Households			
Home owners				
Owned without a mortgage	11.0	31.6	9.9	29.3
Being bought	32.4	37.4	22.6	36.5
Total home owners	*43.3*	*69.0*	*32.5*	*65.8*
Renters				
Private and other renter[(b)]	29.5	23.3	33.4	25.0
State/territory housing authority	19.3	2.8	21.7	3.9
Housing co-operative or church group	*^0.6	*^0.3	^0.6	^0.4
Indigenous Housing Organisation/ Community housing	6.2	. .	9.6	. .
Total renters[(c)]	*55.8*	*26.4*	*65.5*	*29.4*
Other tenure types[(d)]	*0.9	4.6	2.0	4.8
Total[(e)]	**100.0**	**100.0**	**100.0**	**100.0**
Total number[(e)]	**14,155**	**1,991,527**	**175,981**	**7,973,429**

* 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 generally unreliable for use.

^ Difference between rates for Indigenous and non-Indigenous Australians are NOT statistically significant for these categories.

(a) People aged 18 and over.
(b) Includes real estate agents, unrelated people, relatives, owner/managers of caravan parks, employers and other landlords.
(c) Includes landlord type not stated.
(d) Includes people living under life tenure schemes, those living in rent-free schemes and other tenure types nfd.
(e) Excludes tenure type not stated.

Source: NATSISS 2008 and NHS 2007–08.

2.10 Index of disadvantage

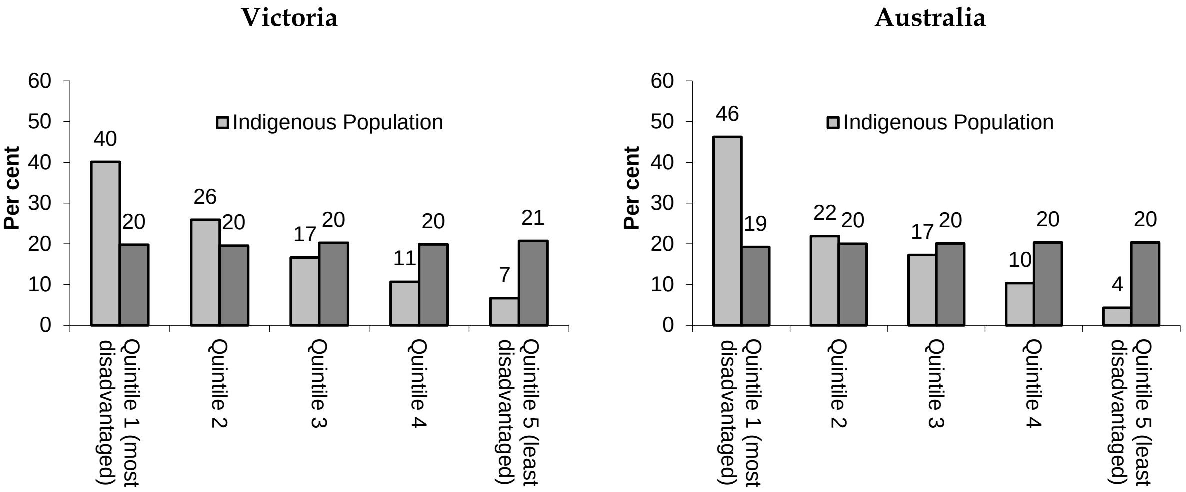
An analysis of the relative disadvantage within the Aboriginal and Torres Strait Islander population compared with the non-Indigenous population

The ABS has developed an index to allow measurement of relative socioeconomic status at a small area level. Known as Socio-Economic Indexes for Areas (SEIFA), it summarises a range of socioeconomic variables associated with disadvantage. The index of advantage/disadvantage is a continuum of advantage to disadvantage and is available for both urban and rural areas. Low values indicate areas of disadvantage, and high values indicate areas of advantage. It takes into account variables such as the proportion of families with high incomes, people with a tertiary education, and employees in skilled occupations.

Note that this SEIFA index is assigned to areas, not to individuals. This means that not all members of the population in a relatively disadvantaged area are equally disadvantaged.

SEIFA analysis can be done based at the geographic (which mean the collection districts or CDs are split into the five quintiles based on the SEIFA of the CDs) or population level (which means the members of each population are split into quintiles and the SEIFA quintiles are then based on the populations which fit into each quintile). SEIFA analyses based on the geographic level are presented in this report.

- In 2006 in Victoria, a greater proportion of the Indigenous population was in the most disadvantaged quintile of socioeconomic status than the non-Indigenous population (40% compared with 20%) (Figure 2.10.1). About 7% of the Indigenous population was in the least disadvantaged quintile compared with 21% of the non-Indigenous population.
- Compared with the Indigenous population nationally, Victoria had a lower proportion of Indigenous people in the most disadvantaged quintile of socioeconomic status (40% compared with 46%) and a higher proportion of Indigenous people in the least disadvantaged quintile (7% compared with 4%).



Note: The population of Victoria was unable to be split into exact quintiles based on the SEIFA index of advantage/disadvantage, instead the best approximate quintiles were calculated.

Source: AIHW analyses of2006 Census data.

Figure 2.10.1: Population distribution by SEIFA advantage/disadvantage quintiles, by Indigenous status, Victoria and Australia, 2006

2.11 Dependency ratio

The **dependency ratio** is expressed as a percentage derived as follows:

$$\frac{\text{Percentage of population aged under 15 + percentage of population aged 65 and over}}{\text{Percentage of population aged 15–64}}$$

It is used as a proxy for the ratio between those who are not economically active (and therefore dependent) and those who are economically active.

The youth and aged dependency ratios can be calculated separately if required:

Youth dependency ratio $$\frac{\text{Percentage of population aged under 15}}{\text{Percentage of population aged 15–64}}$$

Aged dependency ratio $$\frac{\text{Percentage of population aged 65 and over}}{\text{Percentage of population aged 15–64}}$$

- The Indigenous population has a younger age structure than the non-Indigenous population. In 2010 in Victoria, 34% of Indigenous people were younger than 15 compared with 18% of non-Indigenous people. People aged 65 and over comprised 4% of the Indigenous population and 14% of the non-Indigenous population. These proportions were similar nationally.
- In 2010 in Victoria, the dependency ratio for Indigenous people was 0.62 compared with 0.48 for non-Indigenous people. The youth dependency ratio for Indigenous people in Victoria was higher than for non-Indigenous people (0.56 compared with 0.27), whereas the aged dependency ratio was lower (0.06 for Indigenous people compared with 0.21 for non-Indigenous people) (Table 2.11.1).
- This same pattern was evident nationally where the dependency ratio was 0.63 for Indigenous Australians compared with 0.48 for non-Indigenous Australians, the youth dependency ratio was 0.57 for Indigenous Australians compared with 0.27 for non-Indigenous Australians, and the aged dependency ratio was 0.05 for Indigenous Australians compared with 0.21 for non-Indigenous Australians.

Table 2.11.1: Total, youth and aged dependency ratios, by Indigenous status, Victoria and Australia, 2010

	Victoria		Australia[(a)]	
	Indigenous	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
Dependency ratio	0.62	0.48	0.63	0.48
Youth dependency ratio	0.56	0.27	0.57	0.27
Aged dependency ratio	0.06	0.21	0.05	0.21

(a) Includes other territories.

Source: AIHW analyses of ABS population estimates based on 2006 Census.

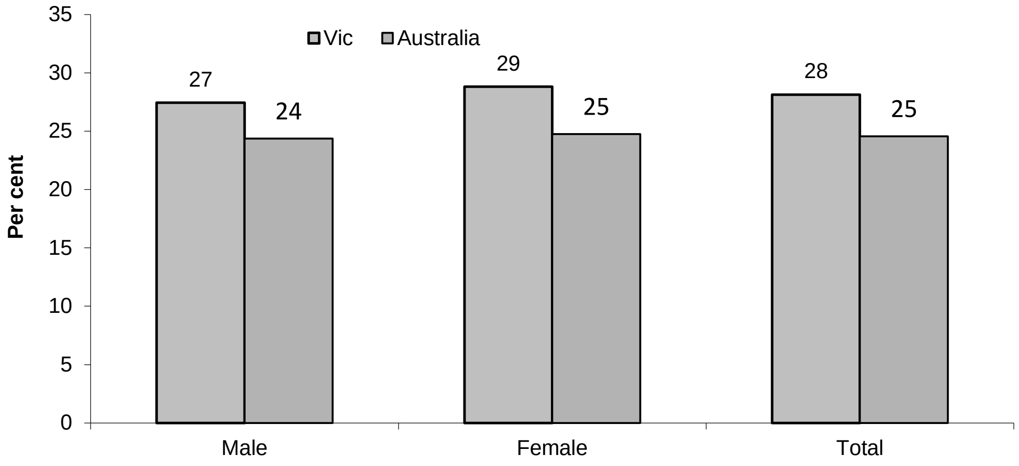
2.13 Community safety

Three parameters of community safety are considered for this measure:

- *experience of personal injury or death as a result of violence*
- *experience of threatened violence or a social setting in which violence is common*
- *experience of a social setting where there is a lack of security and a perception of danger, for example, where crimes against property or disorderly behaviour are common.*

Victim of physical or threatened violence

- In 2008 in Victoria, a slightly lower proportion of Indigenous males than Indigenous females aged 15 and over reported being a victim of physical or threatened violence in the last 12 months (27% and 29%, respectively) (Figure 2.13.1).
- The proportion of Indigenous people aged 15 and over that reported being a victim of physical or threatened violence in the last 12 months was slightly higher in Victoria than across Australia (28% and 25%, respectively).
- In Victoria, Indigenous people aged 18 and over were 2.5 times as likely to report being victims of physical or threatened violence in the last 12 months as non-Indigenous people (Table 2.13.1).



Note: Proportions exclude people who refused to anwer either the question on victimisation of physical violence or the question on victimisation of threatened violence.

Source: AIHW analyses of NATSISS 2008.

Figure 2.13.1: Percentage of Indigenous people aged 15 and over reporting they were a victim of physical or threatened violence in last 12 months, by sex, Victoria and Australia, 2008

Stressors

- In 2008 in Victoria, about 83% of Indigenous people aged 18 and over or their family members and close friends, experienced at least one stressor in the last 12 months compared with 48% of non-Indigenous people. The most common stressors for Indigenous people were death of a family member or close friend (38%) and alcohol or drug-related problems (28%).

- In Victoria and across Australia, a similar proportion of Indigenous people aged 18 and over felt overcrowding at home was a stressor, as did their family members and close friends (both around 13%).

Table 2.13.1: Issues of community safety, people aged 18 and over, by Indigenous status, Victoria and Australia, 2008

	Victoria		Australia	
	Indigenous	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
	%	%	%	%
Victim of physical or threatened violence in last 12 months[(a)]	24.3*	9.7*	20.5*	10.8*
Stressors experienced by individual, family members and/or close friends in last 12 months[(b)]				
Mental illness	26.3*	8.4*	17.1*	8.8*
Death of family member or close friend	38.1*	18.6*	40.4*	19.4*
Alcohol or drug-related problems	27.5*	5.1*	24.2*	5.7*
Abuse or violent crime	10.9*	2.1*	7.6*	2.4*
Witness to violence	11.5*	2.0*	9.0*	2.2*
Trouble with the police	18.7*	2.5*	14.7*	2.6*
One or more of the above stressors	*62.4**	*28.7**	*59.1**	*30.2**
You, a family member or friend spent time in gaol	13.4	. .	12.8	. .
Overcrowding at home	12.7	. .	12.7	. .
Treated badly / discrimination	13.7	. .	10.2	. .
Total experienced stressors[(c)(d)]	*83.4**	*48.4**	*79.0**	*49.1**
No stressors reported	16.6*	51.6*	21.0*	50.9*
Total	**100.0**	**100.0**	**100.0**	**100.0**

* Represents statistically significant differences in the Indigenous/non-Indigenous comparisons.

. . Data not collected for non-Indigenous Australians.

(a) For this variable only, non-Indigenous comparison has been sourced from General Social Survey 06 (GSS06).

(b) In the 2008 NATSISS, Indigenous Australians were asked about 24 separate stressors, and in the 2007-08 NHS, non-Indigenous Australians were asked about 14 separate stressors.

(c) Sum of components may exceed total, as people may have reported more than one type of stressor.

(d) Includes all other types of stressors not listed here.

Note: Excludes stressors not stated.

Source: NATSISS 2008 and NHS 2007-08.

Neighbourhood community problems

- Of Indigenous people aged 15 and over in Victoria, 75% reported neighbourhood/community problems compared with 74% nationally.
- Theft and dangerous/noisy driving were most commonly reported as a neighbourhood/community problem in both Victoria (46% for theft and 52% for dangerous/noisy driving) and nationally (43% for theft and 46% for dangerous/noisy driving).

Table 2.13.2: Neighbourhood/community problems, Indigenous Australians aged 15 and over, Victoria and Australia, 2008

	Victoria	**Australia**
	%	**%**
Neighbourhood/community problem present		
Theft[(a)]	46.2	42.5
Problems involving youth	32.9	34.4
Prowlers/loiterers	17.6	19.1
Vandalism/graffiti/damage to property	35.3	35.3
Dangerous or noisy driving	51.5	46.1
Alcohol	37.7	41.3
Illegal drugs	33.8	36.4
Family violence	19.7	24.8
Assault	18.3	22.7
Sexual assault	9.4	11.7
Problems with your neighbours	14.9	15.4
Levels of neighbourhood conflict	9.8	14.1
Level of personal safety day or night	14.9	13.8
Total with neighbourhood/community problems	*75.1*	*74.2*
No neighbourhood/community problems reported	24.9	25.8
Total	**100.0**	**100.0**
Total number	**21,829.9**	**327,101.0**

(a) Excludes unknown responses.

Source: AIHW analysis of NATSISS 2008.

2.14 Contact with the criminal justice system

The prevalence of Aboriginal and Torres Strait Islander peoples in prison custody, other contact with the criminal justice system, including police custody and juvenile justice, and relationships with health and social factors

People in prison custody

- As at 30 June 2009, there were 241 Indigenous and 4,109 non-Indigenous people in prison custody in Victoria. Nationally there were 7,386 Indigenous and 21,554 non-Indigenous people in custody (Table 2.14.1).
- The age-standardised rate of imprisonment for Indigenous people in Victoria was around 968 per 100,000, nearly 10 times the rate for non-Indigenous people (101 per 100,000).
- Imprisonment rates were lower in Victoria than the national rates for both Indigenous and non-Indigenous Australians.
- A higher proportion of Indigenous prisoners were males than females (92% males in both Victoria and in Australia). This trend was also present for all prisoners (Indigenous and non-Indigenous).
- Between 2000 and 2009 in Victoria, the crude imprisonment rate of Indigenous people increased significantly, by an average yearly amount of around 45 per 100,000, or 48% for the whole period. The rate for Indigenous people nationally also increased significantly (40%) with an average yearly increase of around 73 per 100,000 (Figure 2.14.1).

Table 2.14.1: People in prison custody, by Indigenous status and sex, Victoria and Australia, 30 June 2009

	Indigenous					
	Number					
	Males	Females	People[a]	Crude rate[b]	Age- standardised rate[c]	
Victoria	221	20	241	1,158.8	968.4	
Australia	6,783	603	7,386	2,309.8	1,890.7	

	Non-Indigenous					
	Number					
	Males	Females	People[a]	Crude rate[b]	Age-standardised rate[c]	Age-standardised rate ratio[d]
Victoria	3,847	262	4,109	98.7	100.8	9.6
Australia	20,063	1,493	21,554	130.9	135.6	13.9

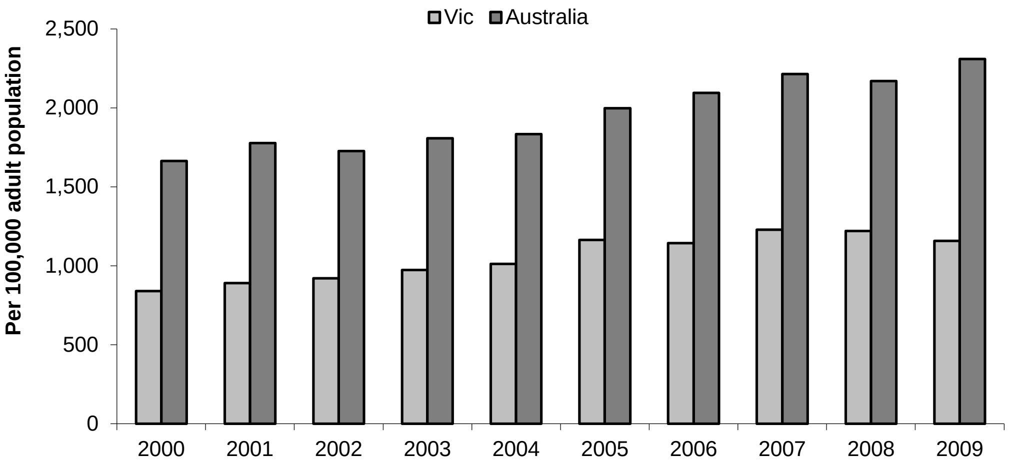
(a) Includes sex not stated.

(b) Number per 100,000 adult population.

(c) Number per 100,000 adult population directly age-standardised to 2001 Australian standard population.

(d) The ratio of Indigenous to non-Indigenous imprisonment is calculated by dividing the Indigenous age-standardised rate by the non-Indigenous age-standardised rate.

Source: ABS 2009.

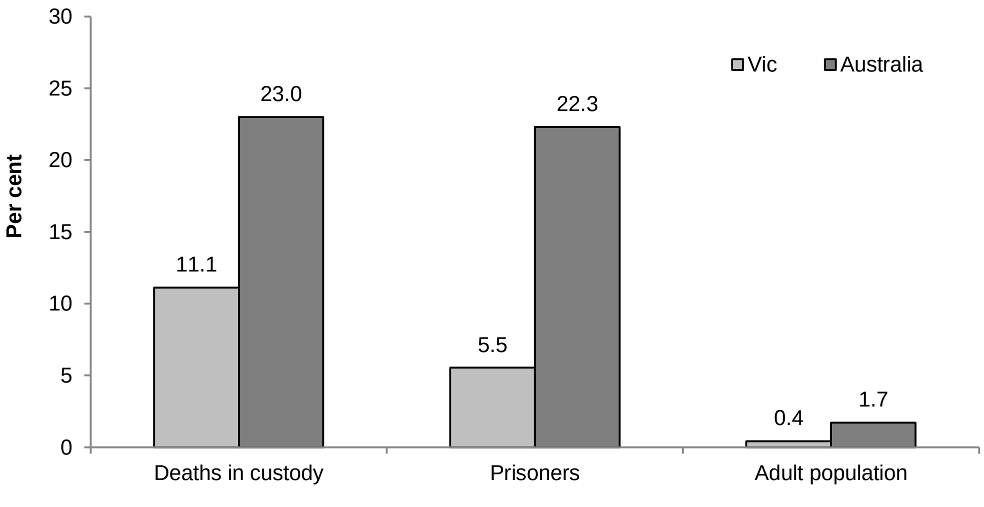


Source: Australian Bureau of Statistics. Prisoners in Australia (cat. No. 4517.0).

Figure 2.14.1: Crude imprisonment rates of Indigenous Australians, Victoria and Australia, 2000-2009

Deaths in prison custody

- Between 2004 and 2006 in Victoria, Indigenous people accounted for about 11% of deaths in custody (police and prison), 6% of the prisoner population and 0.4% of the adult population. This compares with 23% of deaths in custody, 22% of prisoners and 1.7% of the adult population nationally.



Source: AIHW analyses of Australian Institute of Criminology (AIC) National Deaths in Custody Program (NDICP).

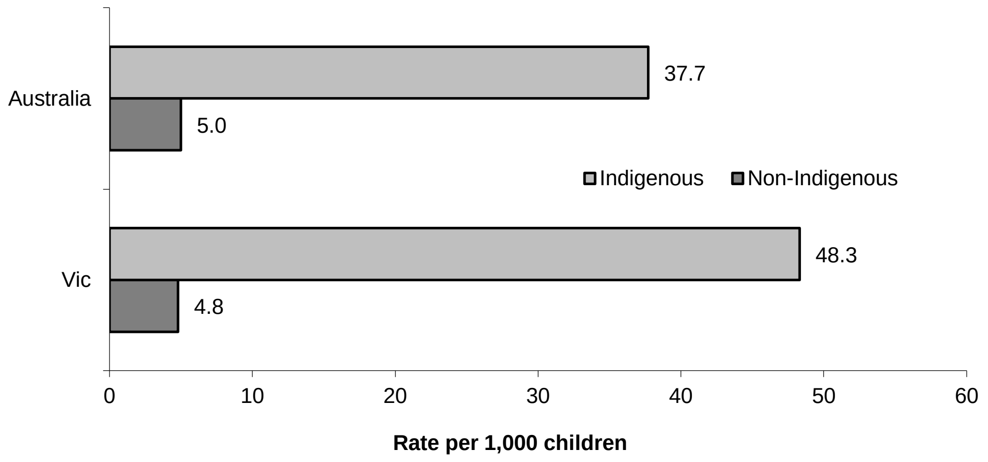
Figure 2.14.2: Aboriginal and Torres Strait Islander peoples as a proportion of deaths in custody (police and prison), prisoner population and total adult population (18 years and over), Victoria and Australia, 2004-06

2.15 Child protection

Aboriginal and Torres Strait Islander children in substantiations, on care and protection orders and in out-of-home care

Substantiations: refer to child protection notifications made to relevant authorities during the year ended 30 June 2009, which were investigated and the investigation was finalised by 31 August 2009, and it was concluded that there was reasonable cause to believe that the child had been, was being or was likely to be abused or neglected or otherwise harmed.

- In 2008–09 in Victoria, Indigenous children aged 0–16 were more likely to be the subject of substantiations than other children aged 0–16 (48 per 1,000 compared with 5 per 1,000) (Figure 2.15.1).
- The substantiation rate for Indigenous children was higher in Victoria than nationally whereas the rate for non-Indigenous children in Victoria was similar across Australia.
- The proportion of Aboriginal and Torres Strait Islander children in Victoria who were subjects of substantiations decreased from 68 per 1,000 in 2005-06 to 48 per 1,000 in 2008-09. Due to new service and data reporting arrangements, the Victorian child protection data for 2006-07 may not be fully comparable to previous years (Table 2.15.1).
- The proportion of other children in Victoria who were subjects of substantiations decreased from 6.0 to 4.8 per 1,000 in the same period (Table 2.15.1).
- As at 30 June 2009, 60% of Aboriginal and Torres Strait Islander children in out-of-home care in Victoria were placed with relative/kin, other Indigenous caregivers or Indigenous residential care (Table 2.15.2).



Source: AIHW 2010.

Figure 2.15.1: Children aged 0-16 who were the subjects of substantiations: rate per 1,000 children, by Indigenous status, Victoria and Australia, 2008–09

Table 2.15.1: Number and rates of Aboriginal and Torres Strait Islander and other children aged 0–16 who were the subject of substantiated notifications, Victoria and Australia, 1998–99 to 2008–09

	Victoria[(a)]		Australia[(b)]	
Year	**Indigenous**	**Other**	**Indigenous**	**Other**
		Number of children		
1998–99[(c)]	n.a.	n.a.	n.a.	n.a.
1999–00	568	6,218	n.a.	n.a.
2000–01	602	6,547	n.a.	n.a.
2001–02	579	6,569	n.a.	n.a.
2002–03	667	6,177	n.a.	n.a.
2003–04	700	6,323	n.a.	n.a.
2004–05	770	6,244	n.a.	n.a.
2005–06	834	6,453	6,033	28,322
2006–07	697	5,891	7,076	26,784
2007-08	681	5,481	7,313	24,602
2008-09	684	5,445	8,135	24,343
		Rate per 1,000 children		
1998–99	n.a.	n.a.	n.a.	n.a.
1999–00	55.5	5.8	n.a.	n.a.
2000–01	58.0	6.1	n.a.	n.a.
2001–02	48.1	6.1	n.a.	n.a.
2002–03	55.6	5.7	n.a.	n.a.
2003–04	57.7	5.9	n.a.	n.a.
2004–05	63.0	5.8	n.a.	n.a.
2005–06	67.7	6.0	29.4	6.5
2006–07	56.6	5.3	34.3	6.1
2007-08	55.0	4.9	35.3	5.5
2008-09	48.3	4.8[(d)]	37.7	5.0[(d)]

(a) Because of new service and data reporting arrangements, the Victorian child protection data for 2006–07 may not be fully comparable to previous years' data.

(b) Australia data were not available before 2005–06.

(c) Indigenous data were not available from Victoria in 1998–99.

(d) 2008-09 rates are for non-Indigenous children and exclude those children of unknown Indigenous status.

Notes

1. Because of the small number involved, children aged 17 years were not included in this table. The substantiation rate for 17 year olds is, compared with the rate for younger children, very low.
2. Rates calculated using ABS Indigenous population estimates and projections (low series) based on the 2001 Census.
3. Improvements in the quality of the data on Indigenous status are one of the major issues to be considered when analysing trends for Aboriginal and Torres Strait Islander children. Increases in the rates of Aboriginal and Torres Strait Islander children in the child protection system over time may be due to improvements in the quality of the data.

Source: AIHW 1999; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2007; 2008; 2009; 2010.

Table 2.15.2: Aboriginal and Torres Strait Islander children in out-of-home care: Indigenous status and relationship of carer, Victoria, at 30 June 2009

Relationship	Victoria[(a)]
	Per cent
Indigenous relative/kin	25.0
Other Indigenous caregiver	10.4
Other relative/kin	22.4
Indigenous residential care	1.8
Total placed with relative/kin, other Indigenous caregivers or Indigenous residential care	*59.5*
Other caregiver	32.2
Other residential care	8.3
Total not placed with relative/kin, other Indigenous caregivers or Indigenous residential care	*40.5*
Total	**100.0**

(a) A small number of children are placed with externally arranged foster carers who are also their relatives and have been recorded in the foster care category.

Notes

1. This table does not include Indigenous children who were living independently or whose living arrangements were unknown.
2. Percentages in tables may not add to 100 due to rounding.
3. Children in family group homes are reported as in residential care

Source: AIHW 2010.

2.16 Transport

The use of transport, including walking, access to motor vehicles and perceived difficulty with transport among Aboriginal and Torres Strait Islander peoples

Motor vehicle access

- In 2006 in Victoria, 75% of Indigenous households and 87% of other households had at least one vehicle, compared with 72% of Indigenous households and 87% of other households nationally.
- The ratio of people to vehicles was higher for Indigenous households, with 1.35 people per vehicle in Victoria compared with 1.18 people per vehicle for other households. Nationally the ratio was 1.59 for Indigenous households and 1.19 for other people.

Table 2.16.1: Households with at least one registered vehicle, by Indigenous status, Victoria and Australia, 2006

	Ratio of people 17 years and over in occupied private dwellings to vehicle[(a)]			Proportion of households[(b)] with at least one vehicle		
	Indigenous[(c)]	Other[(d)]	Total	Indigenous[(c)]	Other[(d)]	Total
State/territory						
Victoria	1.35	1.18	1.18	75.3	87.4	87.3
Australia[(e)]	**1.59**	**1.19**	**1.19**	**71.9**	**87.2**	**86.9**

(a) Excludes motorbikes.

(b) Defined as all households (excluding visitor households), in an occupied private dwelling, being Australian usual residents.

(c) An Indigenous household is defined where a family within the household contains one or more people of Aboriginal or Torres Strait Islander origin or where a lone person is of Aboriginal or Torres Strait Islander origin.

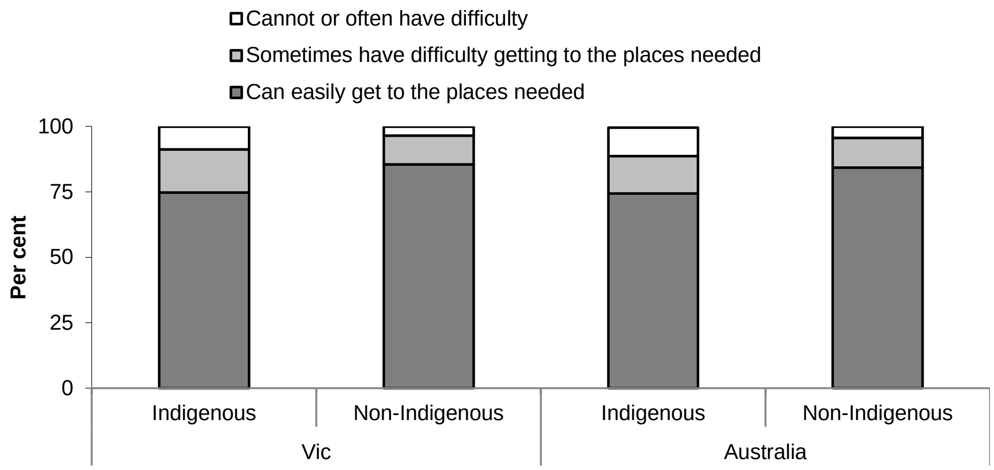
(d) Includes households where Indigenous status was 'not stated'.

(e) Includes Territories of Christmas Island and Cocos Islands.

Source: ABS and AIHW analysis of 2006 Census data.

Transport access, difficulty and use

- Indigenous people in Victoria and nationally were more likely to have difficulty getting to the places they needed to than non-Indigenous people. In 2008 in Victoria, 25% of Indigenous people reported that they sometimes or often have difficulty, or cannot get to places compared with 14% of non-Indigenous people. Nationally, 25% of Indigenous people sometimes or often have difficulty, or cannot get to places compared with 16% of non-Indigenous people (Figure 2.16.1).



Source: ABS and AIHW analyses of NATSISS 2008 and General Social Survey (GSS) 2006.

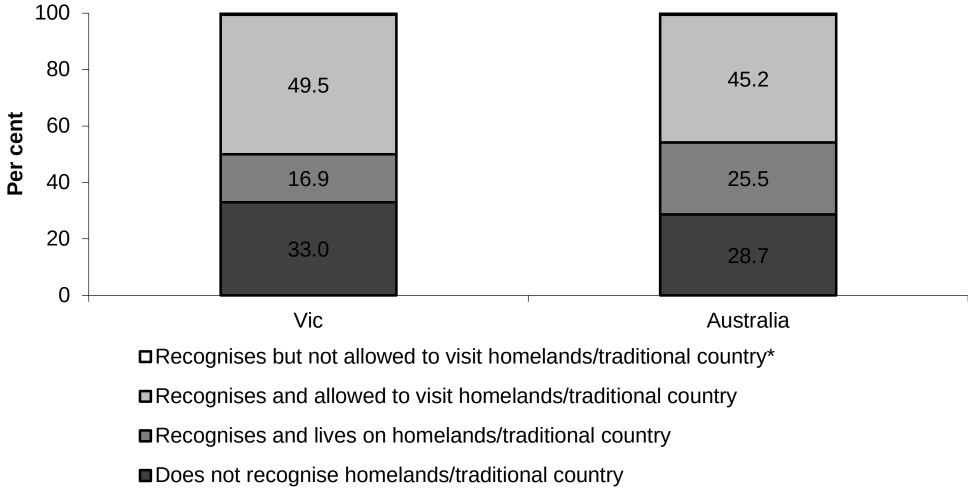
Figure 2.16.1: Difficulty with transport, by Indigenous status, Victoria and Australia, people aged 18 and over, 2008

2.17 Indigenous people with access to their traditional lands

The proportion of Aboriginal and Torres Strait Islander peoples living on or visiting traditional areas of land with which they have ancestral and/or cultural links

Access to traditional lands

- In 2008 in Victoria, 50% of Indigenous people aged 15 and over recognised and were allowed to visit their homelands/traditional country. Nationally, 45% of Indigenous people recognised their homelands and were allowed to visit (Figure 2.17.1).
- About 17% of Indigenous people in Victoria and 26% of Indigenous people nationally lived on their homeland.
- About 33% of Indigenous people in Victoria reported they did not recognise their homelands and 0.6% reported they were not allowed to visit their homelands. This compared with 29% and 0.6% for Indigenous people nationally.
- In 2008 in Victoria, Indigenous people aged 15 and over who did not recognise their homelands/traditional country were more likely to report excellent/very good/good health (80%) than those who did recognise their homelands/traditional country (73%). The data for Australia showed similar patterns though the difference was smaller (81% compared with 77%) (Figure 2.17.2).
- In Victoria, indigenous people aged 15 and over who recognised their homelands/traditional country were more likely to report presence of neighbourhood/community problems than Indigenous people who did not recognise their homelands/traditional country (75% and 72%, respectively) (Figure 2.17.3).

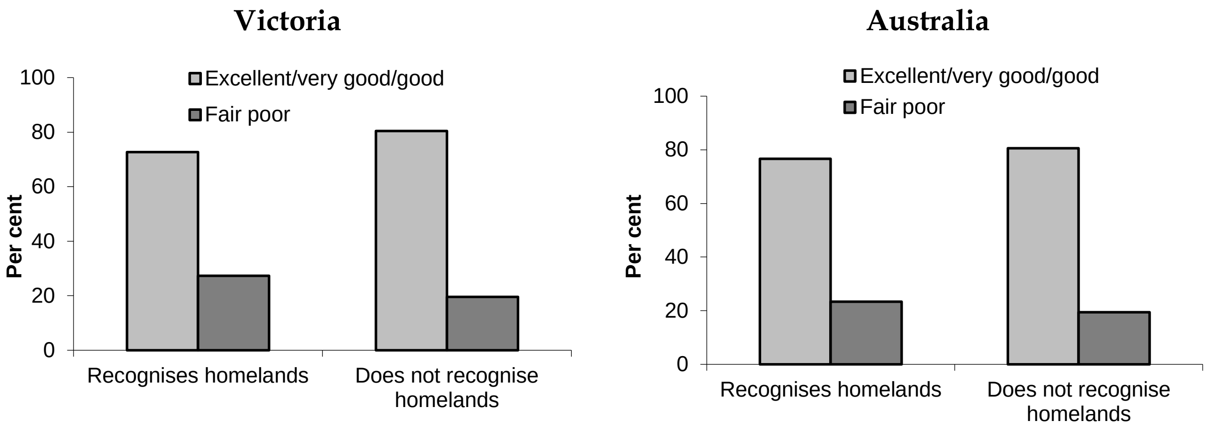


* The proportion of Indigenous Australians aged 15 and over who recognise but are not allowed to visit their homeland/traditional country was 0.6% for both Vic and Australia.

Note: Proportions and numbers exclude not stated responses.

Source: AIHW analyses of NATSISS 2008.

Figure 2.17.1: Access to homelands/traditional country, Indigenous Australians aged 15 and over, Victoria and Australia, 2008



Source: AIHW analyses of NATSISS 2008.

Figure 2.17.2: Self-assessed health status by whether Indigenous people aged 15 and over recognise/do not recognise homelands/traditional country, Victoria and Australia, 2008

2.18 Tobacco use

The proportion of Indigenous Australians who are current regular smokers

Smoking status

Smoking prevalence data presented below are from the 2008 NATSISS, with non-Indigenous comparisons from the 2007-08 National Health Survey.

- In 2008 in Victoria, about 48% of Indigenous people aged 18 and over reported they were current daily smokers, 2% were smokers who smoked weekly or less than weekly; 24% were ex-smokers and 26% had never smoked (Table 2.18.1)
- Indigenous people in Victoria were nearly 3 times as likely to be daily smokers as non-Indigenous people (Table 2.18.1).

Table 2.18.1 Smoking rates for people aged 18 and over, by Indigenous status(a), 2008 and 2007–08, Victoria

Smoker status (%)	Indigenous	Non-Indigenous	Rate ratio	Rate difference
Current smoker				
Daily(b)	48.3	17.0	2.8	31.3
Other(c)	*1.5	2.2	0.7	-0.7
Total smokers(b)	*49.8*	*19.1*	*2.6*	*30.7*
Ex-smoker(d)	24.1	29.5	0.8	-5.4
Never smoked(e)	26.1	51.4	0.5	-25.3
Total	**100.0**	**100.0**	. .	. .

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

(a) Data for Indigenous people are from the 2008 National Aboriginal and Torres Strait Islander Social Survey. Data for non-Indigenous people are from the 2007-08 National Health Survey

(b) Difference between 2008 Indigenous rate and 2007-08 non-Indigenous rate is statistically significant for all jurisdictions

(c) Comprises people who smoked at least once a week, but not daily, and those who smoked less than weekly

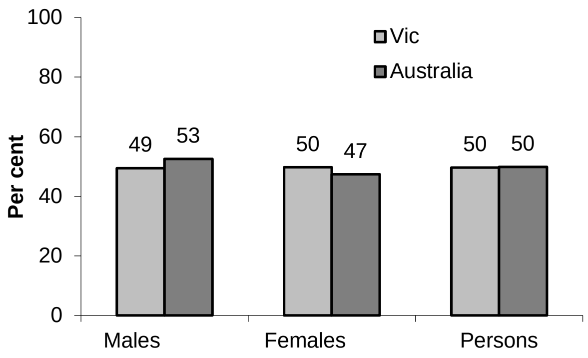
(d) Difference between 2008 Indigenous rate and 2007-08 non-Indigenous rate is statistically significant for all jurisdictions except the ACT.

(e) Difference between 2008 Indigenous rate and 2007-08 non-Indigenous rate is statistically significant for all jurisdictions except the NT.

Source: AIHW analyses of NATSISS 2008 and National Health Survey 2007-08.

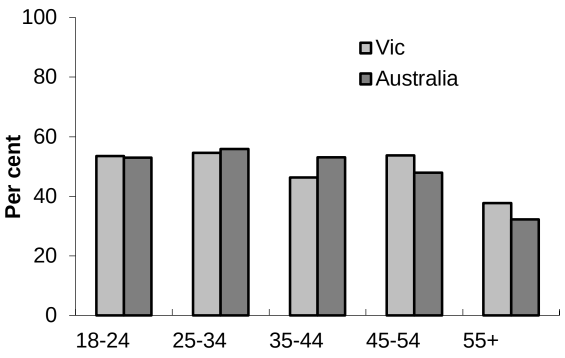
Smoking status by sex and age group

- In Victoria, Indigenous adults aged 25–34 were most likely to report being current smokers (55%), followed by those aged 18–24 and 45–54 years (54% for both). The data nationally showed slightly different features, where Indigenous adults aged 25–34 were still most likely to report being current smokers (56%), followed by those aged 18–24 and 35–44 (both 53%) (Figure 2.18.1).
- A similar proportion of Indigenous males and Indigenous females aged 18 and over in Victoria reported being current smokers (49% and 50%). Overall, a similar percentage of Indigenous adults in Victoria and nationally were current smokers (about 50%).



Source: AIHW analyses of NATSISS 2008.

Figure 2.18.1: Per cent of Indigenous people aged 18 and over reporting they are current smokers, by sex, Victoria and Australia, 2008



Source: AIHW analyses of NATSISS 2008.

Figure 2.18.2: Per cent of Indigenous people aged 18 and over reporting they are current smokers, by age, Victoria and Australia, 2008

2.20 Risky and high-risk alcohol consumption

The proportion of Aboriginal and Torres Strait Islander people who consume alcohol at risky or high-risk levels

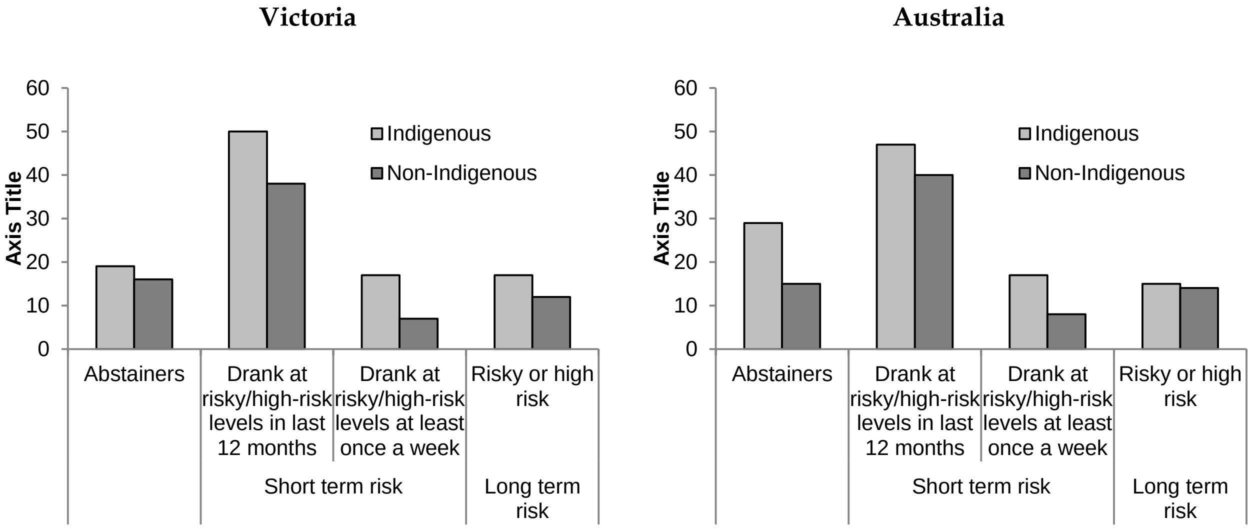
The consumption of alcohol at risky and high-risk levels is defined as alcohol consumption which exceeds the National Health and Medical Research Council (NHMRC) guidelines for low-risk drinking in the short or long term. These guidelines are outlined below:

Risky/high-risk drinking

- Short-term risky drinking is consumption in excess of six but fewer than 11 standard drinks on any one day for males, and in excess of four but fewer than seven standard drinks for females.
- Short-term high-risk drinking is consumption of 11 or more standard drinks on any one day for males, and in excess of seven standard drinks for females.
- Long-term risky drinking is average consumption in excess of four but fewer than six standard drinks per day (amounting to 29 but fewer than 42 per week) for males, and in excess of two but fewer than five standard drinks per day (amounting to 15 but fewer than 28 per week) for females.
- Long-term high-risk drinking is average consumption in excess of six standard drinks per day (amounting to 43 or more per week) for males, and in excess of four standard drinks per day (amounting to 29 or more per week) for females.

Self-reported alcohol consumption and risk levels

- In 2004–05 in Victoria, Indigenous adults were more likely than non-Indigenous adults to report having abstained from alcohol consumption in the last 12 months (19% compared with 16%) (Figure 2.20.1).
- About 50% of Indigenous adults drank at short-term risky/high-risk levels in the last 12 months, and 17% drank at risky/high-risk levels at least once a week. This is compared with 38% of non-Indigenous adults who reported drinking at risky/high-risk levels in the last 12 months and 7% who drank at this level at least once a week.
- About 17% of Indigenous adults in Victoria drank at long-term risky/high-risk levels in the last 12 months compared with 12% of non-Indigenous adults.
- The proportion of Indigenous adults who drank at short-term risky/high-risk levels at least once a week in the last 12 months was slightly lower in Victoria than it was nationally (17% compared with 19%) (Figure 2.20.2).

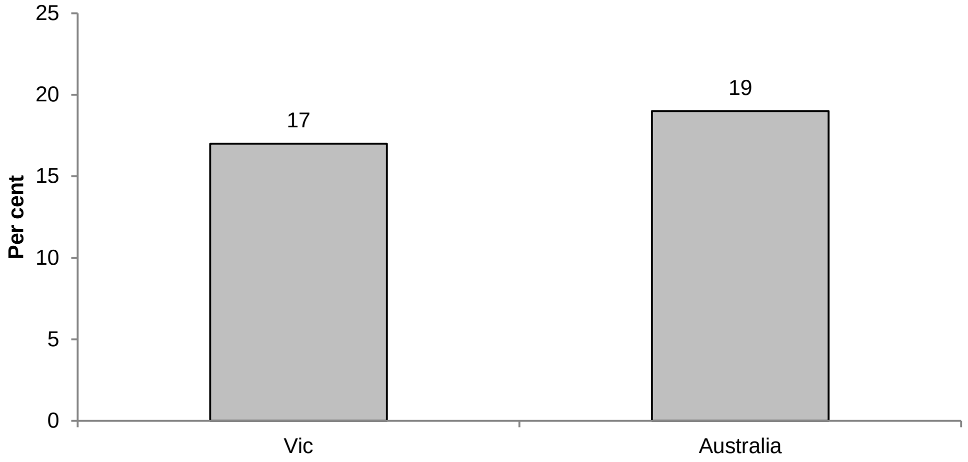


Notes

1. Risk level based on Australian Alcohol Guidelines 2000.
2. Based on responses to questions in 2004–05 National Health Survey/NATSIHS about frequency of consumption of specified number of drinks in previous year. The number of drinks was based on the NHMRC guidelines for risky and high-risk short-term alcohol consumption for males and females.
3. Long-term risk level based on consumption in week prior to interview.

Source: ABS and AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.

Figure 2.20.1: Alcohol risk levels by Indigenous status, people aged 18 and over, age-standardised, Victoria and Australia, 2004-05



Notes

1. Risk level based on Australian Alcohol Guidelines 2000.
2. Short-term risk level based on responses to questions in 2004-05 NHS/NATSIHS about frequency of consumption of specified number of drinks in previous year. The number of drinks was based on the National Medical and Health Research Council (NMHRC) guidelines for risky and high-risk short-term alcohol consumption for males and females.

Source: ABS and AIHW analyses of NATSIHS 2004-05.

Figure 2.20.2: Aboriginal and Torres Strait Islander adults who drank at short term risky/high-risk levels at least once a week, Victoria and Australia, 2004-05

2.21 Drug and other substance use including inhalants

The use of drugs and other substances, including substances inhaled for psychoactive effects, among Aboriginal and Torres Strait Islander people

Substance use by sex

- In 2008 in Victoria, a higher proportion of Indigenous males aged 18 and over reported substance use in the last 12 months (34%) than Indigenous females (22%) of the same age. Nationally, Indigenous males (30%) were also more likely to report substance use in the last 12 months than Indigenous females (18%).
- In Victoria, about 61% of Indigenous males and 51% of Indigenous females aged 18 and over reported that they had ever used substances. These proportions were higher than those reported for Indigenous males and females nationally (54% and 38% respectively).
- Marijuana, hashish and cannabis resin were the most commonly reported type of substance used by Indigenous adults. In 2008, 20% of Indigenous adults in Victoria used marijuana, hashish or cannabis resin, slightly higher than the rate nationally (18%).

Table 2.21.1: Substance use, Indigenous Australians aged 18 and over, by sex, Victoria and Australia, 2008

	Victoria			Australia		
	Males	**Females**	**People**	**Males**	**Females**	**People**
	%	%	%	%	%	%
Used substances in last 12 months						
Marijuana, hashish or cannabis resin	25.9	14.4	19.9	24.3	11.6	17.6
Amphetamines or speed	9.0	5.7	7.3	6.1	2.8	4.3
Ecstasy or designer drugs	8.5	4.4	6.4	4.8	2.1	3.4
LSD or synthetic hallucinogens	3.4	0.9	2.1	1.5	0.5	0.9
Pain killers or analgesics for non-medical purposes	9.5	6.2	7.8	5.3	4.5	4.8
Naturally occurring hallucinogens	1.7	0.8	1.2	1.1	0.2	0.6
Cocaine	3.0	0.9	1.9	1.2	0.5	0.8
Other analgesics	1.3	0.5	0.9	0.6	0.2	0.4
Volatile solvents	2.7	0.4	1.5	0.6	0.2	0.4
Tranquillisers or sleeping pills for non-medical purposes	6.0	3.1	4.5	1.8	1.2	1.5
Kava	1.9	0.8	1.3	1.8	0.7	1.2
Total used substance in last 12 months	**34.1**	**21.7**	**27.6**	**29.8**	**17.6**	**23.3**
Used substance but not in last 12 months	26.5	29.2	27.9	24.4	19.8	22.0
Total used substance(a)	**60.8**	**50.9**	**55.7**	**54.3**	**37.5**	**45.3**
Never used substance	37.5	48.6	43.2	45.4	61.7	54.1
Not stated(b)	1.7	0.5	1.1	0.3	0.8	0.6
Total(c)	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes 'whether used in last 12 months' not known.

(b) This category comprises people who accepted the substance use form but did not state if they had ever used substances.

(c) Excludes 'form not answered'.

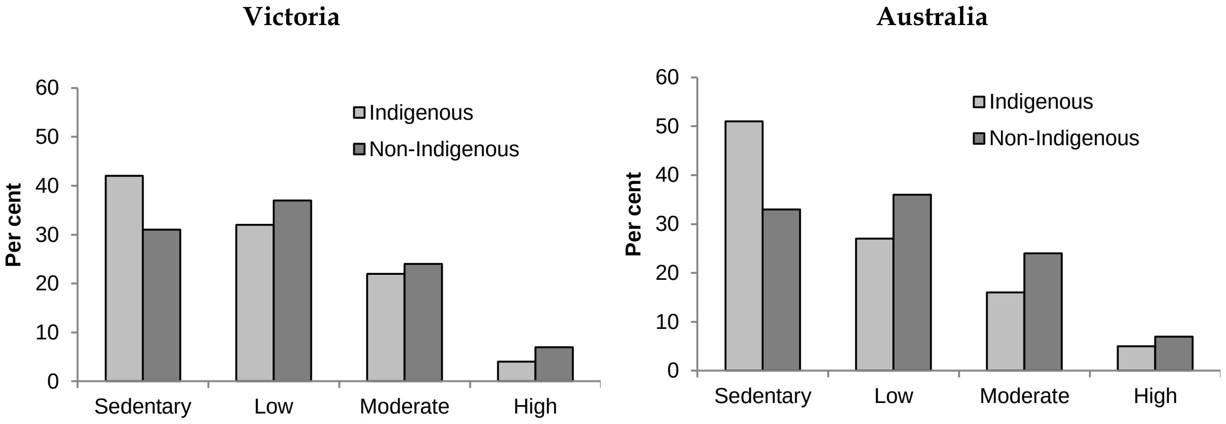
Source: AIHW analyses of NATSISS 2008.

2.22 Level of physical activity

The proportion of the Aboriginal and Torres Strait Islander adult population classified as having sedentary, low, moderate or high physical activity levels

Physical activity

- In 2004-05 in *Non-remote* areas of Victoria, about 38% of Indigenous people reported their exercise level as sedentary, 33% as low, 22% as moderate and 6% as high.
- A higher proportion of Indigenous than non-Indigenous people reported their exercise level as sedentary. After adjusting for differences in age structure, about 42% of Indigenous people aged 15 and over in *Non-remote* areas reported their exercise level as sedentary in the two weeks before the survey, 32% as low, 22% as moderate and 4% as high. This compared with 31% of non-Indigenous people who reported their exercise level as sedentary, 37% as low, 24% as moderate and 7% as high.
- This same pattern is evident nationally, with 51% of Indigenous people reporting their exercise level as sedentary, 27% as low, 16% as moderate, and 5% as high.



Note: Proportions are directly age-standardised.

Source: ABS and AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.

Figure 2.22.1: People aged 15 and over, level of physical activity, *Non-remote* areas, by Indigenous status, Victoria and Australia, 2004-05

2.23 Dietary behaviour

The dietary behaviour of Aboriginal and Torres Strait Islander people including fruit and vegetable consumption, type of milk consumed and salt intake

Dietary habits

- In 2004–05 in Victoria, 97% of Indigenous and all non-Indigenous people aged 12 and over ate vegetables daily. Nationally, 95% of Indigenous and 99% of non-Indigenous people ate vegetables daily.
- In 2004–05, 89% of Indigenous people aged 12 and over in Victoria reported eating fruit daily, which was slightly higher than that reported for Indigenous people nationally (86%). In Victoria, a slightly higher proportion (94%) of non-Indigenous people aged 12 and over ate fruit daily than was reported nationally (93%).
- In both Victoria and across Australia, 96% of Indigenous and 95% of non-Indigenous people aged 12 and over drank milk. The most common type of milk consumed was whole milk.
- The proportion of Indigenous people who usually added salt after cooking was lower in Victoria (34%) than nationally (46%).

Table 2.23.1: Selected dietary habits, by sex and Indigenous status, people aged 12 and over, Victoria and Australia, 2004-05

Dietary behaviours	Victoria		Australia	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	%	%	%	%
Vegetable intake				
Eats vegetables daily	97	100	95	99
Does not eat vegetables daily	3	0	5	1
Total[(a)]	*100*	*100*	*100*	*100*
Fruit intake				
Eats fruit daily	89	94	86	93
Does not eat fruit daily	11	6	14	7
Total[(a)]	*100*	*100*	*100*	*100*
Usual type of milk consumed				
Whole	65	41	79	45
Low/reduced fat	20	35	11	31
Skim	5	13	5	13
Total drinks milk[(b)]	*96*	*95*	*96*	*95*
Does not drink milk	4	5	4	5
Total[(c)]	*100*	*100*	*100*	*100*
Salt added after cooking				
Never/rarely	35	. .	30	. .
Sometimes	31	. .	25	. .
Usually	34	. .	46	. .
Total[(d)]	*100*	. .	*100*	. .

(a) Includes ‘whether eats fruit/vegetables’ not known.

(b) Includes 'soy milk' and other types of milk.

(c) Includes ‘usual type of milk’ not known.

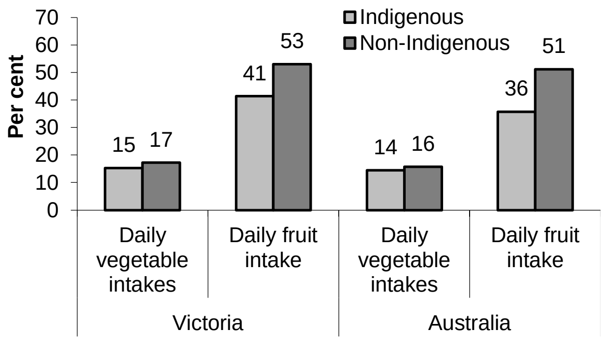
(d) Includes ‘frequency salt is added after cooking’ not known.

Source: ABS and AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.

Fruit and vegetable intake

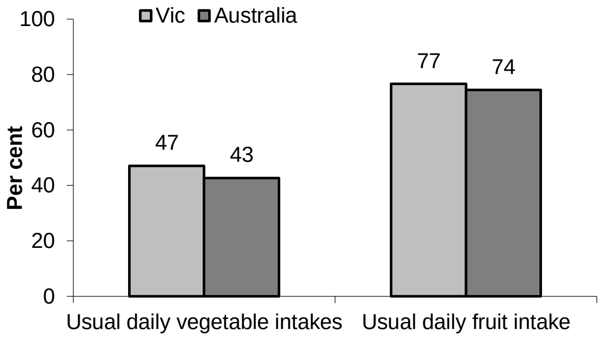
The National Health and Medical Research Council guidelines recommend a minimum of five serves of vegetables and two serves of fruit per day for adults aged 19 and over. For children aged 4–7, the recommended daily intake is two serves of vegetables and one serve of fruit; for those aged 8–11, it is three serves of vegetables and one serve of fruit; for those aged 12–18, it is four serves of vegetables and three serves of fruit.

- In 2004–05, 15% of Indigenous people aged 12 and over living in *Non-remote* areas of Victoria, had the recommended daily intake of vegetables and 41% the recommended daily intake of fruit. Compared with Indigenous people nationally, a slightly higher proportion of non-Indigenous people in these areas reported having the recommended daily intake of vegetables (17%) and a much higher proportion the recommended daily intake of fruit (53%) (Figure 2.23.1).
- A similar pattern was observed across *Non-remote* areas of Australia—a slightly higher proportion of non-Indigenous people reported having the recommended daily intake of vegetables and a much higher proportion reported having the recommended daily intake of fruit when compared with Indigenous Australians (Figure 2.23.1).
- In 2008, 47% of Indigenous children aged 4 to 14 living in *Non-remote* areas of Victoria reported having the recommended daily intake of vegetables and 77% the recommended daily intake of fruit. These percentages were slightly higher than those reported for *Non-remote* areas of Australia (43% and 74%, respectively) (Figure 2.23.2).



Source: AIHW analyses of NATSIHS 2004-05 and NHS 2004–05.

Figure 2.23.1: Percentage of Australians aged 12 and over who had the recommended daily intake of vegetables and fruit, by Indigenous status, *Non-remote* areas, Victoria and Australia, 2004-05



Source: AIHW analyses of NATSISS 2008.

Figure 2.23.2: Percentage of Indigenous children aged 4–14 who had the recommended daily intake of vegetables and fruit, *Non-remote* areas, Victoria and Australia, 2008

2.24 Breastfeeding practices

The breastfeeding status of Aboriginal and Torres Strait islander infants, breastfeeding duration, breastfeeding and other sources of food and reasons why mothers stopped breastfeeding

Breastfeeding status

- In 2008 in Victoria, about 80% of Indigenous infants aged 0–3 had ever been breastfed compared with 77% of Indigenous infants of the same age nationally; about 14% of Indigenous infants aged 0–3 in Victoria were currently being breastfed compared with 21% of Indigenous infants of the same age nationally; and the median age at which Indigenous children stopped being completely breastfed was 17 weeks in both Victoria and across Australia.

Table 2.24.1: Breastfeeding status, Indigenous infants aged 0–3, Victoria and Australia, 2008

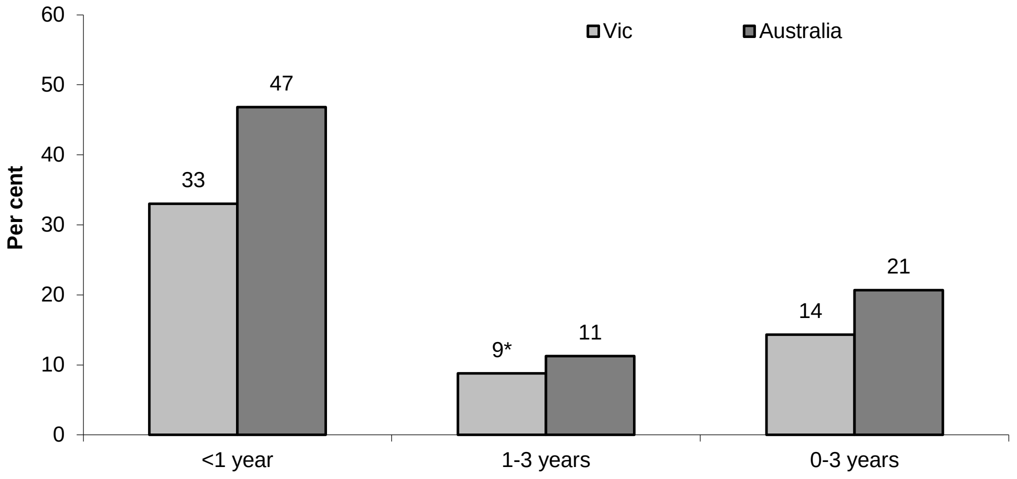
Breastfeeding measure	Victoria	Australia
	Proportion (%)	
Child breastfed		
Currently breastfeeding	14.4	20.7
Not currently breastfeeding		
Age child stopped being completely breastfed		
Less than 6 months	39.4	33.7
Between 6 and 12 months	11.0	10.4
12 months or older	13.4	11.6
Total(a)	65.9	56.6
Ever breastfed(b)	80.3	77.3
Never breastfed	19.7	22.7
Total(c)	**100.0**	**100.0**
Total People	**3,322**	**52,648**
Median age at which child stopped being completely breastfed (weeks)(d)	17	17
Mean age at which child stopped being completely breastfed (weeks)	25	27

(a) Includes age at which child stopped breastfeeding not stated.
(b) Includes not known if child currently breastfed.
(c) Excludes children for whom breastfeeding status was not known.
(d) Median provides a more reliable measure of breastfeeding duration.

Source: NATSISS 2008.

Breastfeeding status by age

- In 2008, 33% Indigenous infants under 1 year old in Victoria were currently breastfed, lower than the rate reported nationally (47%).



* Estimate has an RSE between 25% and 50% and should be used with caution.

Note: Excludes children for whom breastfeeding status was not known.

Source: AIHW analysis of NATSISS 2008.

Figure 2.24.1: Aboriginal and Torres Strait Islander children aged 0-3 currently breastfeeding, by age, Victoria and Australia, 2008

Age at which first given solid food

- In 2008 in Victoria, 45% of Indigenous infants aged 0–3 were first regularly given solid food when they were between 3 and 6 months old, and 30% between 6 and 9 months. These proportions were similar nationally (43% and 30%, respectively).
- A smaller proportion of Indigenous infants aged 0–3 in Victoria were regularly given solid food compared with Indigenous infants of the same age across Australia (75% and 91%, respectively).

Table 2.24.2: Age at which first regularly given solid food, Indigenous infants aged 0–3,, Victoria and Australia, 2008

	Victoria	Australia
Less than 3 months	4.2*	4.7
3 to <6 months	45.4	43.1
6 to <9 months	29.6	30.1
9 months or more	10.3*	8.1
Age not known	3.8*	4.9
Total given solid food[(a)]	*75.0*	*90.9*
Solid food not given	6.8*	9.1
Total[(b)]	**100.0**	**100.0**

* Estimate has an RSE between 25% and 50%, and should be used with caution.

(a) Children who have been given solid food regularly.

(b) Excludes whether given solid food 'unknown'.

Source: AIHW analysis of NATSISS 2008.

2.25 Unsafe sexual practices

Proportion of Aboriginal and Torres Strait Islander peoples engaging in unsafe sexual practices

Teenage pregnancies

Teenage pregnancy is one proxy indicator of unsafe sexual practices. It does not measure all cases, just those involving pregnancies in the under-20 age group. It should be noted that not all unsafe sexual practices result in teenage pregnancy and not all teenage pregnancies would be unplanned. So this proxy measure overestimates unplanned pregnancies and underestimates all cases of unsafe sexual practices.

- In 2005–07, there were 269 women in Victoria who gave birth aged less than 20 who identified as Aboriginal or Torres Strait Islander. This represented 17% of all Indigenous mothers, at a rate of 30 per 1,000 women aged 12 to 20. In comparison, only 3% of all non-Indigenous mothers were aged less than 20, at a rate of 6 per 1,000 women.
- The rate of Indigenous women aged less than 20 who gave birth in Victoria was lower than the national rate (30 compared with 47 per 1,000 women).

Table 2.25.1: Women aged less than 20 who gave birth, by Indigenous status, Victoria and Australia[a][b], 2005–07

	Number		Per cent		Rate per 1,000 women aged 12 to <20 years[c]		
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Ratio
Victoria	269	5,105	16.7	2.6	29.9	6.4	4.7
Australia[d]	**6,396**	**29,243**	**20.7**	**3.6**	**46.9**	**9.2**	**5.1**

(a) Based on state/territory of usual residence.

(b) Excludes missing, non-Australian resident and not stated Australia residents.

(c) Based on Australian female population aged 15–44. Rates will be calculated when ERP data available.

(d) Includes missing, non-Australian resident, not stated and not stated Australia residents.

Note: Excludes not stated Indigenous status.

Source: AIHW analyses of NNDSS.

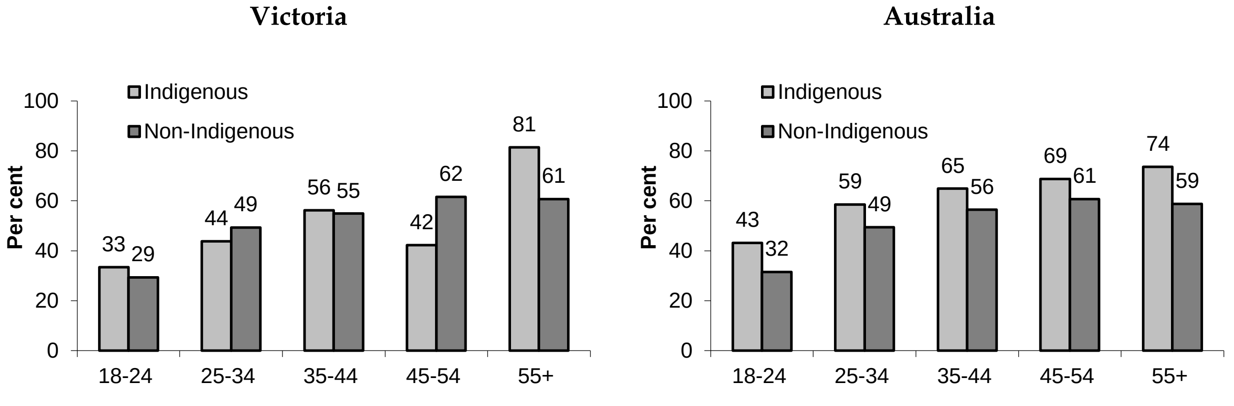
2.26 Prevalence of overweight and obesity

The prevalence of overweight and obesity among Aboriginal and Torres Strait Islander adults and children

Body Mass Index (BMI), which is calculated by dividing weight in kilograms by height in metres squared, is used to assess overweight and obesity levels. The normal range of BMI is between 18.5 and 25. A person is underweight if his/her BMI is less than 18.5, or overweight if the BMI is equal to or over 25. A person is obese if the BMI is equal to or over 30.

Prevalence of overweight and obesity

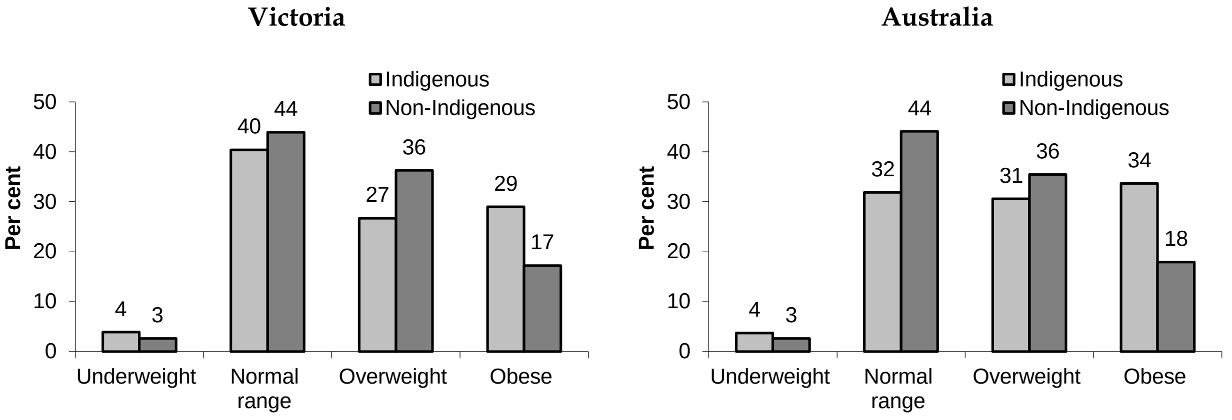
- In 2004-05 in Victoria, for the age groups 18–24, 35–44, and 55 and over, a higher proportion of Indigenous adults were overweight or obese compared with non-Indigenous adults. In the age groups 25-34 and 45-54, a lower proportion of Indigenous adults were overweight or obese compared with non-Indigenous adults. This is different to the pattern nationally where a higher proportion of Indigenous adults than non-Indigenous adults were overweight or obese across all age groups (Figure 2.26.1).
- In Victoria, Indigenous adults aged 55 and over were most likely to be overweight or obese (81%) while for non-Indigenous adults those aged 45–54 were most likely to be overweight or obese (62%).
- After adjusting for differences in age structure between the Indigenous and non-Indigenous populations, about 4% of Indigenous adults were underweight, 40% were of acceptable weight, 27% were overweight and 29% were obese. This compared with 3%, 44%, 36% and 17% for non-Indigenous adults in Victoria in these BMI categories respectively (Figure 2.26.2).
- The proportion of Indigenous adults who were overweight and obese was lower in Victoria than it was nationally.



Note: Excludes those with an unknown Body Mass Index.

Source: AIHW analyses of NATSIHS 2004-05.

Figure 2.26.1: Proportion of adults overweight and obese, by age group, by Indigenous status, Victoria and Australia, 2004-05



Note: Excludes those with an unknown Body Mass Index.

Source: AIHW analyses of NATSIHS 2004-05.

Figure 2.26.2: Proportion of Indigenous adults who are underweight, normal weight, overweight and obese, age-standardised, by Indigenous status, Victoria and Australia, 2004-05

Health system performance (Tier 3)

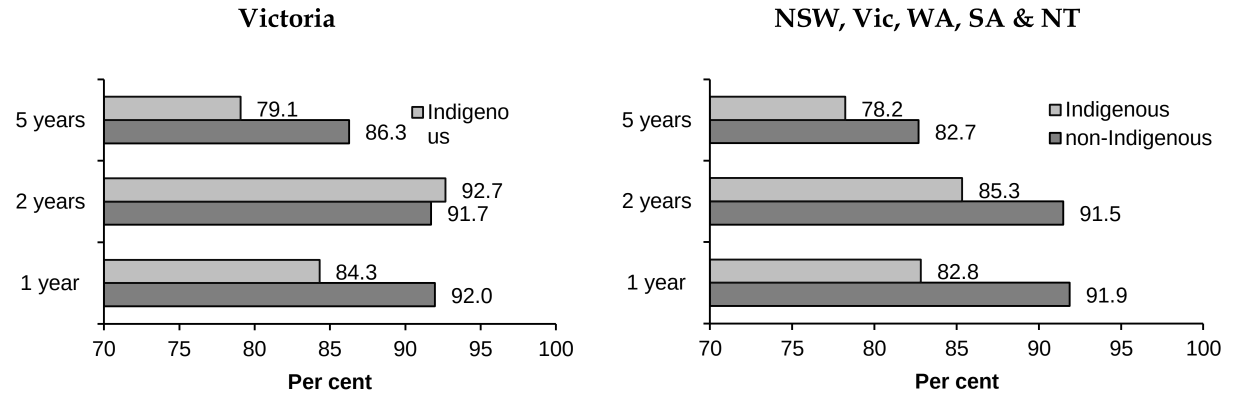
3.02 Immunisation

Vaccination coverage rates among Indigenous Australian children and adults

Childhood immunisation

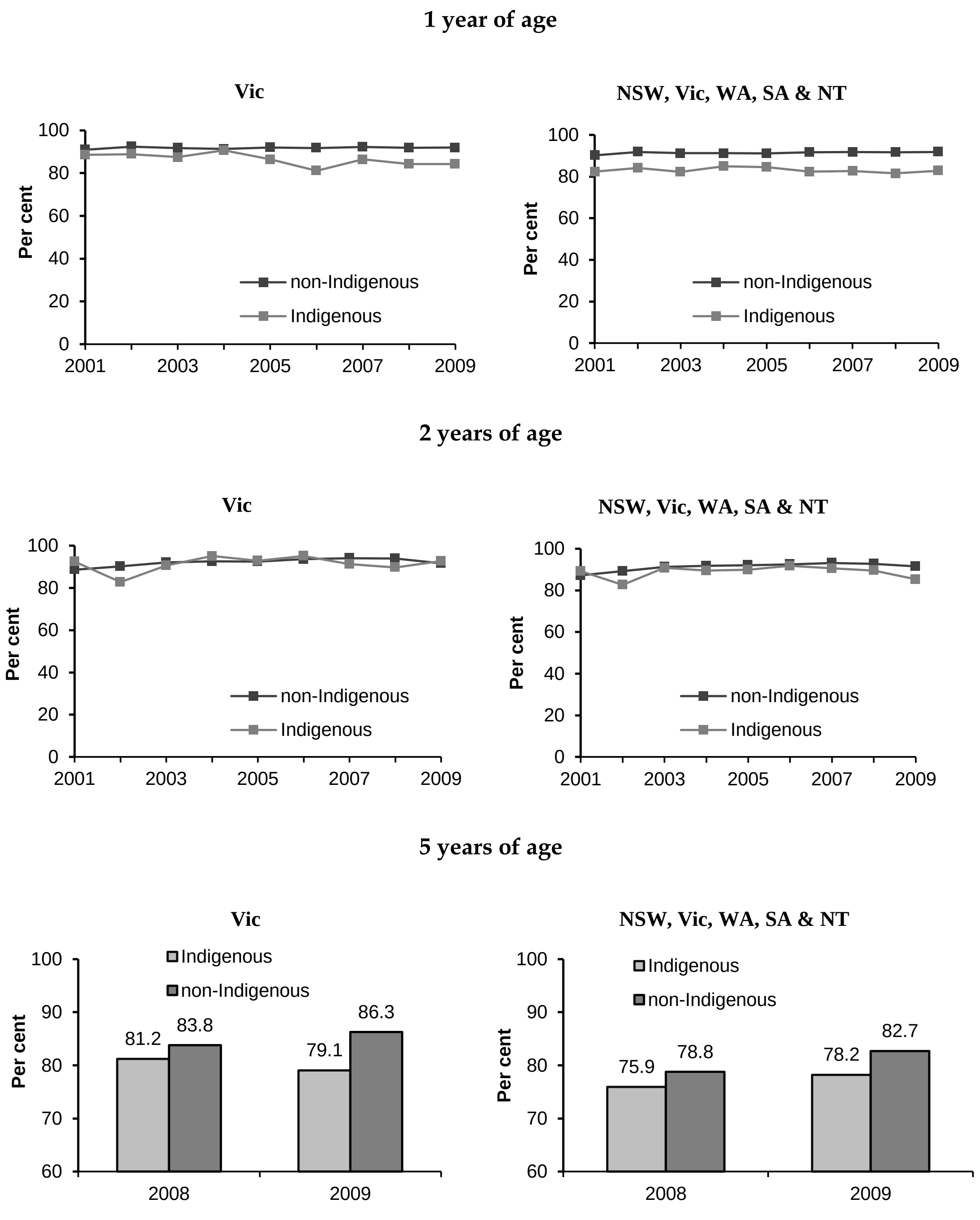
The vaccination schedule for children in 2010 can be found in the Aboriginal and Torres Strait Islander Health Performance Framework report (AIHW 2011).

- As at 31 December 2009 in Victoria, the proportion of Aboriginal and Torres Strait Islander children who were fully immunised was lower than for other children at 1 year of age (84% compared with 92%) and 5 years of age (80% compared with 86%), whilst at 2 years of age the proportion of Aboriginal and Torres Strait Islander children was slightly higher than for other children (93% compared with 92%). For New South Wales, Victoria, Western Australia, South Australia and the Northern Territory combined, the proportion of Indigenous children who were fully vaccinated was lower across all of the three age groups (83% compared with 92% for 1 year, 85% and 92% at 2 years, and 78% and 83% at 5 years) (Figure 3.02.1).
- From 2001 to 2009 in Victoria, the proportion of Aboriginal and Torres Strait Islander children who were fully vaccinated at 1 year decreased by 6%, and the proportion at 2 years varied between 83% and 95%. At 5 years, the immunisation rate dropped from 81% in 2008 to 79% in 2009 for Indigenous children (Figure 3.02.2).
- In New South Wales, Victoria, Western Australia, South Australia and the Northern Territory combined, the proportion of Indigenous children aged 1 year who were fully vaccinated was similar from 2001 to 2009, while the proportion of Indigenous children aged 2 years varied with an 11% difference between the minimum and the maximum. The proportion of Indigenous children aged 5 who were fully vaccinated increased from 2008 to 2009.



Source: AIHW analyses of Australian Childhood Immunisation Register (ACIR), Medicare Australia.

Figure 3.02.1: Per cent of Aboriginal and Torres Strait Islander children fully vaccinated at age 1year, 2 years and 5 years, Victoria and NSW, Vic, WA, SA & NT combined, 2009

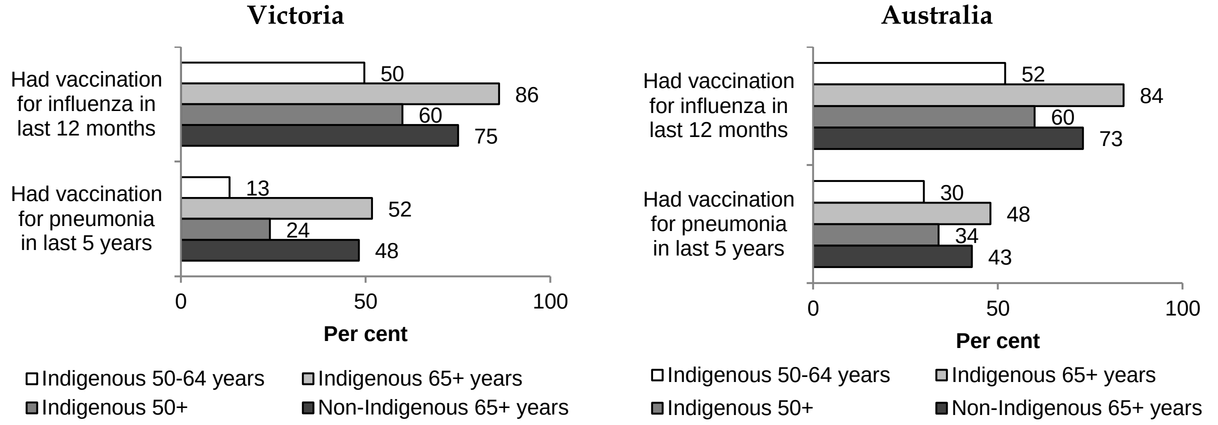


Source: AIHW analyses of ACIR, Medicare Australia.

Figure 3.02.2: Per cent of children fully vaccinated at age 1 year, 2years (2001–2009) and 5 years (2008–2009), by Indigenous status, Victoria and NSW, Vic, WA, SA & NT combined

Adult immunisation

- In 2004–05 in Victoria, about 60% of Indigenous people aged 50 and over had been vaccinated against influenza in the last 12 months, similar to the proportion nationally. About 24% of Indigenous people aged 50 and over had been vaccinated against pneumonia in the last 5 years, lower than the proportion nationally (34%) (Figure 3.02.3).
- In Victoria, a higher proportion (86%) of Indigenous people aged 65 and over had been vaccinated against influenza in the last 12 months than non-Indigenous people the same age (75%). This trend was similar nationally (84% and 73% respectively).
- In Victoria, a higher proportion (52%) of Indigenous people aged 65 and over had been vaccinated against pneumonia in the last 5 years than non-Indigenous people the same age (48%). This trend was similar nationally (48% and 43% respectively).



Source: ABS and AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.

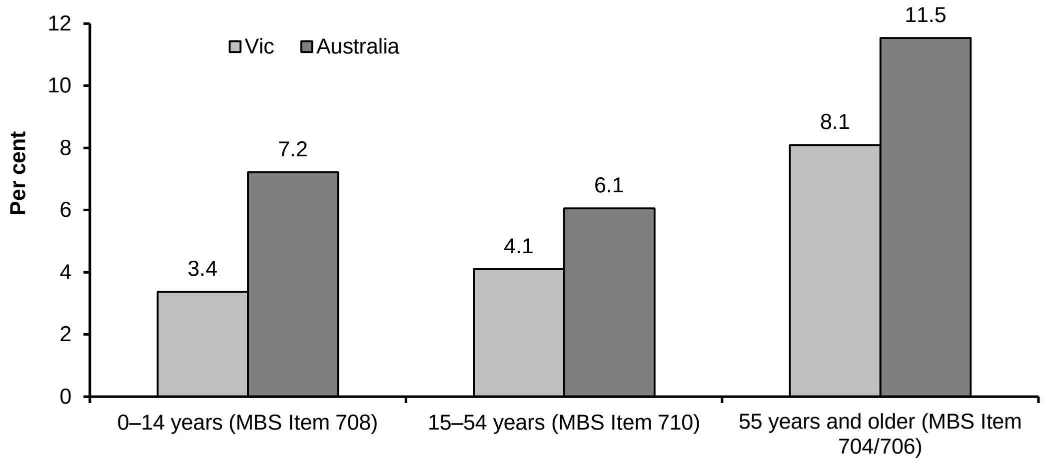
Figure 3.02.3: Indigenous people aged 50 and over and other people aged 65 and over: immunisation status, Victoria and Australia, 2004–05

3.03 Early detection and early treatment of disease

The early detection and early treatment of disease among the Indigenous population measured by the health assessment and disease screening of Aboriginal and Torres Strait Islander peoples

Medicare Benefits Schedule health assessments/checks

- In Victoria from July 2008 to June 2009:
  - 3.4% of Indigenous children aged 0–14 had an annual child health check;
  - 4.1% of Indigenous people aged 15–54 had a two-yearly health check;
  - 8.1% of Indigenous people aged 55 and older had an annual health assessment;
  - 21% of total people aged 75 and older had an annual health assessment.
- The proportion of Indigenous people undertaking health checks and assessments between July 2006 and June 2007 was lower in Victoria than nationally, across the age groups of 0–14, 15–54, and 55 and over (Figure 3.03.1).



Source: AIHW analyses of Medicare data.

Figure 3.03.1: Per cent of target group received Medicare Benefits Schedule Health Assessments and Health Checks for Indigenous people, Victoria and Australia, July 2008 to June 2009

Breastscreening

- In 2007–08 in Victoria, the proportion of Indigenous women aged 50–69 years participating in the BreastScreen Australia program was markedly lower than the rate for all women in that age group (28% compared with 53%). Nationally, 36% of Indigenous women and 55% of all women aged 50–69 participated in the program.
- The proportion of Indigenous women in Victoria who participated in the BreastScreen Australia program decreased from 35% in 2003–04 to 28% in 2007–08. Over the same period, the proportion of all women in Victoria who participated in the program decreased from 59% to 53% (Figure 3.03.2).

- Over the same period nationally, the proportion of Indigenous women aged 50–69 participating in the BreastScreen Australia program increased by 2.3%, while there were no significant changes in the proportion for all women.

Source: Steering Committee for the Review of Government Service Provision (SCRGSP) 2010.

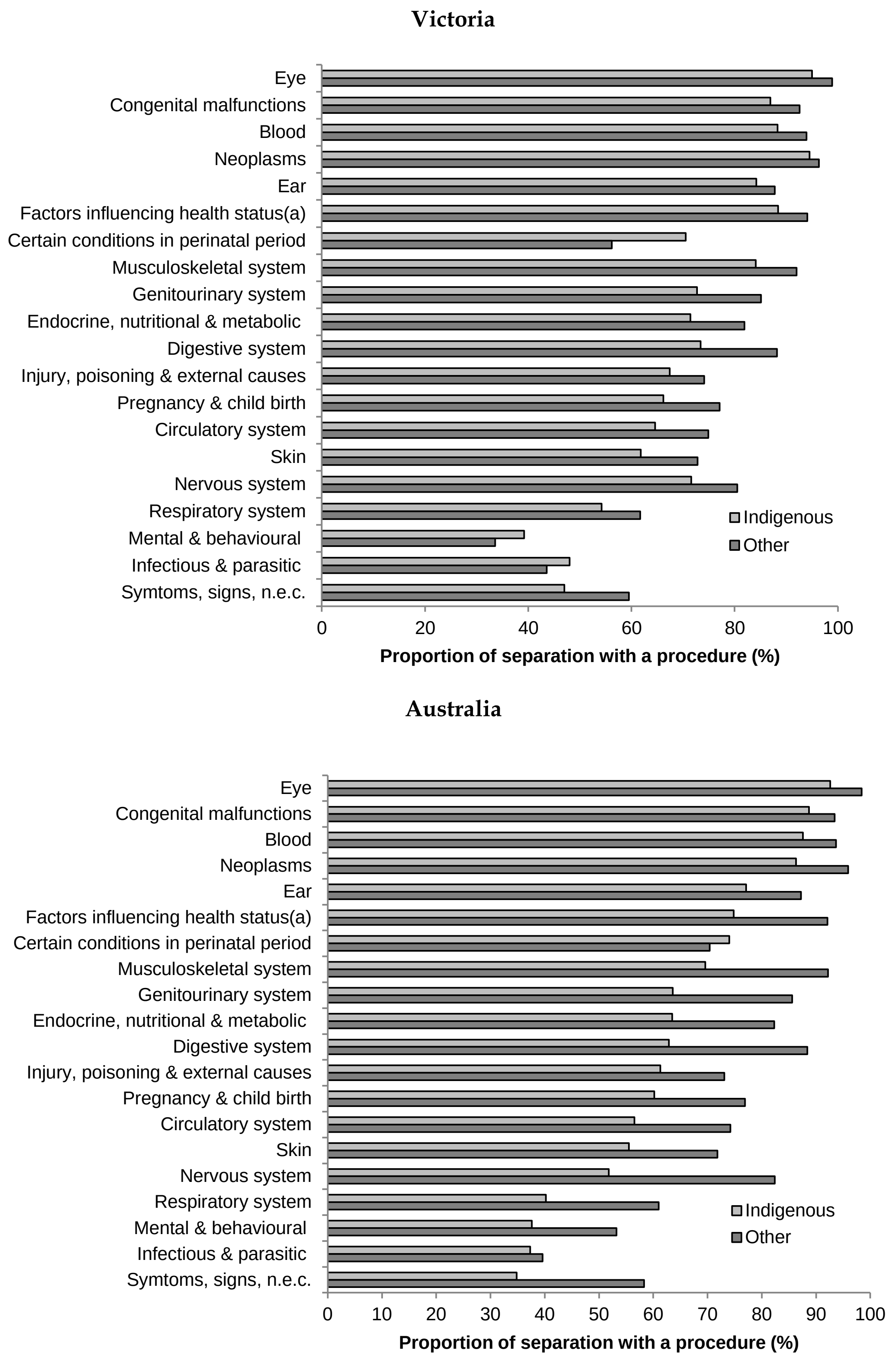
Figure 3.03.2: Participation rates for BreastScreen Australia Programs of women aged 50–69, Indigenous womenand all women, Victoria and Australia, 2003–04 to 2007–08

3.05 Differential access to key hospital procedures

The key hospital procedure differentials between Aboriginal and Torres Strait Islander peoples and other Australians as measured through standardised rates, ratios and rate differences in hospital separations with the same principal diagnosis

Studies have shown that while Aboriginal and Torres Strait Islander people are more likely to be hospitalised than other people, they are less likely to receive a medical or surgical procedure while in hospital (ABS & AIHW 2008).

- Between July 2006 and June 2008 in Victoria, about 69% of hospitalisations of Indigenous people had a procedure reported compared with 80% of hospitalisations of other people. Nationally, these proportions were 59% and 81% respectively.
- In Victoria, the proportion of hospital separations with a procedure reported by principal diagnosis was lower for Indigenous patients than for other patients for most of the diagnosis chapters except for certain conditions in perinatal period, mental and behavioural disorders, and infectious and parasitic diseases. The ratios from the proportion for Indigenous patients to that for other patients by principal diagnosis ranged from 0.8 to 1.3 (Figure 3.05.1).
- Nationally, the proportion of separations with a procedure reported by principal diagnosis was lower for Indigenous patients than for other patients for almost all of the diagnosis chapters, except for certain conditions in perinatal period.


Victoria

Australia

Source: AIHW analyses of NHMD.

Figure 3.05.1: Per cent (age-standardised) of hospital episodes with a procedure reported, selected principal diagnoses, by Indigenous status, Victoria and Australia, 2006–07 to 2007–08

3.06 Ambulatory care sensitive hospital admissions

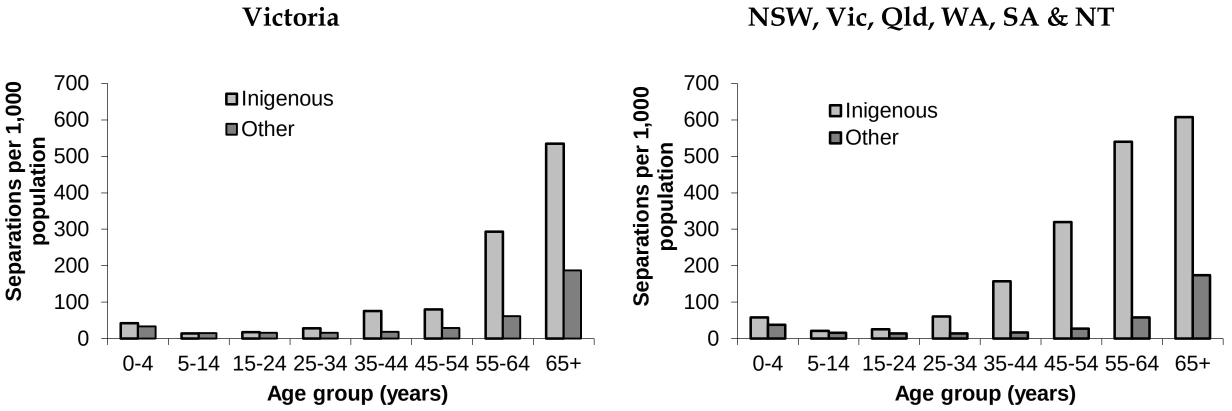
The number of hospital admissions for ambulatory care sensitive conditions for Aboriginal and Torres Strait Islander people expressed as a rate by age group, age–standardised rate and ratio

Ambulatory care sensitive conditions can be broken down into three categories:

1. vaccine-preventable conditions, including influenza, pneumonia, tetanus, measles, mumps, rubella, diphtheria, pertussis and polio
2. potentially preventable acute conditions, including dehydration, gastroenteritis, kidney infection, perforated ulcer, cellulitis, pelvic inflammatory disease, ear, nose and throat infections, and dental conditions
3. potentially preventable chronic conditions, including diabetes, asthma, angina, hypertension, congestive heart failure and chronic obstructive pulmonary disease.

Hospitalisations by age

- Between July 2006 and June 2008 in Victoria, Indigenous people were hospitalised for ambulatory care sensitive conditions at about 3 times the rate of other people (129 compared with 45 per 1,000). This was lower than the rate ratio of 5 for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined.
- Over the same period in Victoria, Indigenous people had higher hospitalisation rates for ambulatory care sensitive conditions than other people across most age groups except 5–14 years. Rate ratios for Indigenous people to other people were particularly marked in the 35–44 and 55–64 year groups, where Indigenous people were hospitalised at 4.1 and 4.8 times the rate respectively. For New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, the highest rate ratio (about 12) was in the 45–54 year group (Figure 3.06.1).
- Hospitalisation rates for ambulatory care sensitive conditions in Victoria were highest in the 65 and over age group for both Indigenous and other people..
- Hospitalisation rates for ambulatory care sensitive conditions for Indigenous people across all age groups were lower in Victoria than in the six jurisdictions combined.



Source: AIHW analyses of NHMD.

Figure 3.06.1: Age-specific hospitalisation rates for ambulatory care sensitive hospital admissions, by Indigenous status and sex, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Hospitalisations by diagnosis

- Between July 2006 and June 2008, diabetes complications were the most common type of ambulatory sensitive condition among Indigenous people in Victoria (98 per 1,000 population); followed by chronic obstructive pulmonary disease (COPD) (7 per 1,000) and angina (4.3 per 1,000). Indigenous people were hospitalised at 4.6 times the rate of other people for diabetes complications, 2.8 times the rate for CPOD, and 2.5 times the rate for angina. The three most common types of ambulatory care sensitive conditions for Indigenous people in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined were diabetes complications (165 per 1,000), CPOD (12 per 1,000 and convulsions and epilepsy (7 per 1,000) (Table 3.06.1).
- In Victoria, Indigenous people were hospitalised for potentially preventable chronic conditions at 3.7 times the rate, for potentially preventable acute conditions at 1.2 times the rate and for vaccine-preventable conditions at twice the rate, of other people (Figure 3.06.2).
- Hospitalisation rates for Indigenous people for potentially preventable chronic conditions, vaccine-preventable conditions and potentially preventable acute conditions were lower in Victoria than in the six jurisdictions combined.

Table 3.06.1: Top 10 ambulatory care sensitive hospital admissions, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA and NT combined, July 2006 to June 2008[a][b][c][d]

	Number		Rate per 1,000[e]		
	Indigenous	**Other[f]**	**Indigenous**	**Other[f]**	**Ratio[g]**
			Victoria		
Diabetes complications	2,926	239,733	97.9	21.3	4.6*
Convulsions and epilepsy	250	14,978	4.1	1.4	2.9*
Chronic obstructive pulmonary disease	208	28,516	7.0	2.5	2.8*
Ear, nose and throat infections	162	15,297	1.7	1.5	1.1
Dental problems	243	29,797	2.6	2.9	0.9
Cellulitis	124	17,268	2.1	1.6	1.3*
Asthma	204	18,744	2.4	1.9	1.3*
Pyelonephritis	146	26,379	3.1	2.4	1.3*
Angina	149	19,394	4.3	1.7	2.5*
Congestive cardiac failure	47	25,077	2.0	2.2	0.9
Subtotal	*4,459*	*435,183*	*127.3*	*39.5*	*3.2**
Total[h]	**4,642**	**488,942**	**128.9**	**44.7**	**2.9***
			NSW, Vic, Qld, WA, SA & NT		
Diabetes complications	82,788	863,248	165.2	20.3	8.1*
Convulsions and epilepsy	6,034	57,173	7.0	1.5	4.8*
Chronic obstructive pulmonary disease	4,928	108,919	11.8	2.5	4.6*
Ear, nose and throat infections	4,171	62,769	3.1	1.6	1.9*
Dental problems	4,115	105,302	3.1	2.7	1.1*
Cellulitis	3,911	63,349	4.6	1.5	3.0*
Asthma	3,850	67,979	3.7	1.8	2.1*
Pyelonephritis	3,793	90,787	6.1	2.2	2.8*
Angina	2,534	73,118	5.2	1.7	3.0*
Congestive cardiac failure	2,480	84,418	5.9	2.0	3.0*
Subtotal	*118,604*	*1,577,062*	*215.7*	*37.9*	*5.7**
Total[h]	**120,308**	**1,749,006**	**212.3**	**42.2**	**5.0***

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

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

(b) Categories are based on the ICD-10-AM (National Centre for Classification in Health 2006).

(c) Financial year reporting.

(d) Data are reported by state/territory of usual residence of the patient hospitalised and are for New South Wales, Victoria, Queensland, Western Australia, South Australia, and the Northern Territory only. These six jurisdictions are considered to have adequate levels of Indigenous identification, although the level of accuracy varies by jurisdiction and hospital. Hospitalisation data for these six jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

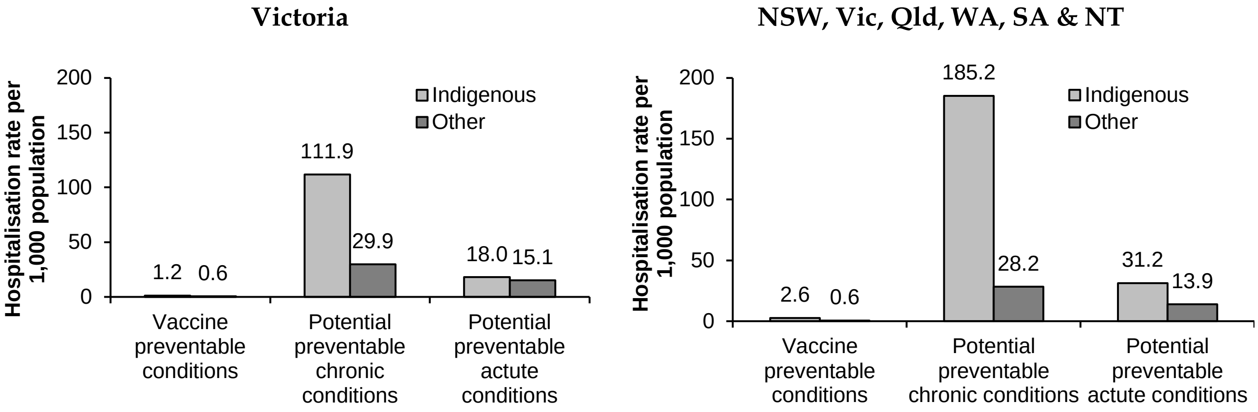
(e) Directly age-standardised using the Australian 2001 Standard population.

(f) Other includes hospitalisations of non-Indigenous people and those for whom Indigenous status was 'not stated'.

(g) Ratio - Indigenous:Other.

(h) All ambulatory care sensitive hospital admissions. Note that the sum of the number of hospitalisations for each condition exceeds the total as more than one ambulatory care sensitive condition can be diagnosed for each hospital separation.

Source: Analyses of AIHW NHMD.



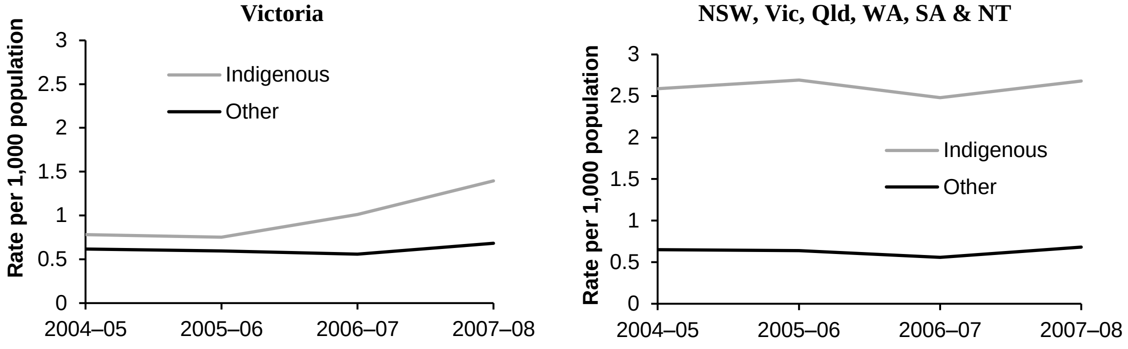
Source: AIHW analyses of NHMD.

Figure 3.06.2: Age-standardised hospitalisation rates for ambulatory care sensitive hospital admissions, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

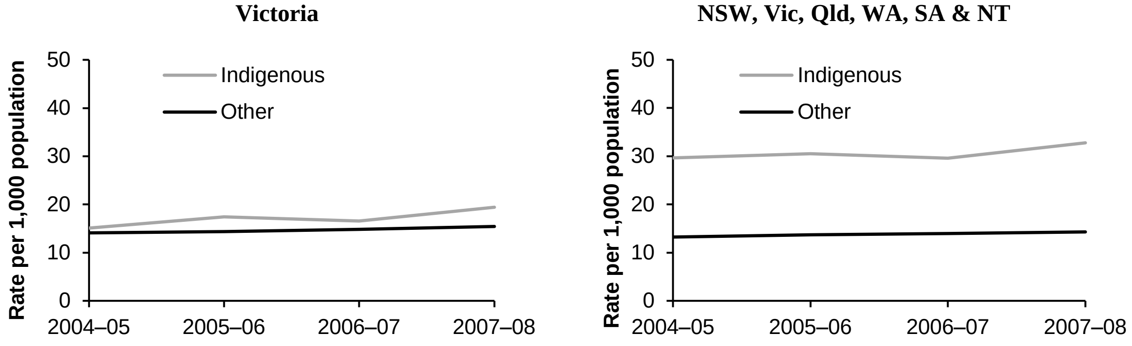
Hospitalisation trends

- Over the period 2004–05 to 2007–08 in Victoria for Indigenous people, the hospitalisation rates for vaccine-preventable conditions, for potentially preventable acute conditions, and for potentially preventable chronic conditions, all increased:
  - for vaccine-preventable conditions the hospitalisation rate increased from 0.8 to 1.4 per 1,000 population, equivalent to an increase of 81%;
  - for potentially preventable acute conditions the rate increased from 15 to 19 per 1,000, equivalent to an increase of 24%;
  - for potentially preventable chronic conditions the rate increased from 97 to 114 per 1,000, equivalent to an increase of 19%.
- For other people, while the hospitalisation rate for vaccine-preventable conditions fluctuated, the hospitalisation rates for potentially preventable acute conditions and for potentially preventable chronic conditions increased by 9% and 11% respectively (Figure 3.06.3).
- Over the same period in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, there were no significant differences in hospitalisation rates for vaccine-preventable conditions among Indigenous people, while among other people the rates varied from 0.6 to 0.7 per 1,000 with a difference of 22% between the minimum and the maximum. For potentially preventable acute conditions, the hospitalisation rates varied from 30 to 33 per 1,000 with 10% difference between the minimum and the maximum for Indigenous people, while it increased by 8% from 13 to 14 per 1,000 for other people. For potentially preventable chronic conditions, the hospitalisation rates increased by 30% for Indigenous people and 18% for other people.

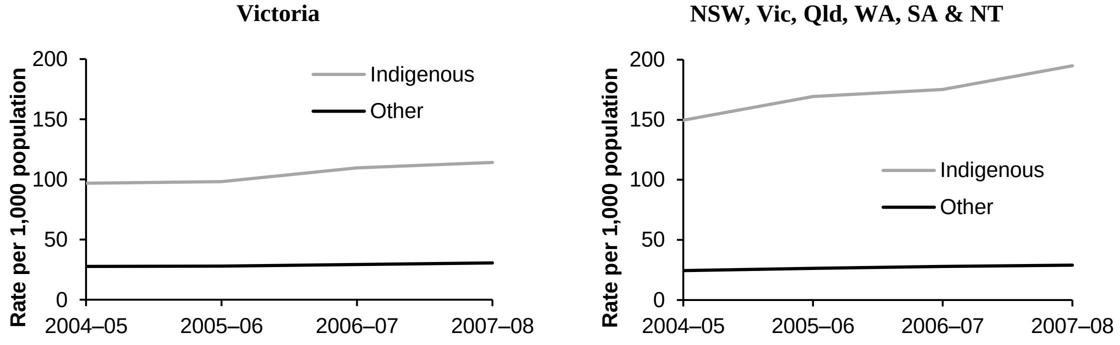
Vaccine-preventable conditions



Acute conditions



Chronic conditions



Source: AIHW analyses of NHMD.

Figure 3.06.3: Age-standardised hospitalisation rates for ambulatory care sensitive hospital admissions, by Indigenous status, New South Wales and NSW, Vic, Qld, WA, SA & NT combined, 2004–05 to 2007–08

3.08 Discharge against medical advice

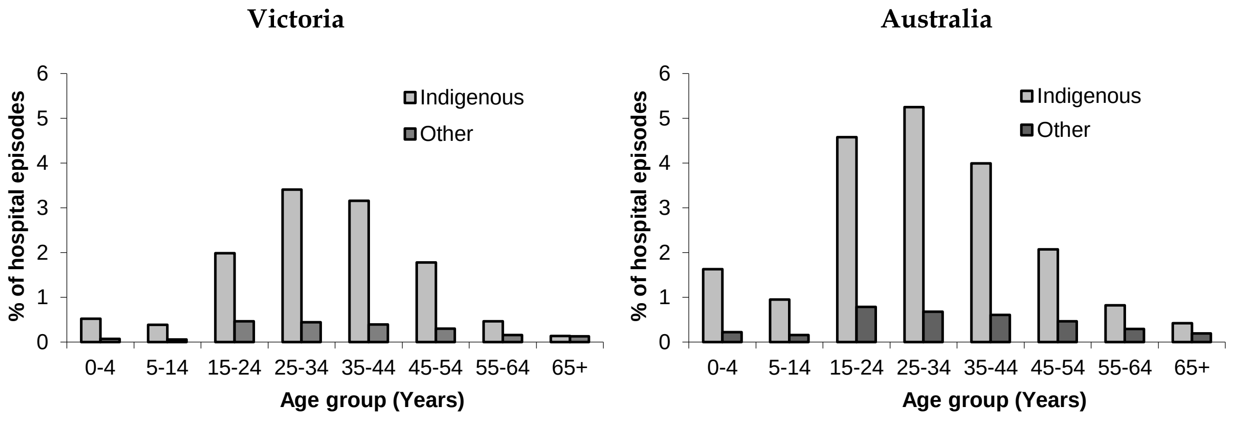
The rate at which Aboriginal and Torres Strait Islander peoples leave hospital against medical advice or are discharged at their own risk

Data for this measure come from the AIHW's National Hospital Morbidity Database. Hospitalisations for mental and behavioural disorders are excluded.

- Between July 2006 and June 2008 in Victoria, 1.6% of hospitalisations of Indigenous people involved discharge against medical advice. This proportion was lower than that for Indigenous people nationally (2.5%).
- After adjusting for differences in age structure, Indigenous people were 6.1 times as likely as other people to discharge against medical advice. Nationally, the rate ratio was 5.9.

Hospitalisations by age

- Between July 2004 and June 2006 in Victoria, Indigenous people were much more likely to discharge from hospital against medical advice than other people across most age groups except the 65 and over group in which the proportions of discharges against medical advice for Indigenous and other people were similar. Nationally, the proportions for Indigenous people were much higher than for other people across all age groups.
- Out of all the age groups, Indigenous people aged 25–34 were most likely to discharge from hospital against medical advice, both in Victoria (3.4%) and nationally (5.2%). Their rate of discharge was about 8 times that of other people in the same age group, both in Victoria and nationally.

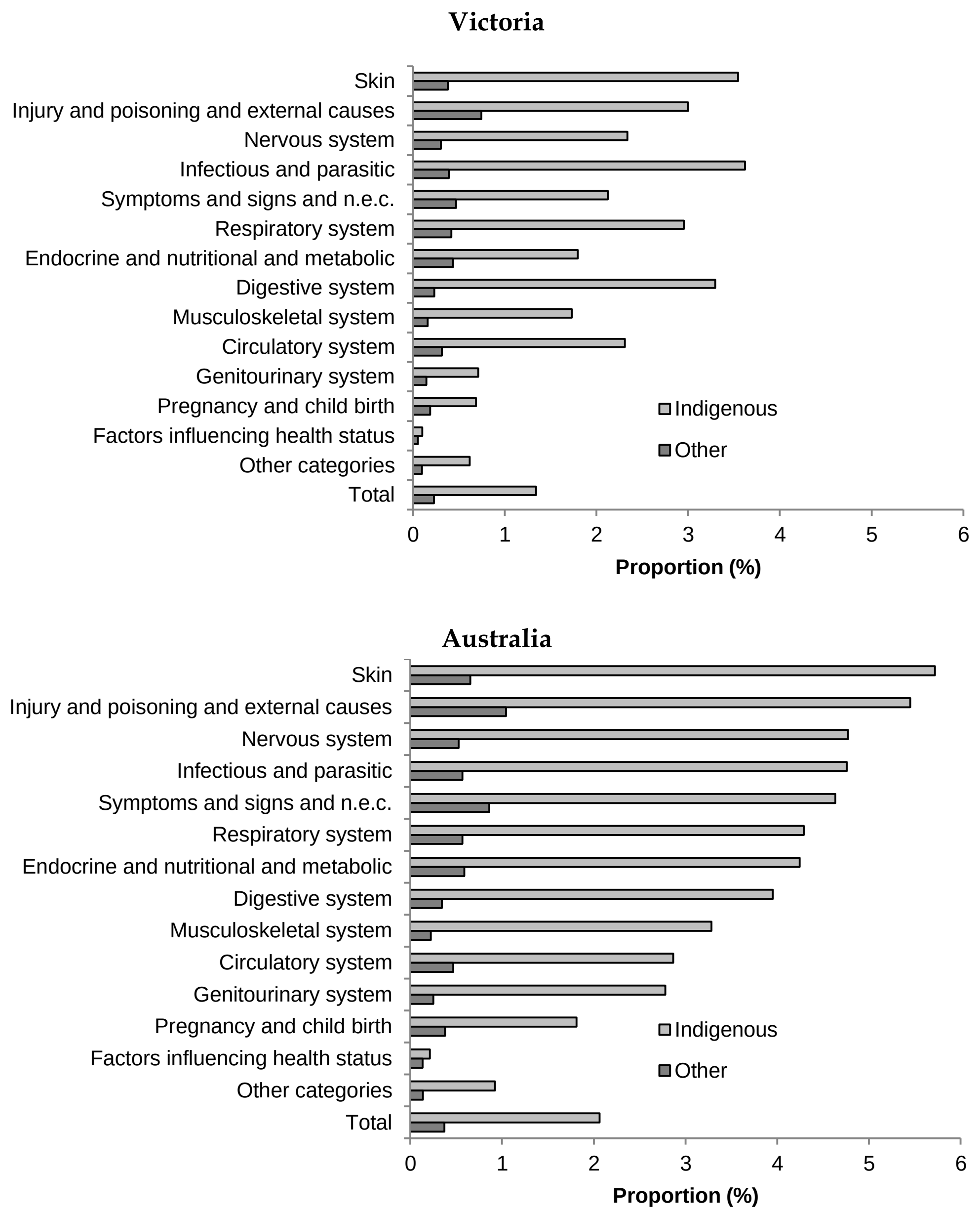


Source: AIHW analyses of NHMD.

Figure 3.08.1: Per cent of hospital episodes in which patients were discharged against medical advice, by Indigenous status and age group (excluding Mental and Behavioural Disorders), Victoria and Australia, July 2006 to June 2008

Hospitalisations by diagnosis

- The most common principal diagnoses for hospitalisations for which Indigenous people in Victoria discharged against medical advice were infectious and parasitic diseases (3.6%) followed by skin diseases (3.5%). Indigenous people discharged from hospital against medical advice at more than 9 times the rate of other people for these diagnoses.
- In Victoria, the greatest disparities between proportions of hospitalisations involving discharge against medical advice for Indigenous and other people were for hospitalisations with a principal diagnosis of digestive system diseases (ratio of 14) and musculoskeletal diseases (ratio of 11).
- Hospitalisation rates for Indigenous people who discharged from hospital against medical advice were lower in Victoria than in Australia for all principal diagnosis categories.


Victoria

Australia

Source: AIHW analyses of NHMD.

Figure 3.08.2: Per cent (age-standardised) of hospital episodes in which patients were discharged against medical advice, by Indigenous status and principal diagnosis (excluding Mental and Behavioural Disorders), Victoria and Australia, July 2006 to June 2008

3.09 Access to mental health services

Access to mental health care services such as hospitals, community mental health care, doctors and Aboriginal and Torres Strait Islander Primary Health Care Services by Aboriginal and Torres Strait Islander peoples

Hospitalisations

- Between July 2006 and June 2008 in Victoria, there were 1,592 hospitalisations of Indigenous people for mental health-related conditions.
- Indigenous males and females were hospitalised for mental health-related conditions at more than one and a half times the rate of other males and females in Victoria (22 compared with 13 per 1,000 for males, and 33 compared with 21 per 1,000 for females) (Figure 3.09.1).
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, Indigenous males were hospitalised for mental health-related conditions at more than twice the rate of other males, whilst the rate for Indigenous females was one and a half times the rate of other females.
- Indigenous males in Victoria were hospitalised for mental health-related conditions at a lower rate than Indigenous males in the six jurisdictions combined (22 to 29), whilst for Indigenous females, the rate was higher in Victoria than in the six jurisdictions combined (33 to 24).

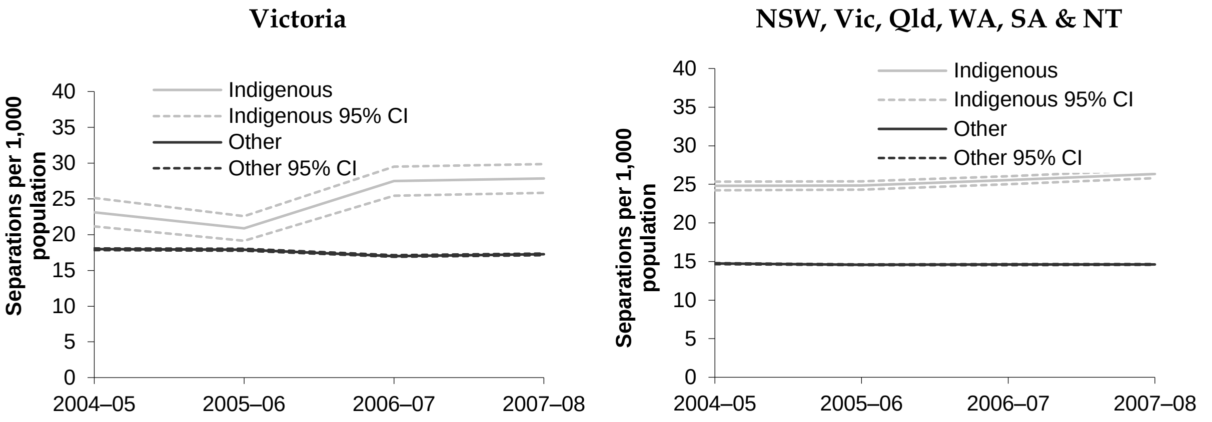
Source: AIHW analyses of NHMD.

Figure 3.09.1: Age-standardised hospitalisation rates for principal diagnosis of mental health-related conditions by Indigenous status and sex, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Hospitalisation trends

- From 2004–05 to 2007–08 in Victoria, there were no significant changes in hospitalisation rates for mental health-related conditions among Indigenous people. Over the same period, there was a significant decline in the hospitalisation rates for mental health-related conditions among other people, with an average yearly decrease of 0.3 hospitalisations per 1,000 population.

- Over the same period in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, there was a significant increase in hospitalisation rates for mental health-related conditions among Indigenous people. There was no significant change in the hospitalisation rate of other people.
- There were no significant changes in the hospitalisation rate ratios for mental-health related conditions between Indigenous and other people in Victoria. However, in the six jurisdictions combined there was a significant increase in the rate ratio.



Source: AIHW analyses of NHMD.

Figure 3.09.2: Hospitalisation rates from mental health-related conditions by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, 2004–05 to 2007–08

Community mental health care services

- In 2007–08 in Victoria, there were 29,410 contacts with community mental health services by people who identified as Aboriginal or Torres Strait Islander (1.7% of total service contacts in Victoria).
- Indigenous people were almost three times as likely as non-Indigenous people to be clients of a community mental health service (943 contacts per 1,000 population compared with 327 per 1,000) (Table 3.09.1).
- These rates were considerably higher than the rates nationally, where Indigenous people were two and a half times as likely as non-Indigenous people to have a community mental health care service contact (737 per 1,000 compared with 294 per 1,000).

Table 3.09.1: Community mental health care service contacts per 1,000 population, by Indigenous status, Victoria and Australia, 2007–08

	Victoria	Australia
	Number	
Indigenous	29,410	362,429
Non-Indigenous	1,691,539	5,577,420
Not stated	15,507	434,418
Total	**1,736,456**	**6,374,267**
	Number per 1,000 population [(a)]	
Indigenous	943	737
Other Australians[(b)]	327	294
Ratio[c)]	2.9	2.5
Total	**331**	**304**

(a) Rates were directly age-standardised using the Australian 2001 Standard population.

(b) Other includes service contacts for non-Indigenous clients and those for whom Indigenous status was not stated.

(c) Rate ratio Indigenous:other.

Note: Shading indicates that the Indigenous identification in the National Community Mental Health Care Database (NCMHCD) in these jurisdictions is in need of improvement. This is based on information provided by state and territory health authorities on the quality of their data in the NCMHCD. Data from these states and territories should be interpreted with caution due to likely under identification of Indigenous Australians.

Source: AIHW National Community Mental Health Care Database (NCMHCD).

Residential mental health care services

- In 2007–08 in Victoria, there were 31 contacts with residential mental health care services by people who identified as Aboriginal or Torres Strait Islander (2.1% of total service contacts in Victoria).
- Indigenous people were more than 3 times as likely as non-Indigenous people to be clients of a residential mental health care service (9.6 per 1,000 compared with 2.8 per 1,000) (Table 3.09.2).
- Nationally, Indigenous people were 1.3 times as likely as non-Indigenous people to be clients of a residential mental health care service (1.9 per 1,000 compared to 1.5 per 1,000).

Table 3.09.2: Residential mental health care service contacts per 1,000 population, by Indigenous status, Victoria and Australia, 2007–08

	Victoria	Australia
	Number	
Indigenous	31	87
Non-Indigenous	1448	2,962
Not stated	19	173
Total	**1,498**	**3,222**
	Number per 1,000 population [(a)]	
Indigenous	9.6	1.9
Other Australians(b)	2.8	1.5
Ratio(c)	3.4	1.3
Total	**2.8**	**1.5**

(a) Rates were directly age-standardised using the Australian 2001 Standard population.

(b) Other includes service contacts for non-Indigenous clients and those for whom Indigenous status was not stated.

(c) Rate ratio Indigenous:other.

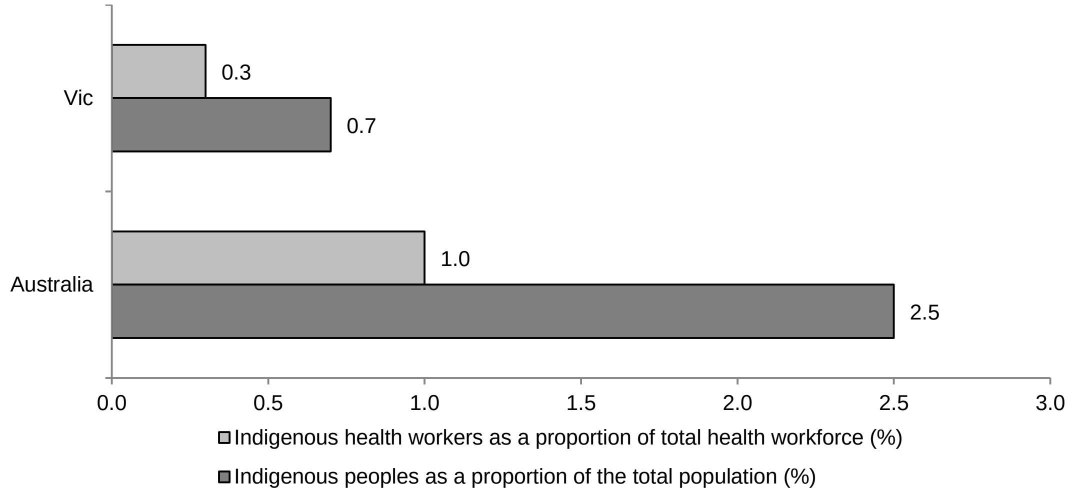
Note: Shading indicates that the Indigenous identification in the National Community Mental Health Care Database (NCMHCD) in these jurisdictions is in need of improvement. This is based on information provided by state and territory health authorities on the quality of their data in the NCMHCD. Data from these states and territories should be interpreted with caution due to likely under identification of Indigenous Australians.

Source: AIHW National Residential Mental Health Care Database (NRMHCD).

3.10 Aboriginal and Torres Strait Islander Australians in the health workforce

Number and proportion of Aboriginal and Torres Strait Islander Australians in the health workforce

- In 2006, there were 381 people aged 15 and over in Victoria who identified as Aboriginal or Torres Strait Islander who were employed in the health workforce.
- They accounted for 0.3% of the health workforce, which was lower than the proportion of the Victorian population that is Indigenous (0.7%) (Figure 3.10.1).
- Nationally, Aboriginal and Torres Strait Islander people accounted for 1.0% of the health workforce which is also lower than the proportion of the population that is Indigenous (2.5%).



Source: ABS and AIHW analyses of 2006 Census of Population and Housing.

Figure 3.10.1: Aboriginal and Torres Strait Islander peoples aged 15 and over in health workforce as a proportion of total health workforce, Victoria and Australia, 2006

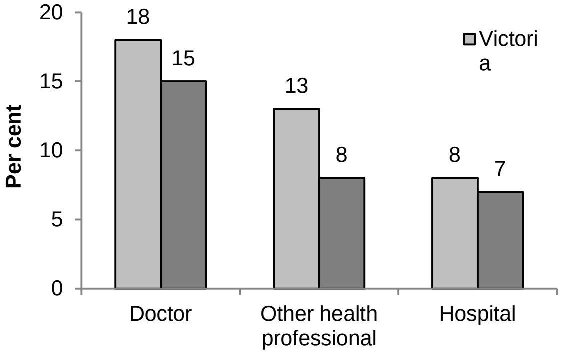
3.11 Competent governance

Measures of competent governance in mainstream and Indigenous-specific health services, including management of service delivery, compliance and accountability of services, and cultural responsiveness of service delivery for Indigenous clients

Experiences of not visiting a health professional when required

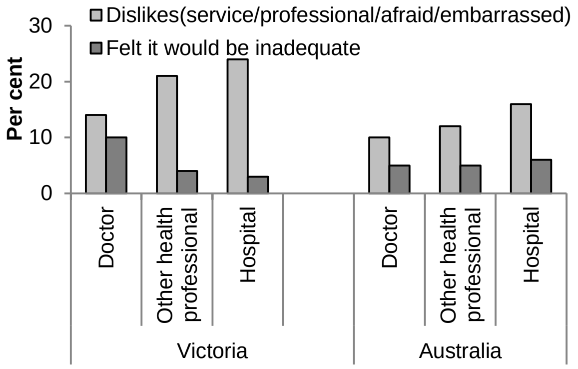
The 2004–05 National Aboriginal and Torres Strait Islander Health Survey collected data on the reasons why Indigenous Australians did not visit a doctor or other health professional in the last 12 months when they needed to.

- In 2004–05 in Victoria, 18% of Indigenous people reported that they did not visit a doctor in the last 12 months when they needed to. Over the same period, 13% of Indigenous people did not visit other health professionals when needed and 8% did not visit a hospital when needed. These proportions are higher than those reported for Indigenous people nationally (Figure 3.11.1).
- Of those Indigenous people in Victoria who needed to visit a doctor but didn't, about 14% did not go due to dislikes of the service/professional, felt embarrassed or afraid; and 10% did not go because they felt the service would be inadequate (Figure 3.11.2). Among Indigenous people who needed to visit other health professionals but didn't, these proportions were 21% and 4% respectively; and among Indigenous Australians who needed to visit a hospital but didn't, the proportions were 24% and 3% respectively.



Source: AIHW analyses of NATSIHS 2004–05.

Figure 3.11.1: Proprotion of Indigenous people who did not attend a GP service/hospital/other health professional when needed, Victoria and Australia, 2004–05



Source: AIHW analyses of NATSIHS 2004–05.

Figure 3.11.2: Indigenous people who did not attend a GP service/hospital/other health professional when needed, by reason, Victoria and Australia, 2004–05

Aboriginal and Torres Strait Islander representation on health/hospital boards

The functions of the board of a public hospital, denominational hospital or multi-purpose service are to oversee and manage the hospital and to ensure that the services provided by the hospital comply with the requirements of the *Health Services Act 1988* and the objectives of the hospital. Public hospitals must have a board of management of between 6 and 12 people, whose names are submitted by the board and appointed by the Minister.

Metropolitan health services must have a Board of Management of between 6 and 9 people appointed by the Governor in Council on the recommendation of the Minister. The Minister must ensure that the Board includes at least one person who is able to reflect the perspectives of users of health services and that women and men are adequately represented. Members of the Boards of denominational public hospitals are not appointed by the Minister.

Information on the structure of health/hospital boards is not routinely collected by the Department of Human Services in Victoria and there is no requirement for the hospital and community health centres to record the Indigenous status of board members. Available data show that 6 of the 84 health boards in Victoria reported Aboriginal and Torres Strait Islander representation in 2002–02 and 2003–04.

Individual boards no longer exist in the Melbourne metropolitan regions. In no case is Indigenous membership mandatory, though some hospitals seek a representative from the local Aboriginal cooperative/community organisation and encourage members of minority groups when advertising opportunities for board appointments.

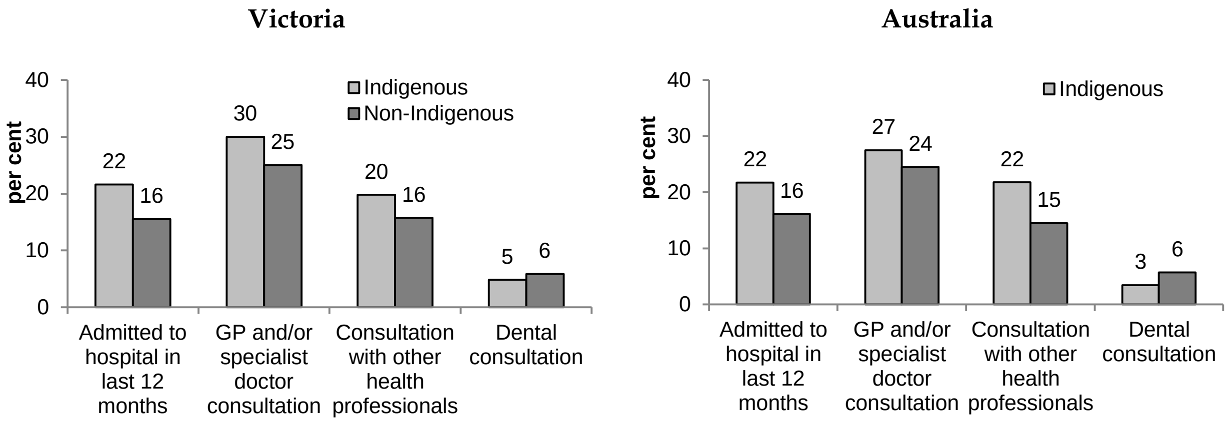
Opportunities also exist for community members to participate in hospital advisory committees. Information on the membership of these committees is not collected by the Department of Human Services.

3.12 Access to services by types of service compared with need

Access to services by types of service compared with need (for example, primary care, hospital, dental and allied health and post-acute care and palliative care)

Self-reported access to health care

- After adjusting for differences in age structure, a higher proportion of Indigenous people aged 15 and over in Victoria reported that they were admitted to hospital in the last 12 months (22%) than non-Indigenous people of the same age (16%).
- Higher proportions of Indigenous people aged 15 and over in Victoria consulted a GP and/or specialist doctor (30%) and other health professionals (20%) in the last two weeks, compared with non-Indigenous people (25% and 16% respectively).
- In the two weeks before the NATSIHS, a slightly lower proportion of Indigenous people aged 15 and over (5%) consulted a dentist, compared with non-Indigenous people (6%).
- The above trends were also observed in the proportions of Indigenous and non-Indigenous people accessing the types of health services across Australia.

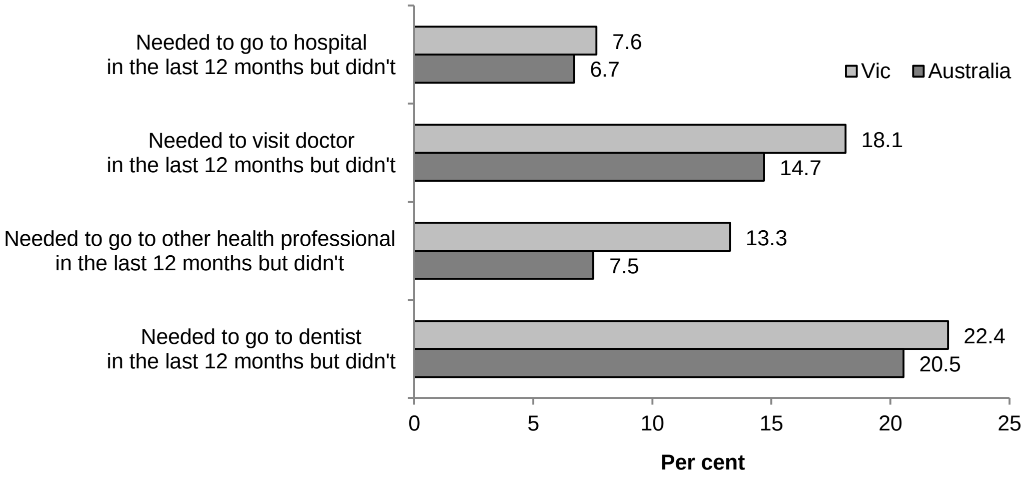


Source: ABS and AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.

Figure 3.12.1: Per cent of people aged 15 and over who accessed health care, by type of health care, within the last 12 months (hospital) or the last 2 weeks (other health care), by Indigenous status, age-standardised, Victoria and Australia, 2004–05

Whether needed to access health care and reasons why didn't

- In 2004–05 in Victoria, about 22% of Indigenous people needed to go to a dentist in the last 12 months but didn't, 18% needed to go to a doctor, 13% needed to go to another health professional and 8% needed to go to a hospital but didn't.
- Indigenous people in Victoria were more likely than Indigenous people nationally to report that they needed to access a dentist, other health professionals, a doctor or hospital but didn't.
- The most common reasons why Indigenous people in Victoria and nationally did not go to a dentist when needed were cost (28% and 29% respectively), waiting time being too long or not available at the time required (27% and 22% respectively) and felt afraid, embarrassed or a dislike of the service (26% and 21% respectively).
- The most common reason why Indigenous people in Victoria did not go to a doctor when needed was decided not to seek care (27%), followed by waiting time being too long or not available at the time required (19%), and too busy (18%).
- The most common reason why Indigenous people in Victoria and across Australia did not go to another health professional when needed was cost (both around 28%). In Victoria, the second most common reason was felt afraid, embarrassed or a dislike of the service (21%). Nationally, the second most common reason was too busy (25%).
- The most common reasons why Indigenous people in Victoria did not visit a hospital when needed were decided not to seek care for their health problem (28%) and felt afraid, embarrassed or a dislike of the service (24%). In comparison, the most common reasons for Indigenous people across Australia were decided not to seek care (25%) and transport/distance issues (19%).



Source: ABS and AIHW analyses of NATSIHS 2004–05.

Figure 3.12.2: Per cent of Aboriginal and Torres Strait Islander peoples reporting that they needed a health service at least once in the last 12 months but did not access the service, Victoria and Australia, 2004–05

Table 3.12.1: Whether needed to go to a doctor, hospital, dentist or other health professional, by reasons didn′t go, Aboriginal and Torres Strait Islander peoples, Victoria and Australia, 2004–05

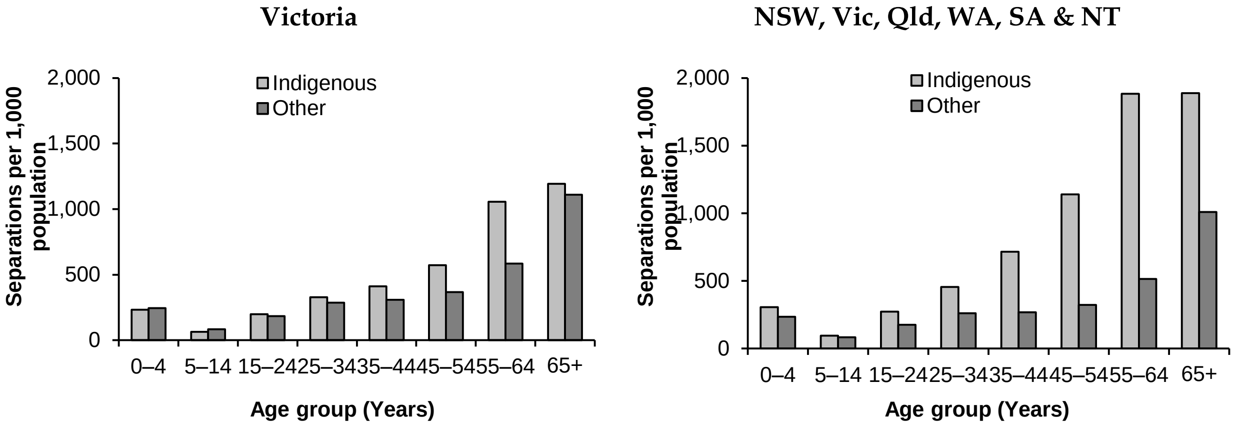
	Doctor		Hospital		Dentist		Other health professional	
	Victoria	**Australia**	**Victoria**	**Australia**	**Victoria**	**Australia**	**Victoria**	**Australia**
	%	%	%	%	%	%	%	%
Needed to go to service in the last 12 months but didn't	18	15	8	7	22	21	13	8
Reasons didn't Visit								
Cost	7	12	3	4	28	29	28	28
Transport/Distance	12	14	17	19	5	11	5	8
Waiting time too long or not available at time required	19	14	20	16	27	22	4	9
Not available in area	0	4	3	3	4	8	5	7
Too busy (including work, personal or family responsibilities)	18	24	16	16	14	14	17	25
Dislikes (service/professional/afraid /embarrassed)	14	10	24	16	26	21	21	12
Felt it would be inadequate	10	5	3	6	3	2	4	5
Decided not to seek care	27	26	28	25	9	13	17	17
Other	9	11	17	15	6	9	16	12

Source: ABS and AIHW analyses of NATSIHS 2004–05.

Hospitalisations

Hospitalisations by age

- Between July 2006 and June 2008, Indigenous people in Victoria had higher hospitalisation rates than other people in most age groups, except 0–4 and 5–14. Differences in hospitalisation rates between Indigenous and other people were particularly marked in the 45–54 and 55–64 year groups where Indigenous people were hospitalised more than one and a half (1.6 and 1.8) times the rates of other people in these age groups.
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, Indigenous people in the 45–54 and 55–64 year groups were hospitalised at 3.5 and 3.7 times the rate of other people respectively.
- In Victoria, hospitalisation rates were highest among those aged 65 and over for both Indigenous people (1,192 per 1,000) and other people (1,109 per 1,000).
- Hospitalisation rates for Indigenous people were lower in Victoria than in the six jurisdictions combined, across all age groups.



Victoria

NSW, Vic, Qld, WA, SA & NT

Source: AIHW analyses of NHMD.

Figure 3.12.3: Age specific hospitalisation rates, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

3.14 Access to after-hours primary care

Access to after-hours primary health care by Aboriginal and Torres Strait Islander people

After-hours primary medical care relates to 'medical care provided at any time outside 8am to 6pm on weekdays (that are not public holidays) and 8am to 1pm on a Saturday'

Emergency department episodes

There are many reasons that people may present at after-hours emergency departments including difficulties surrounding accessing primary care during school and work hours.

- From 2006–07 to 2007–08, there were 1,257,457 episodes of care provided after-hours in emergency departments in Victoria, 14,806 (1.2%) of which were for patients identified as Aboriginal or Torres Strait Islander. Almost half of all presentations to emergency departments by Indigenous and non-Indigenous patients were for after-hours care (48% and 47% respectively) (Table 3.14.1).
- From 2006–07 to 2007–08, there were 765,710 episodes of after-hours care provided by emergency departments for triage categories 4 (semi-urgent) and 5 (non-urgent) in Victoria, 9,923 (1.3%) of which were for patients identified as Aboriginal and Torres Strait Islander. For both Indigenous and non-Indigenous people, about 46% of episodes to emergency departments for triage categories semi-urgent and non-urgent were after-hours.
- About 67% of Indigenous presentations to emergency departments after-hours in Victoria were for semi-urgent or non-urgent triage categories.

Table 3.14.1: Presentations to emergency departments after-hours by Indigenous status of the patient, Victoria and Australia, 2006–07 to 2007–08

	Semi-urgent & non-urgent		Total presentations	
	Victoria	**Australia**	**Victoria**	**Australia**
After-hours presentations				
Indigenous	9,923	139,703	14,806	225,183
Non-Indigenous	753,759	2,711,173	1,238,419	4,703,231
Not stated	2,028	119,030	4,232	214,801
Total	**765,710**	**2,969,907**	**1,257,457**	**5,143,215**
Total emergency department presentations				
Indigenous	21,497	302,457	31,001	467,115
Non-Indigenous	1,647,782	5,889,981	2,613,040	9,915,822
Not stated	4,434	246,337	8,735	432,767
Total	**1,673,713**	**6,438,775**	**2,652,776**	**10,815,704**
Proportion of after-hours presentations out of all presentations to ED				
Indigenous	46.2	46.2	47.8	48.2
Non-Indigenous	45.7	46.0	47.4	47.4
Not stated	45.7	48.3	48.4	49.6
Total	**45.7**	**46.1**	**47.4**	**47.6**

Notes

1. After-hours is defined by the MBS definition (excluding consideration of public holidays): on Sunday, before 8am or after 1pm on a Saturday, or at any time other than 8am to 8pm on a weekday.
2. Caution should be used in the interpretation of these data because the identification of Indigenous patients is not considered to be complete and completeness varies among the jurisdictions.
3. The quality of Indigenous identification is considered acceptable for the purpose of analysis only for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory (public hospitals only).
4. The Non-admitted Patient Emergency Department Care data is required to be reported for hospitals categorised as peer group A or B in the previous year's Australian hospital statistics. In addition, data are provided for some smaller hospitals by some states and territories.
5. The coverage of the National Non-admitted Patient Emergency Department Care Database is estimated at about 78% of records for 2006–07 and for 2007–08. Therefore this data will only cover a sub-set of after-hours emergency episodes of care.

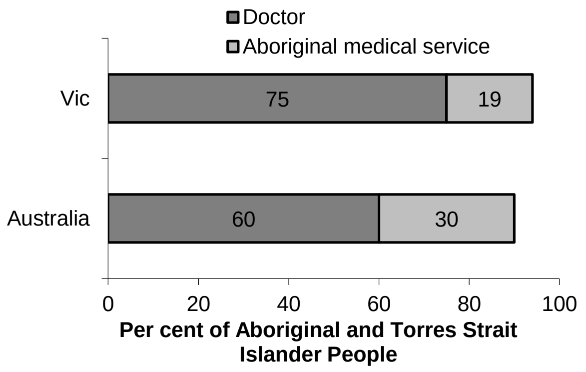
Source: AIHW analyses of National Non-admitted Patient Emergency Department Care Database (NAPEDCD).

3.15 Extent to which individuals have a regular GP or health service

Number and proportion of individuals who have a regular general practitioner (GP) or health service

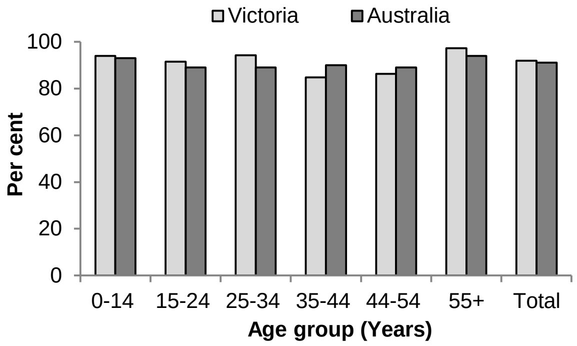
Whether visited same doctor/health service

- In 2004–05 in Victoria, 75% of Indigenous people reported that they usually went to a doctor if they had a problem with their health, and 19% reported they went to an Aboriginal medical service (Figure 3.15.1).
- Nationally, 60% of Indigenous people went to a doctor if they had a problem with their health, and 30% went to an Aboriginal medical service.
- In both Victoria and nationally, Indigenous people aged 55 and over were most likely to report that they usually went to the same doctor or health service (97% and 94% respectively) (Figure 3.15.2).
- A similar proportion of Indigenous people in Victoria (92%) and Australia (91%) usually went to the same GP or medical service.



Source: ABS and AIHW analyses of NATSIHS 2004–05.

Figure 3.15.1: Where usually go if problem with health, Aboriginal and Torres Strait Islander peoples, Victoria and Australia, 2004–05



Source: ABS and AIHW analyses of NATSIHS 2004–05.

Figure 3.15.2: Whether usually goes to the same GP/medical service, by age group, Aboriginal and Torres Strait Islander peoples, Victoria and Australia, 2004–05

3.16 Care planning for clients with chronic diseases

The use of care planning for the management of chronic disease among the Aboriginal and Torres Strait Islander population

Asthma plans

- In 2004–05 in Victoria, about 5% of Indigenous people and 8% of non-Indigenous people in *Non-remote* areas reported having asthma as a long-term condition. These proportions were lower than the national prevalence (18% of Indigenous people; 10% of non-Indigenous) (Table 3.16.1).
- About 23% of Indigenous people with asthma in non-remote areas in Victoria had a written asthma plan compared with 27% of the non-Indigenous people with asthma. These proportions were similar nationally (25% of Indigenous people with asthma had a plan; 22% of non-Indigenous).
- The proportion of Indigenous people in Victoria with asthma who had a written asthma plan was highest among those aged 0–4 and 5–14 (62% and 39% respectively) (Figure 3.16.1).

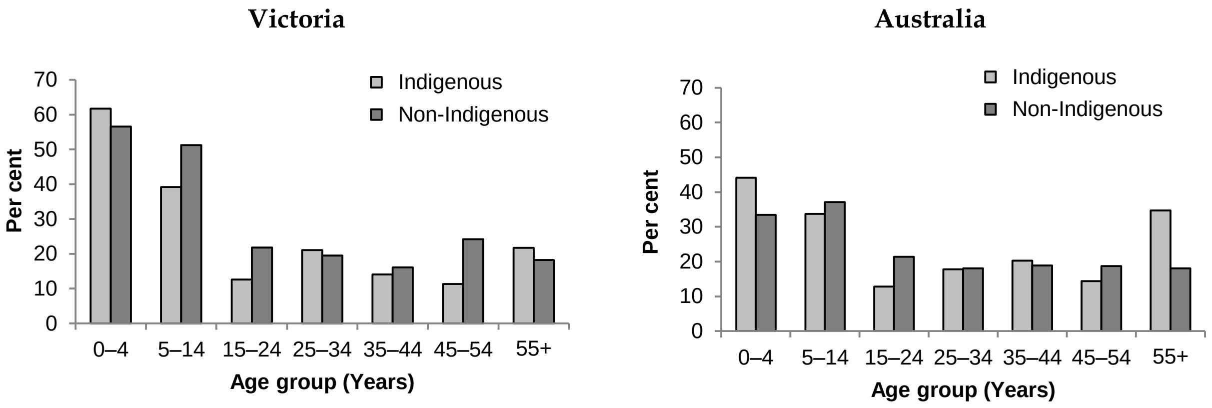
Table 3.16.1: Whether person(s) in *Non-remote* areas have a written asthma action plan by Indigenous status, *Non-remote* areas, Victoria and Australia, 2004–05

Jurisdiction	Does have a written asthma action plan	Does not have a written asthma action plan	Never heard of a written asthma action plan	Total[(a)]	Total with asthma	Total people with asthma
	%	%	%	%	%	No.
Victoria						
Indigenous	22.9	70.1	6.3	100.0	4.7	5,904
Non-Indigenous	26.5	65.8	7.5	100.0	7.7	496,570
Rate ratio	0.9	1.1	0.8	. .	0.6	. .
Australia						
Indigenous	**24.7**	**66.9**	**6.9**	**100.0**	**17.7**	**59,777**
Non-Indigenous	**22.4**	**71.9**	**5.2**	**100.0**	**10.2**	**1,939,245**
Rate ratio	**1.1**	**0.9**	**1.3**	**. .**	**1.7**	**. .**

(a) Includes 'not known if has a written asthma action plan', which represents 1.5% of Indigenous people and 0.5% of non-Indigenous people with asthma in *Non-remote* areas.

Note: Data have been directly age-standardised using the 2001 Australian Standard population.

Source: AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.



Source: AIHW analyses of NATSIHS 2004–05 and NHS 2004–05.

Figure 3.16.1: Proportion of people with asthma in *Non-remote* areas who have a written asthma action plan, by Indigenous status and age group, *Non-remote* areas, Victoria and Australia, 2004–05

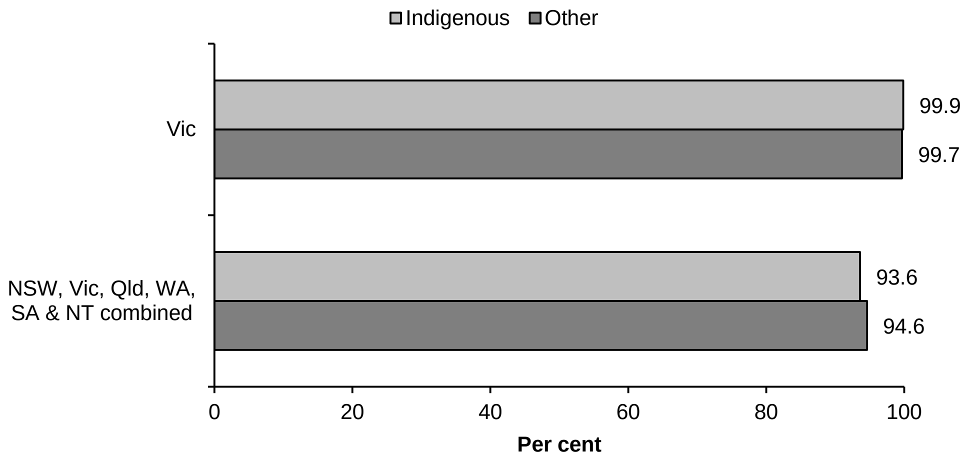
3.17 Accreditation

The proportion of:

- *Aboriginal and Torres Strait Islander separations and patient days in accredited public hospital as a percentage of all Aboriginal and Torres Strait Islander separations and patient days in public hospitals*
- *accredited general medical practice service establishments by proportion of Indigenous populations in Divisions of General Practice*

Hospital accreditation

- Between July 2006 and June 2008 in Victoria, almost all (99.9% and 99.7%) of hospital admitted episodes for Indigenous and other people occurred in accredited hospitals (Figure 3.17.1).
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, 94% of hospital admitted episodes for Indigenous people occurred in accredited hospitals compared with 95% of episodes for other people.

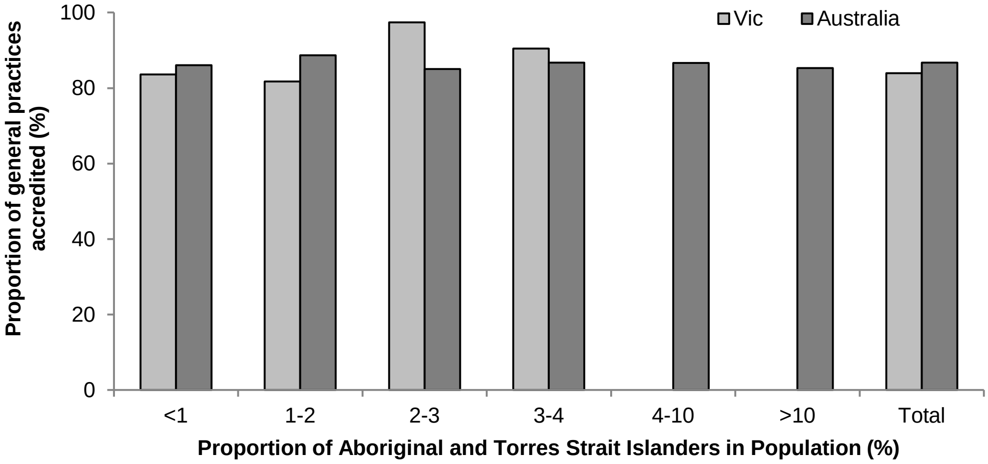


Source: AIHW analyses of National Public Hospitals Establishement Database.

Figure 3.17.1: Per cent of hospital admitted patent episodes in accredided hospitals, by Indigenous status, Victoria and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

General practice accreditation

- In 2008–09 in Victoria, 1,047 general practice divisions were accredited and 200 divisions were registered but not yet accredited. The proportion of accredited divisions among all the registered divisions was 84% in Victoria, compared with 87% nationally.
- In Victoria, the proportion of accredited general practice divisions ranged from 82% in areas where 1–2% of the population was Indigenous to 97% in areas where 2–3% or more than 10% of the population was Indigenous (Figure 3.17.2). Note that there were no general practices divisions in Victoria where 4–10% or more than 10% of the population was Indigenous.
- In Australia, the proportion of accredited general practice divisions ranged from 85% in areas where 2–3% of the population was Indigenous to 89% in areas where 1–2% of the population was Indigenous.



Source: AIHW analyses of Australian General Practice Accreditation Limited (AGPAL) and General Practice Accreditation Plus (GPA+) data.

Figure 3.17.2: Proportion of General Practices accredited, by proportion of Aboriginal and Torres Strait Islander peoples in population for Divisions of General Practice, Victoria and Australia, 2008–09

3.18 Aboriginal and Torres Strait Islander people's training for health-related disciplines

The proportion of Aboriginal and Torres Strait Islander Australians in tertiary education for health-related disciplines

Higher education sector

- In 2008 in Victoria:
  - there were 102 enrolments in health-related courses by Indigenous undergraduate students. This made up 0.6% of total undergraduate enrolments.
  - there were 15 completions in health-related courses by Indigenous undergraduate students. This made up 0.4% of total undergraduate completions (Table 3.18.1).
- In 2008 in Australia, there were 1,120 Indigenous undergraduate students enrolled in health-related courses, and 152 Indigenous undergraduate students who completed a health-related course. This made up 1.6% and 1.0% of total undergraduate enrolments and completions in health-related courses respectively.
- In 2008 in Victoria, the most common type of health-related course in which Indigenous students were enrolled was nursing (65 enrolments) followed by public health (12 enrolments).
- Enrolments in nursing had the highest Indigenous representation of all health-related university courses in Victoria (1.0%), followed by public health (0.8%). Nationally, public health had the highest Indigenous representation of all health-related university courses for both enrolments and completions.

Table 3.18.1: Number of undergraduate students enrolled and completed health-related courses in the Tertiary Education sector, by qualification type, Victoria and Australia, 2008

	Enrolled			Completed		
	Aboriginal & Torres Strait Islander	**Total**	**Per cent Aboriginal & Torres Strait Islander (%)**	**Aboriginal & Torres Strait Islander**	**Total**	**Per cent Aboriginal & Torres Strait Islander (%)**
			Victoria			
Medical studies	11	2,810	0.4	n.p.	578	n.p.
Nursing	65[(b)]	6,612[(b)]	1.0	n.p.	1,693[(b)]	n.p.
Pharmacy	n.p.	970	n.p.	0	223	0.0
Dental studies	n.p.	400	n.p.	n.p.	75	n.p.
Optical science	n.p.	184	n.p.	0	36	0.0
Public health	12	1,431	0.8	n.p.	270	n.p.
Radiography	0	160	0.0	0	38	0.0
Rehabilitation therapies	10	3,403	0.3	n.p.	677	n.p.
Total[(a)]	**102**	**15,848**	**0.6**	**15**	**3,568**	**0.4**
			Australia			
Medical studies	128	12,165	1.1	13	2,024	0.6
Nursing	582	32,807	1.8	71	7,453	1.0
Pharmacy	n.p.	4,643	n.p.	n.p.	964	n.p.
Dental studies	20	2,330	0.9	n.p.	503	n.p.
Optical science	n.p.	547	n.p.	0	133	0.0
Public health	298	4,486	6.6	47	754	6.2
Radiography	n.p.	1,883	n.p.	n.p.	435	n.p.
Rehabilitation therapies	73	12,273	0.6	12	2,365	0.5
Total[(a)]	**1,120**	**70,953**	**1.6**	**152**	**14,601**	**1.0**

(a) The data takes into account the coding of Combined Courses to two fields of education. As a consequence, counting both fields of education for Combined Courses means that the totals may be less than the sum of all fields of education.

(b) There were 16 enrolments and 4 completions for Indigenous students in nursing at national level that were not assigned a state/territory but were classified as ‘multi-state’.

Source: AIHW analyses of Department of Education, Employment and Workplace Relations (DEEWR) Higher Education Statistics Collection.

Vocational education and training (VET) sector

- In 2008 in Victoria, 415 Indigenous students enrolled in health-related courses in the VET sector, and 23 Indigenous students completed a health-related course in the VET sector. This made up 1.2% of total VET enrolments and 0.9% of total VET completions in health-related courses in Victoria.
- In Australia, 6,143 Indigenous students enrolled in health-related courses in the VET sector, and 395 Indigenous students completed a health-related course in the VET sector. This made up 6.4% of total VET enrolments and 3.8% of total completions in health-related courses.
- In Victoria, Indigenous VET students were most commonly enrolled in other health courses (253 enrolled), followed by public health (84 enrolled), whilst the most commonly completed VET health-related course for Indigenous students was public health (13 completed).
- In Australia, the most common type of health-related course in which Indigenous VET students were enrolled or had completed in 2008 was public health (4,094 enrolled and 182 completed).
- In Victoria, other health had the highest Indigenous representation (1.6%) of all VET health-related courses enrolled in 2008; whilst nationally, public health had the highest Indigenous representation (10.8%).

Table 3.18.2: Vocational education and training (VET) sector students enrolled and completed health-related courses, Victoria and Australia, 2008

	Enrolled			Completed		
	Aboriginal & Torres Strait Islander	Total	Per cent Aboriginal & Torres Strait Islander (%)	Aboriginal & Torres Strait Islander	Total	Per cent Aboriginal & Torres Strait Islander (%)
				Victoria		
Medical studies	0	271	0.0	0	0	. .
Nursing	58	7,854	0.7	6	863	0.7
Pharmacy	0	44	0.0	0	0	. .
Dental studies	8	876	0.9	n.p.	298	n.p.
Optical science	n.p.	439	n.p.	0	16	0.0
Public health	84	8,738	1.0	13	644	2.0
Rehabilitation therapies	n.p.	315	n.p.	n.p.	36	n.p.
Complementary therapies	6	791	0.8	0	180	0.0
Other health	253	15,894	1.6	n.p.	390	n.p.
Total	**415**	**35,222**	**1.2**	**23**	**2,427**	**0.9**
				Australia		
Medical studies	n.p.	507	n.p.	0	n.p.	0.0
Nursing	421	19,503	2.2	98	3,090	3.2
Pharmacy	0	68	0.0	0	n.p.	0.0
Dental studies	70	3,886	1.8	11	1,307	0.8
Optical science	n.p.	969	n.p.	0	109	0.0
Public health	4,094	38,045	10.8	182	2,592	7.0
Rehabilitation therapies	11	661	1.7	n.p.	159	n.p.
Complementary therapies	59	3,221	1.8	n.p.	866	n.p.
Other health	1,483	29,734	5.0	94	2,268	4.1
Total	**6,143**	**96,594**	**6.4**	**395**	**10,426**	**3.8**

Source: AIHW analyses of National Centre for Vocational Education Research (NCVER), National VET Provider Collection 2008.

3.19 Expenditure on Aboriginal and Torres Strait Islander health compared with need

Expenditure on health for Aboriginal and Torres Strait Islander people

This measure is presented on both a total population basis and per capita basis and disaggregated to reflect expenditure on acute health care, primary health care and population health, as a reflection of met need.

- In 2006–07 in Victoria, the State Government was estimated to have spent, on average, $3,321 per Indigenous person compared with $1,537 per non-Indigenous person. This represents an Indigenous/non-Indigenous expenditure ratio of 2.2:1 (Table 3.19.1).
- Overall throughout Australia, state/territory governments were estimated to have spent, on average, $3,864 per Indigenous people compared with $1,651 per non-Indigenous person, equating to an Indigenous/non-Indigenous expenditure ratio of 2.3:1.
- The Victorian Government spent more per person for Aboriginal and Torres Strait Islander people than for non-Indigenous people for almost all types of health goods and services, except patient transport which was equal.
- The highest expenditure per person for Indigenous and non-Indigenous people in Victoria was for public hospital services ($2,180 and $1,229 respectively) followed by admitted patient services ($1,663 and $996 respectively).

Table 3.19.1: Estimated state/territory health expenditure per person for Indigenous and non-Indigenous people, by program, Victoria and Australia, 2006–07

	Expenditure per person ($)			
	Victoria		**Australia**	
Health good or service type	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
Public hospital services				
Admitted patient services[(a)]	1,663	996	2,102	1,000
Non-admitted patients	518	233	627	282
Subtotal	*2,180*	*1,229*	*2,728*	*1,282*
Patient transport	76	76	194	76
Community health	702	132	665	174
Public health	259	53	155	55
Dental	36	24	59	26
Research	69	25	16	16
Health administration n.e.c.	0	0	. .	. .
Total	**3,321**	**1,537**	**3,846**	**1,651**
Indigenous: Non-Indigenous ratio	**2.2**	. .	**2.3**	. .

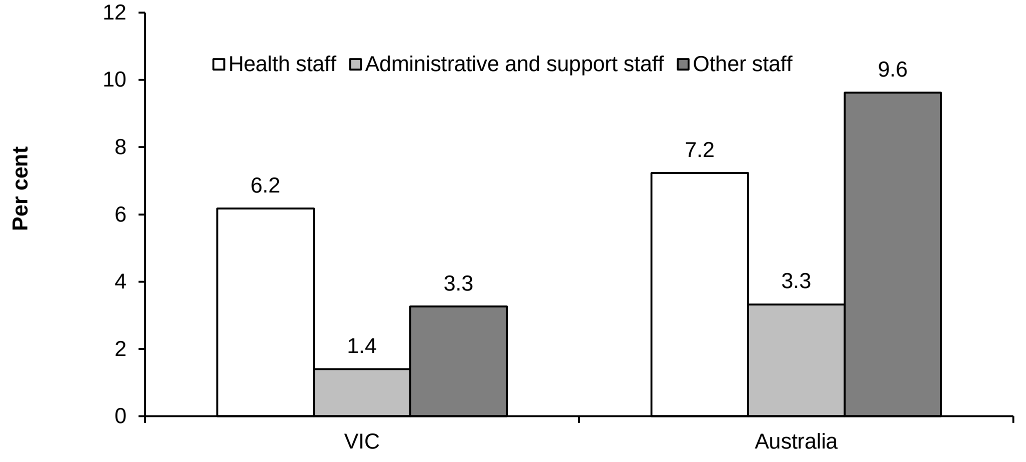
(a) Admitted patient expenditure adjusted for Aboriginal and Torres Strait Islander people's under-identification.

Source: AIHW 2009.

3.20 Recruitment and retention of clinical and management staff (including GPs)

The recruitment and retention of qualified clinical and management staff to provide effective health care to meet Aboriginal and Torres Strait Islander health care needs

- As at 30 June 2008 in Victoria, 17.2 (6.2%) of full-time equivalent (FTE) health staff positions, 2 (1.4%) of administrative and support staff positions and 0.4 (3.3%) of other staff positions funded by the Australian Government were vacant.
- Nationally, 7.2% of the FTE Australian Government funded health staff positions, 3.3% of administrative and support staff positions and 9.6% of other staff positions were vacant as at 30 June 2008.



Source: AIHW analyses of OSR data 2010.

Figure 3.20.1: Vacancies as a percentage of total positions (FTE) in Aboriginal health care services, Victoria and Australia, as at 30 June 2008

Appendix 1 Data sources and quality

The Australian Childhood Immunisation Register

The ACIR is a national register that records details of vaccinations given to children under 7 who live in Australia. Immunisation coverage is produced at the national, state/territory and local level on a quarterly basis using the ACIR data.

Coverage estimates for Aboriginal and Torres Strait Islander children include only those who identify as such and are registered on the ACIR. They may not be representative of all Aboriginal and Torres Strait Islander children, and should therefore be interpreted with caution.

Children for whom Indigenous status was not stated are included with the 'non-Indigenous' under the 'other' category.

Vaccination coverage is a measure of the proportion of people in a target population who have received the recommended course of vaccinations at a particular age.

Data quality issues relating to reporting of Indigenous Australians

Indigenous status question

Indigenous identification is collected via a 'yes/no' flag on immunisation encounter forms, and through Medicare offices when any changes are made to personal details. Medicare uses the standard definition of Indigenous status; however, these details are converted to a 'yes' or 'no' when reports on vaccination coverage are produced from the ACIR. The immunisation encounter form method of Indigenous identification is voluntary and relies on the immunisation provider seeking the information. Improving Indigenous identification on the ACIR database is an issue being investigated by the Australian Government.

Under-identification

General limitations of data available from the ACIR must be considered when used to estimate vaccination coverage. Coverage could be overestimated or underestimated, depending on whether those children not identified as Indigenous Australian have higher or lower than average vaccination coverage. A recent study (Rank and Menzies 2007) found that the reporting of Indigenous status on the ACIR has improved from 42% of the estimated national cohort of Indigenous children aged 12 to 14 months in 2002 to 95% in 2005. The ACIR holds records only for children up to seven years of age.

At the time of writing its report *Vaccine-preventable diseases and vaccination coverage in Aboriginal and Torres Strait Islander people, Australia 1999 to 2002* the National Centre for Immunisation Research and Surveillance of Vaccine-Preventable Diseases stated that: 'Indigenous status is currently either not routinely reported or not transferred to the ACIR from the Australian Capital Territory, Queensland and Tasmania, so these jurisdictions were not included in this report' (Menzies et al. 2004).

Vaccination coverage data from the ACIR and the NATSIHS are not directly comparable because of the differences in the cohort used, population coverage, data collection method, method of calculating 'fully immunised' and vaccines included.

Selected other data quality issues

The Australian Childhood Immunisation Register (ACIR)

Registrations

The ACIR was established in 1996. The data used are from an administrative data collection, for which there is an incentive payment for notification, and further incentives for parents to have their child's vaccination status up to date. The register is linked to the Medicare enrolment register and about 99% of children are registered with Medicare by 12 months of age. Immunisations are notified to Medicare Australia by a range of providers including general practitioners, councils, Aboriginal medical services and state and territory health authorities.

Data have been reported using the ACIR definition of fully-immunised children; that is, children who have received all age-appropriate immunisations for diphtheria, tetanus, pertussis, hepatitis B, poliomyelitis, haemophilus influenza type B, measles, mumps and rubella. The varicella vaccine was added to the NIPS for children born from 1 May 2004; the pneumococcal vaccine for children born from 1 January 2005; and the rotavirus vaccine for children born from 1 May 2007. Consequently, data for these vaccinations are not available for the cohort of children being reported for this indicator in the report.

Although there are now more vaccines than reported on the National Immunisation Program Schedule for children, these are not in scope for those children aged 5 at the time of reporting.

A minimum 3-month lag period is allowed for late notification of immunisations to the register. Data have been presented for children born between 1 January 2004 and 31 March 2004.

The ACIR automatically includes all children aged under 7 who are enrolled in Medicare as its denominator to calculate vaccine coverage rate (ABS and AIHW 2006). It is estimated that about 99% of children are registered with Medicare by 12 months of age. However, it is not possible to determine accurately whether this is true of the Indigenous Australian child population, nor whether Indigenous children are less likely to be enrolled in Medicare. Children not registered with Medicare are added to the ACIR when details of an eligible immunisation are supplied by a recognised immunisation provider (DoHA 2006).

Australia and New Zealand Dialysis and Transplant Registry (ANZDATA)

The data reported here on Indigenous people with end-stage renal disease (ESRD) have been supplied by ANZDATA. 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.

In Australia, people who develop ESRD and undertake dialysis or kidney transplantation are registered with ANZDATA. The registry is the most comprehensive and reliable source of information on people treated for ESRD. It compiles data on incidence and prevalence, renal complications, co-morbidities and patient deaths. The current registry began in 1977 and is coordinated by the Queen Elizabeth Hospital in Adelaide. All relevant hospitals and related satellite units in Australia and New Zealand participate.

Data quality issues relating to reporting of Indigenous Australians

Indigenous status question

Patients in the registry are identified according to 'racial origin'. Aboriginal people and Torres Strait Islanders are identified separately, but separate results are not always published for Torres Strait Islanders because of small numbers of patients.

Under-identification

The completeness of identification of Indigenous people in the registry is not known. However the nature of the illness means that treatment centres have prolonged contact with patients and therefore have a considerable opportunity to collect accurate information (Disney et al. 1997).

Indigenous identification is based on self-identification and discussion with the treating nurse or physician. There is often significant concern about the quality of Indigenous identification in morbidity, mortality and demographic data sets. However, racial identification in the ANZDATA registry is reported to be good. A survey form is completed for all patients at the commencement of haemodialysis; this survey has a question about 'Racial origin' and includes a prompt regarding Indigenous status. ESRD patients have regular contact with renal services from the time of diagnosis, through intensive maintenance therapy until death. There is heightened awareness of renal disease in Indigenous Australians and multiple opportunities exist to reconfirm data accuracy (Cass et al. 2001).

Selected other data quality issues

ANZDATA

Data sets provided for analysis in this report are de-identified. Data is collected from all dialysis and transplant units in Australia and New Zealand at 31 December. 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 that date.

National Community Mental Health Care Database

Information on the use of community mental health services by Indigenous people is available from the AIHW National Community Mental Health Care Database (NCMHCD). The NCMHCD is a collation of data on specialised mental health services provided to non-admitted patients in both government-operated community and hospital-based ambulatory care services for example community mental health services, outpatient clinics and day clinics. Information collected in the database is a nationally agreed set of common data elements collected by service providers based on the National Minimum Data Set for Community Mental Health Care.

The quality of Indigenous identification in this database varies by jurisdiction. In 2006–07, Queensland, Western Australia, Tasmania, the Northern Territory and the Australian Capital Territory reported that the quality of their data was suitable for analysis.

As with hospitalisation data, service contacts for which the Indigenous status of the client was not reported have been included with hospitalisations for non-Indigenous people under the 'other' category.

Data quality issues relating to reporting of Indigenous Australians

Indigenous status question

All states and territories use the standard ABS question of Indigenous status.

However, there may be some quality issues regarding the coding of more specific details (that is, 'Aboriginal', 'Torres Strait Islander', 'Both Aboriginal and Torres Strait Islander'). Queensland, Western Australia, Tasmania, the Northern Territory and the Australian Capital Territory reported that the quality of their data was suitable for analysis. South Australia indicated that there has been limited analysis of the quality of Indigenous status data. Therefore, the quality of the data is uncertain at this stage.

Under-identification

The quality of the Indigenous identification in this database varies by jurisdiction and should be interpreted with caution.

The number of service contacts per 1,000 population for Aboriginal and Torres Strait Islander people varies among the states and territories.

The 'other Australians' category includes contacts where Indigenous status was missing or not reported (around 7% of all contacts).

All state and territory health authorities provided information on the quality of the data for the NCMHCD 2006–2007. The Northern Territory estimates that there could be a deficit of 25-35% of service contact records. Coverage for most other jurisdictions is estimated to be 95-100% (AIHW METeOR).

The numerator includes people who receive a service in one jurisdiction but normally live in another. There will be some mismatch between numerator and denominator in areas with cross-border flows.

DEEWR Higher Education Statistics Collection

The Australian Government Department of Education, Employment and Workplace Relations (DEEWR) is responsible for the Higher Education Statistics Collection, which includes information from higher education institutions such as universities and colleges of advanced education. The collection contains statistics relating to students enrolled in higher education courses between 1 January and 31 December of each year.

Although universities design and produce their own enrolment forms, DEEWR has provided institutions with suggested wording for questions relating to Indigenous status (ABS 2003).

Higher education data could not be provided by remoteness area because DEEWR does not collect information on where a student comes from. Postcode of home location is often used as a substitute, but it is a poor measure because many students report the campus postcode as their home postcode. Since most campuses are in major cities, using this variable results in participation rates that are incorrectly biased towards *Major cities* at the expense of *Regional and remote* areas.

Selected other data quality issues

DEEWR Higher Education Schools Statistics Collection

The Higher Education Schools Statistics Collection only includes information from higher education institutions in Australia as determined under the Higher Education Funding Act 1988. This includes:

- institutions that receive block operating grant funding for teaching and research activities
- other public higher education institutions that receive some level of operating grant funding
- the Australian Film, Television and Radio School, the National Institute of Dramatic Art and the Australian Defence Force Academy.

Private institutions are not required to report statistical data to DEEWR and are therefore outside the scope of the collection (ABS 2003). The collection of data from private higher education institutions is being trialled (ABS 2004).

Institutions receive an electronic help file detailing what information is required to be furnished. Universities design and produce their own statistical information (enrolment) forms to collect the required information from students. DEEWR has provided institutions with suggested wording for questions relating to Indigenous status, language spoken at home and disability (ABS 2003).

About 3% of students in this data collection have a ‘not stated’ Indigenous status. At the moment these are recorded as non-Indigenous, although plans are under way to record the ‘not stated’ responses separately.

National Non-admitted Patient Emergency Department Care Database

The National Non-admitted Patient Emergency Department Care Database (NAPEDCD) is a national collection of de-identified data on emergency department episodes. The database is held at the AIHW and includes episode-level data on non-admitted patients treated in the emergency departments of public hospitals. These hospitals are classified in the public hospital peer groups of principal referral and specialist women's and children's hospitals and large hospitals.

The NAPEDCD includes data on the type and length of emergency department visit, triage category, waiting times, patient demographics, arrival mode and departure status.

Data quality issues relating to reporting of Indigenous Australians

Indigenous status question

This data set includes the standard Indigenous status question.

Under-identification

The quality of the data provided for Indigenous status in 2007–08 for emergency department presentations varied by jurisdiction. Most states and territories advised that the Indigenous status data collected in an emergency department setting could be less accurate than the data collected for admitted patients; the data should therefore be used with caution (AIHW 2008a).

Selected other data quality issues

National Minimum Data Set—non-admitted patient emergency department care

The non-admitted patient emergency department care data are required to be reported for hospitals categorised as peer group A or B in the previous year's Australian hospital statistics. In addition, data are provided for some smaller hospitals by some states and territories.

The coverage of the National Non-admitted Patient Emergency Department Care Database is estimated at about 78% of records for 2006–07 and 2007–08. Therefore these data will only cover a subset of emergency episodes of care.

The identification of Indigenous patients varies among jurisdictions and is not considered complete. The level of coverage for Indigenous occasions of service is likely to be overestimated because proportionally more Indigenous Australians live in rural and *Remote* areas. Therefore these data may not be indicative of the level of use of emergency department services by Indigenous people nationally (AIHW 2008a).

It is recommended that these data only be reported as numbers, not rates, because the denominator would include Indigenous Australians not covered in this collection.

National Schools Statistics Collections (NSSC) 2009

Data for this measure come from the ABS National Schools Statistics Collection (NSSC), a collaborative arrangement between state, territory and government education departments and the ABS. The NSSC is an annual collection of data on schools, students, staff in primary and secondary schools throughout Australia. Student data are collected through a school census in August of each year and selected results are published annually by the ABS in *Schools Australia*. The data for this census is collected from State Education authorities (government schools) and the Department of Education Science and Training (DEST) (non-government schools), according to agreed standard definitions, instructions and tabulations developed by the ABS. The full-time plus part-time School Participation Rates (SPR) were added to this publication for the first time in 2009.

Care should be taken when comparing attainment outcomes for Indigenous students because of the small number of Indigenous students represented.

Apparent retention rates

Apparent retention rates are the percentage of full-time students of a given cohort group who continue from the start of secondary schooling to a specified year level. The term 'apparent' is used because the retention rate does not account for students repeating a year of school or migrating in or out of the Australian school student population or between states/territories. All full-time students enrolled at a school, including 'VET (vocational education and training) in Schools' students, but excluding people completing Year 12 through a vocational education facility, are included in retention calculations.

Year 10 apparent retention rates: Year 10 students as a proportion of the corresponding cohort from the first year of secondary schooling (Year 7/8).

Year 12 apparent retention rates: Year 12 students as a proportion of the corresponding cohort from the first year of secondary schooling (Year 7/8) or as a proportion of the corresponding cohort from Year 10.

Year 12 attainment rate: The proportion of Year 11 students who went on to achieve a Year 12 certificate.

Data quality issues relating to reporting of Indigenous Australians

Indigenous status question

Although the Ministerial Council on Education, Employment, Training and Youth Affairs agreed to use the standard Indigenous status question in the schools sector, this has still not been implemented in some jurisdictions.

Under-identification

Parents or guardians are asked to identify their child as Aboriginal, Torres Strait Islander, both or neither, when enrolling for the first time. Provision of Indigenous status is not generally mandatory and if this section of the enrolment form is left blank, 'not stated' is recorded on the enrolment database. The incompleteness of Indigenous identification means the number of students recorded as Indigenous is an underestimate of the Aboriginal and Torres Strait Islander student population.

Selected other data quality issues

National Schools Statistics Collection

Changes affecting this release

In 2009, changes to the processing of Northern Territory enrolment data will affect comparisons with previous years of all numbers drawing on student data for the Northern Territory. In addition, while Tasmanian Education underwent a significant restructure of post-Year 10 education in 2009, processes were undertaken, by the Tasmanian Department of Education, to ensure that data provided fully complied with collection definitions.

Retention data

There is no Australia-wide standard method of allocating students and classes to a certain year of school education (grade) and a number of schools do not maintain a formal grade structure. Students at these schools have been allocated to equivalent grades where possible, but otherwise appear against the ungraded category in either the primary or secondary level of school education.

Care should be exercised in the interpretation of apparent retention rates, because the method of calculation does not take into account a range of factors. At the Australia level, these include students repeating a year of education, migration and other net changes to the school population. At lower levels of disaggregation, additional factors affecting the data, such as enrolment policies (which contribute to different age/grade structures between states and territories), inter-sector transfers and interstate movements of students, have not been taken into account. These and other factors affecting the interpretation of apparent retention rates are being looked at, where possible, in the ABS's review of apparent retention rates.

Particularly in small jurisdictions, relatively small changes in student numbers can create apparently large movements in retention rates. In addition, the rates in the smaller jurisdictions may also be noticeably affected by changes in such factors as the proportion of ungraded and/or mature aged students from year to year. The inclusion or exclusion of part-time students can also have a significant effect on apparent retention rates, especially in South Australia, Tasmania and the Northern Territory which have relatively large proportions of part-time students (ABS 2010a).

Attainment data

The following points should be considered when interpreting attainment statistics:

- Full-time and part-time students were included in this analysis
- Because of the small number of Indigenous students represented, care should be taken when comparing attainment outcomes for Indigenous students.

National Centre for Vocational Education Research

The National Centre for Vocational Education Research is Australia's main provider of vocational education and training (VET) sector research and statistics. VET is a national system designed to give workers the skills for particular occupations and industries. The VET sector includes providers that receive public VET funding, such as technical and further education organisations, higher education institutions, other government providers (for example, agricultural colleges), community education providers, government-funded private registered training organisations, schools funded through government allocations for VET, and all other Commonwealth and state recurrent and specific-purpose funded VET, regardless of the location of the training organisation.

Selected other data quality issues

National Centre for Vocational Education Research data

This collection gathers information from providers (in receipt of public VET funding) about activity of the VET system in Australia. The collection encompasses all delivery funded wholly or in part from public funds.

Non-identification rates for Indigenous students in these data are high. Care also needs to be taken when comparing data across jurisdictions for load pass rates, as average module durations vary across jurisdictions (SCRGSP 2005b).

National Perinatal Data Collection

Data for this measure come from the Australian Institute of Health and Welfare (AIHW) National Perinatal Epidemiology and Statistics Unit National Perinatal Data Collection (NPDC).

Data on birthweight is collected as part of the Perinatal National Minimum Data Set. Each state and territory has a perinatal collection based on birth notifications completed by midwives and other staff, using information obtained from mothers and from hospital and other records. Some of these data are provided in electronic format annually to the AIHW National Perinatal Epidemiology and Statistics Unit. Perinatal notification forms are completed in Australia for all births of 20 weeks or more gestation, or a birthweight of 400 grams or more.

All jurisdictions collect the Indigenous status of the mother of the baby. However, this data element does not provide the Indigenous status of the baby. Therefore, Indigenous births will be underestimated as babies born to Indigenous fathers and non-Indigenous mothers are not included. From 2005 to 2007 there were about 11,100 ABS registered births to Indigenous fathers only, which represented 31% of registered Indigenous births (ABS 2008, 2007b, 2006a).

Data from earlier years are not available for Tasmania, as the 'not stated' category for Indigenous status was unable to be distinguished from the 'non-Indigenous' until 2005.

Data on mothers for whom Indigenous status was 'not stated' have been excluded from analysis. In 2007, there were 282 births with a 'not stated' Indigenous status (0.1%) in the NPDC.

The World Health Organization (WHO) defines low birthweight as less than 2,500 grams.

Data quality issues relating to reporting of Indigenous Australians

Indigenous status question

A standard data item for Indigenous status is specified in the Perinatal National Minimum Data Set. However, not all states and territories use this standard wording for the Indigenous status question on their forms. This affects the quality and comparability of the data collected (ABS & AIHW 2003).

Under-identification

All states and territories have a data item to record Indigenous status on their perinatal form, although there are some differences among the jurisdictions. This separately identifies mothers as those of Aboriginal and Torres Strait Islander origin, and non-Indigenous mothers. No information is collected about the father's or baby's Indigenous status.

Since 2005, all jurisdictions collect information on Indigenous status of the mothers in accordance with the NMDS. All jurisdictions are working towards improving the ascertainment of Indigenous status in their perinatal collection. In 2007, the NPESU, in collaboration with the AIHW's Aboriginal and Torres Strait Islander Health and Welfare Unit, released a report on Indigenous mothers and their babies in each state and territory. This report was based on a survey which was sent to the midwifery managers across Australia to determine how many hospitals in each jurisdiction use admission records to obtain Indigenous status information of mothers giving birth and how many collect this information independently. The assessment also involved analysis of the variability in the number and proportion of mothers recorded as Indigenous in the perinatal data collection over time and across jurisdictions from 1991 to 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. Perinatal data from Tasmania, although improving, were deemed to be of insufficient quality. This project included an assessment of Indigenous status data quality. (AIHW: Leeds et al. 2007)

All jurisdictions are working towards improving the quality of the Indigenous status data. Data on Indigenous status are not reported for Tasmania before 2005 because the 'not stated' category for Indigenous status was included with the non-Indigenous category. The 'not stated' category for birthweight was found to be small nationally in the evaluation of the Perinatal National Minimum Data Set (Laws & Sullivan 2009). Therefore, the exclusion of 'not stated' for birthweight will not have a significant impact on these data.

Selected other data quality issues

Perinatal data

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.

The state/territory of birth is provided for all births. Tabulated data in this report are based on births in each state and territory in 2007 meeting the criteria for inclusion in the NPDC. Each state and territory has its own form and/or electronic system for collecting perinatal data. Unless otherwise stated, the data in this report relate to the state or territory of occurrence of births in 2007 rather than to the state or territory of usual residence of the mother. The Australian Capital Territory data contain a relatively high proportion of New South Wales residents who gave birth in the Australian Capital Territory. There are a small number of Aboriginal and Torres Strait Islander mothers who give birth in the Australian Capital Territory, and the proportion fluctuates from year to year, making this jurisdiction less comparable with other jurisdictions. In 2007, 24.1% of Aboriginal or Torres Strait Islander women who gave birth in the Australian Capital Territory were not Australian Capital Territory residents. When interpreting the data, it is important to note that these births to non-residents may include a disproportionate number of high-risk and multi-fetal pregnancies associated with poorer perinatal outcomes. Therefore, percentages or rates such as those for preterm birth and perinatal deaths may be inflated for births that occur in the Australian Capital Territory. Because of this and the small numbers involved, care should be taken in interpreting data from the Australian Capital Territory (Laws et al. 2007).

The Perinatal NMDS does not include neonatal or perinatal death data items of information on cause of death. However, this information is collected as part of the NPDC. The data are incomplete. In some jurisdictions, neonatal deaths for babies transferred to another hospital or readmitted to hospital and those dying at home may not be included. Neonatal deaths for the Northern Territory are considered to be incomplete for 2007 as data do not include deaths occurring outside the Northern Territory. Due to the small number of deaths, interpretation can be limited as to whether differences in mortality rates are due to statistical fluctuations or differential ascertainment.

National Aboriginal and Torres Strait Islander Health Survey

The 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) collected information from 10,439 Indigenous Australians of all ages. This sample was considerably larger than the supplementary Indigenous samples in the 1995 and 2001 National Health Surveys. The survey was conducted in *Remote* and *Non-remote* areas of Australia and collected a range of information from Indigenous Australians. This included information on health-related actions, health risk factors, health status, socioeconomic circumstances and women's health. The survey provides comparisons over time in the health of Indigenous Australians. It is planned to repeat the NATSIHS at 6-yearly intervals, with the next NATSIHS to be conducted in 2011–12. Selected non-Indigenous comparisons are available through the 2004–05 National Health Survey (NHS).

Selected other data quality issues

National Aboriginal and Torres Strait Islander Health Survey

The NATSIHS uses the standard Indigenous status question. The NATSIHS sample was specifically designed to select a representative sample of Aboriginal and Torres Strait Islander Australians. It has therefore overcome the problem inherent in most national surveys with small and unrepresentative Indigenous samples. As with other surveys, the NATSIHS is subject to sampling and non-sampling errors. Calculations of standard errors and significance testing help to identify the accuracy of the estimates and differences.

Information recorded in this survey is essentially 'as reported' by respondents. The ABS makes every effort to collect accurate information from respondents, particularly through careful questionnaire design, pre-testing of questionnaires, use of trained interviewers and assistance from Indigenous facilitators. Nevertheless, some responses may be affected by imperfect recall or individual interpretation of survey questions.

Non-Indigenous comparisons are available through the National Health Survey (NHS). The NHS was conducted in *Major cities*, *Inner and outer regional* areas and *Remote and very remote* areas, but *Very remote* areas were excluded from the sample. Time series comparisons are available through the 1995 and 2001 NHS.

In *Remote and very remote* communities there were some modifications to the NATSIHS content in order to accommodate language and cultural appropriateness in traditional communities and help respondents understand the concepts. Some questions were excluded and some reworded. Also, paper forms were used in communities in *Remote* areas and computer-assisted interview (CAI) instruments were used in *Non-remote* areas. The CAI process included built-in edit checks and sequencing.

Further information on NATSIHS data quality issues can be found in the NATSIHS 2004–05 publication (ABS 2006b).

National Aboriginal and Torres Strait Islander Social Survey

The Australian Bureau of Statistics (ABS) conducted the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) between August 2002 and April 2003. The 2008 NATSISS was conducted between August 2008 and April 2009. The survey provides information about the Aboriginal and Torres Strait Islander populations of Australia for a wide range of areas of social concern including health, education, culture and labour force participation. The 2008 NATSISS included for the first time children aged under 15. The NATSISS will be conducted every 6 years, with the next survey planned for 2014.

The 2008 NATSISS collected information by personal interview from 13,300 Indigenous Australians across all states and territories, including those living in *Remote* areas. The sample covered people aged 15 and over who are usual residents in selected private dwellings. It collected information on a wide range of subjects including family and culture, health, education, employment, income, financial stress, housing, and law and justice.

Selected other 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 sample was 13,300 people in 6900 households, with a response rate of 82% of households. Up to three randomly selected Indigenous people 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 to 17. Indigenous people 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 Aboriginal and Torres Strait Islander Australians.

Information recorded in this survey is 'as reported' by respondents, and 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 three (1994, 2001 and 2008) NATSISS surveys, hence care is required when reviewing results across the three surveys. There are no strictly comparable non-Indigenous results available for the 2008 NATSISS because the latest General Social Survey (which has been used in the past to compare with Indigenous results from the NATSISS) was run in 2006, with the next run in 2010. Data from other ABS surveys run in 2008 may, however, be used to obtain rough non-Indigenous comparisons for some data items.

The 2008 NATSISS has a relatively large level of under-coverage compared with other ABS surveys. There was also an increase in under-coverage compared with 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 is about 53% of the in-scope population at the national level. This rate varies across the states and territories (ABS 2010b).

Further information on NATSISS data quality issues can be found in the 2008 NATSISS User's guide (ABS 2010b).

Census of Population and Housing

The Australian Bureau of Statistics (ABS) Census of Population and Housing is conducted by the ABS at 5-yearly intervals, with 2006 being the most recent, and is designed to include all Australian households. The Census uses the ABS standard Indigenous status question for each household member.

Although the Census data are adjusted for undercount at the person level to arrive at the estimated resident population, no such adjustment is done at the household level. This affects the accuracy of the person counts at the household level to provide adjusted household estimates.

The 1996 and 2001 Census used the Australian Standard Classification of Occupations, but this was replaced by the Australian and New Zealand Standard Classification of Occupations for the 2006 Census.

Selected other data quality issues

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 unexplainable growth in the Aboriginal and Torres Strait Islander 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).

For the 2002 NATSISS, it was estimated that there were 165,700 Indigenous households compared with 144,700 enumerated in the 2001 Census. Although the Census data are adjusted for undercounts at the person level to arrive at the estimated resident population, no such adjustment is done at the household level. This affects the accuracy of the person counts at the household level to provide adjusted household estimates.

National Child Protection Australia

Data for this measure come from three national child protection data collections:

- child protection notifications, investigations and substantiations
- children on care and protection orders
- children in out-of-home care.

These data are collected each year by the AIHW from the relevant departments in each state and territory. Most of the data presented here cover the 2008–09 financial year and have been published in the AIHW report Child protection Australia 2008–09 (AIHW 2010d). Some data on trends in child protection are also included.

Each state and territory has its own legislation, policies and practices in relation to child protection, which accounts for some of the differences between jurisdictions in the data provided. Australian totals have not been provided for those data that are not comparable across the states and territories.

The practices used to identify and record the Indigenous status of children vary across states and territories, with some jurisdictions recording large numbers of unknowns. No state or territory can validate the data on Aboriginal and Torres Strait Islander children by other means and the quality of the data is therefore unknown.

In this collection, children are counted as Indigenous if they are identified as such in the state and territory collections. Children whose Indigenous status is recorded as 'unknown' are excluded, where possible, from calculations of rates and proportions. The counts for Aboriginal and Torres Strait Islander children are therefore likely to be an underestimate of the actual number of Aboriginal and Torres Strait Islander children in the child protection system.

Note that Tasmania and the Australian Capital Territory have very small numbers, and statistics from these jurisdictions are susceptible to random fluctuations.

Reported rates for Aboriginal and Torres Strait Islander children in the child protection system for 2008–09 cannot be compared directly with those from previous years in earlier AIHW Child protection Australia publications. In previous years, rates were calculated using ABS Indigenous population data from the 1996 and 2001 Census; the latter projections are based on the data from the 2006 Census. For time series analyses presented in this measure, rates have been reported as they were in the corresponding referenced publications.

Selected other data quality issues

Child protection data

Reported rates for Aboriginal and Torres Strait Islander children in the child protection system for 2008-09 cannot be compared directly with previous years' data published in AIHW Child protection in Australia reports. In previous years, rates were calculated using ABS Indigenous population denominators from the 1996 and 2001 Census, while the 2008-09 projections are based on the 2006 census population data. For time series analyses presented in this measure, rates were taken from the published reports and they have not been re-calculated using recent Indigenous population estimates based on 2006 Census.

State/territory comparisons

As each state or territory has a different legal regime and different human services policies around child protection, the states and territories cannot be compared with each other, and national totals should not be used. Tasmania and the Australian Capital Territory have very small numbers, and statistics from these jurisdictions are susceptible to random fluctuations.

Child protection is an area in which legislation and human services practice changes. Often, notification rates vary owing to public awareness of child abuse, and practices in relation to the intensity of follow-up of notifications which are affected by a number of factors. For these reasons, time series comparisons may not be statistically valid.

In addition, one-off global changes may occur in the legal and procedural regime of a particular jurisdiction, which may make comparisons between time series data from before and after such change invalid.

Child abuse

Child protection policies and practices are continually under development. As such, they impact on the number of children in the child protection system in different ways. Therefore, trends in child protection numbers should be interpreted carefully.

The definition of what constitutes child abuse and neglect has changed and broadened over time (AIFS: Bromfield &Holzer 2008). Naturally, any broadening of the definition of child abuse and neglect is likely to increase notifications and substantiations. The focus of child protection in many jurisdictions has shifted away from the identification and investigation of narrowly defined incidents of child abuse and neglect. Instead, the focus has moved towards a broader assessment of whether a child or young person has suffered harm.

Care and protection orders

For the 2008–09 financial year, Indigenous children are counted only once, even if they were admitted to or discharged from more than one order or were on more than one order at 30 June 2009. If a child is on more than one order at 30 June, 2009, they are counted as being on the order that implies the highest level of intervention by the department (with guardianship or custody orders being the most interventionist, and interim and temporary orders the least) (AIHW 2010d).

Substantiations

Since 1997, the number of substantiated notifications of child abuse across Australia has increased significantly. Therefore, interpretation of the figures for Indigenous children should be in the light of the increasing number of all children subject to these substantiated notifications.

The practices used to identify and record the Indigenous status of children vary across states and territories, with some jurisdictions recording large numbers of unknowns. No state or territory can validate the data on Aboriginal and Torres Strait Islander children by other means and the quality of the data is therefore unknown. In this collection, children are counted as Indigenous if they are identified as such in the state and territory collections. For information regarding the 2008-09 financial year, children whose Indigenous status is recorded as 'unknown' are excluded, where possible, from calculations of rates and proportions. The counts for Aboriginal and Torres Strait Islander children are therefore likely to be an underestimate of the actual number of Aboriginal and Torres Strait Islander children in the child protection system.

During 1998–99 a new method for counting Indigenous status was implemented in New South Wales, which improved the accuracy of this information. The apparent increase in the rate of Indigenous clients was a reflection of the improved recording of Indigenous status rather than an increase in the number of Indigenous clients. Western Australia also introduced new practices to improve the identification of Indigenous clients in 2001–02.

National Hospital Morbidity Database

The National Hospital Morbidity Database is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals in each state and territory. Information on the characteristics, diagnoses and care of admitted patients in public and private hospitals is provided annually to the AIHW by state and territory health departments.

Data are presented for the six jurisdictions that have been assessed by the AIHW as having adequate identification of Indigenous hospitalisations in 2006-08—New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory. These six jurisdictions represent about 96% of the Indigenous population of Australia. Data are presented by state/territory of usual residence of the patient.

In 2007–08, there were 276,000 hospital separations (episodes of care for admitted patients) for Aboriginal and Torres Strait Islander patients, around 3.5% of all separations. The proportion of separations of Aboriginal and Torres Strait Islander people was higher in public hospitals (5.4% or 256,425 separations) compared with private hospitals (0.6% or 20,015 separations). Of all Aboriginal and Torres Strait Islander separations, nearly 93% occurred in public hospitals (AIHW 2009).

Hospitalisations for which the Indigenous status of the patient was not reported have been included with hospitalisations data for non-Indigenous people under the 'other' category. This is to enable consistency across jurisdictions, because public hospitals in some states and territories do not have a category for the reporting of 'not stated' or inadequately recorded/reported Indigenous status.

Hospitalisation data are presented for the period from July 2006 to June 2008. An aggregate of 2 years of data has been used, because the number of hospitalisations for some conditions is likely to be small for a single year.

The principal diagnosis is the diagnosis established to be the problem that was chiefly responsible for the patient's episode of care in hospital. The additional diagnosis is a condition or complaint either coexisting with the principal diagnosis or arising during the episode of care. The term 'hospitalisation' has been used to refer to a separation, which is the episode of admitted patient care. This can include a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change in the type of care (for example, from acute to rehabilitation). 'Separation' also means the process by which an admitted patient completes an episode of care by being discharged, dying, transferring to another hospital or changing type of care.

Data quality issues relating to reporting of Indigenous Australians

Indigenous status question

All jurisdictions comply with the standard wording for the Indigenous status question and categories for their death registration forms. However, although data are provided to the ABS for the Indigenous status question for 99% of all deaths, there are concerns regarding the accuracy of the data. The Indigenous status question is not always directly asked. Detailed breakdowns of Indigenous deaths are therefore provided for only five jurisdictions—New South Wales, Queensland, South Australia, Western Australia and the Northern Territory.

Indigenous status information from the two sources is kept in the database, although this may not be consistent for an individual.

In 2004, a new range of codes were introduced as part of the effort to standardise and improve indigenous identification in data collection nationally.

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 and examined differences in the reporting of Indigenous status across the two data sets.

There were 106,945 registered death records available to be linked in the study. Of these, 1,800 (1.7%) were identified as Indigenous. Of the total registered deaths, 98,898 (92%) were linked to a Census record. However, a much lower linkage rate was achieved for Indigenous deaths, with more than one quarter of all Indigenous death registrations (26% or 473) unable to be linked to a Census record. As a result, Indigenous death records were over-represented in the unlinked death registrations.

As well as this, unlinked Indigenous death records had different characteristics to linked Indigenous death registrations. Indigenous death records with older ages at death and from *Non-remote* regions were more likely to be linked.

Under-identification

Almost all deaths in Australia are registered. However, the Indigenous status of the deceased is not always recorded or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Aboriginal and Torres Strait Islander population (ABS 2009). As a result, the observed differences between Indigenous and non-Indigenous mortality are underestimates of the true differences.

Longer-term mortality trend data are limited to three jurisdictions (Western Australia, South Australia and the Northern Territory) with 10 years of adequate identification of Indigenous deaths in their recording systems (ABS & AIHW 2005). 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.

The ABS calculated the implied coverage (identification) of Indigenous deaths for 2002–2006 using population estimates: New South Wales 45%, Victoria 32%, Queensland 51%, South Australia 62%, Western Australia 72%, Northern Territory 90%, Tasmania and the Australian Capital Territory were not calculated because of small numbers, Australia 55% (ABS 2007c).

Note that different causes 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.

There are also concerns about data quality for causes of death, especially relating to external causes of death of all Australians (not just Indigenous) (ABS 2006c).

Problems associated with identification result in an underestimation of deaths and hospital separations for Indigenous people.

Other selected data quality issues

Mortality data

Deaths

The mortality rate for Indigenous Australians can be influenced by identification of Indigenous deaths, late registration of deaths, and changes to death forms and/or processing systems. Because of the small size of the Indigenous population, these factors can significantly affect trends over time and between jurisdictions. At present, there is considerable variation across the states and territories in the completeness of mortality and hospital data for Indigenous people.

Survey of Income and Housing (SIH)

The Survey of Income and Housing (SIH) is conducted by the ABS every two years, with the first survey beginning in 1994–95. The survey was developed in order to provide broad aggregates for households within Australia. The current survey was conducted between August 2007 and June 2008, and 9,345 households participated through a personal interview at their usual place of residence. The dwellings were selected through a stratified, multistage cluster design and the survey was conducted over 12 months to be representative of a yearly pattern. Participants were asked information regarding their household, including characteristics, costs, assets and liabilities and individual personal characteristics for residents aged over 15.

Selected other data quality issues

Survey of Income and Housing (SIH)

Survey data are subject to sampling and non-sampling errors. 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. However, the surveys had a sample loss and non-response of 1,781 dwellings, 16% of the selected sample and 2,026 households having at least one imputed value in income or child care expenses.

A further limitation of the survey's scope is that households in *Very remote* areas were not covered. The survey does state that due to the small population in these areas it is likely this will have minimal impact.

Australian General Practice Accreditation Limited (AGPAL) and the General Practice Accreditation Plus (GPA+)

Selected other data quality issues

AGPAL

AGPAL provides information on the total number of accredited practices and practices registered for accreditation. These data are published by Division of General Practice, but not SLA.

GPA+

Data on practices accredited by GPA+ have not been routinely reported, but may become available in the future.

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Related publications

The following AIHW publications relating to children, youth and families might also be of interest:

- AIHW 2011. Educational outcomes of children under guardianship or custody orders: a pilot study, stage 2. Child welfare series no. 49. Cat. no. CWS 37. Canberra: AIHW.
- AIHW 2011. Child protection Australia 2009–10. Child welfare series no. 51. Cat. no. CWS 39. Canberra: AIHW.
- AIHW 2010. Health and wellbeing of young Australians: indicator framework and key national indicators. Bulletin no. 77. Cat. no. AUS 123. Canberra: AIHW.