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Aboriginal and Torres Strait Islander Health Performance Framework 2010 report

Northern Territory

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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 focusing on main areas of improvement and concerns. Main findings from the report are also given in a table format for ease of reference.

While the health status of Indigenous people in the Northern Territory is worse than their non-Indigenous counterparts against most indicators, significant health gains have been made in a number of areas. This shows a positive move towards closing the gap in health disadvantage between Indigenous and non-Indigenous or other Australians.

Despite making progress in some areas, Indigenous Australians are lagging behind in a large number of areas where further improvements need to be made to close the gap in health disadvantage.

Health status and health outcomes

Areas of improvement

- A significant decline in hospitalisations is seen for infectious and parasitic disease (32% decline) and for diseases of the respiratory system (18% decline) among children aged 0 to 14 years over the period 2000–01 to 2009–10.
- Notification rates for syphilis among Indigenous Australians in the Northern Territory have declined over the period 1994–96 to 2006–08 (average of 19 per 100,000 per year), showing a narrowing of the gap between Indigenous and other Australians.
- Significant reductions in mortality have occurred among Indigenous people in the Northern Territory between 1991 and 2007 indicating a narrowing of the gap between Indigenous and non-Indigenous health disadvantage:
  - infant mortality rate declined by 49% and reductions in deaths during neonatal and perinatal periods contributed to this
  - all-cause mortality rates declined by 33%
  - mortality from avoidable causes showed an annual decline of about 53 deaths per 100,000 population, equivalent to a 35% reduction over the period.

Areas needing further work

- Babies of Indigenous mothers are over twice as likely to be of low birthweight as babies born to non-Indigenous mothers during 2006 to 2008.
- Hospitalisations data indicate a number of areas of concern as the gap between Indigenous and other people continues to widen:
  - hospitalisation rate for all major health conditions for Indigenous Australia was 6 times the rate of other Australians in 2006–2008. Over the period 2001–02 to 2007–08, the overall hospitalisation rates have increased significantly
  - injury and poisoning-related hospitalisations among Indigenous people were 6 times the rate of other Australians in 2006–08. Hospitalisation for assault among Indigenous males and females was 8 and 69 times the rate of other males and females respectively

  - mental health-related hospitalisations increased greatly for Indigenous people from 8 per 1,000 hospitalisations in 2001–02 to 14 in 2007–08.
- The incidence rate of end-stage renal disease (ESRD) for Indigenous Australians was 26 times the rate of non-Indigenous Australians in 2006–2008 (188 and 7 per 100,000 people respectively).
- Notification rates of gonorrhea for Indigenous people have increased significantly from 939 to 1,839 between 1994–1996 and 2006–2008.
- Life expectancy at birth is lower among Indigenous males and females at 61.5 years and 69.2 years respectively compared with other males and females in the same jurisdiction (72 and 78 years) and compared with Indigenous males and females nationally (67 and 73 years).

Determinants of health

Areas of improvement

- The rates of anaemia among Indigenous children aged 0–4 years have decreased significantly from 29% to 22% between 2004 and 2010. Significant improvements against various growth measures have also occurred during this period: proportions underweight declined from 10% to 8%, wasted declined from 7% to 5% and stunted from 16% to 14%.
- Significant decline in the rate of hospitalisations among children aged 0–14 years was seen over the period 2000–01 to 2009–10 for nutritional anaemia (61% decline) and malnutrition (40%).
- Although the notification rate for syphilis among Indigenous people is still 19 times the rate for non-Indigenous people, there has been a significant decline in the rate of notifications among Indigenous people over the period 1994–96 to 2006–08 (from 637 notifications per 100,000 to 431.2).
- Higher rates of breastfeeding was achieved for Indigenous infants aged 0–3 years than for non-Indigenous infants of the same age group (88% and 77% respectively) in Australia in 2008.

Areas needing further work

- 58% of Indigenous Australians aged 15 years and over were living in overcrowded households in 2008.
- Around 77% of Indigenous children aged 0–14 years were living in households with a daily smoker in 2007–08.
- The proportion of Indigenous children in Years 3, 5, 7 and 9 achieving all aspects of literacy and numeracy benchmarks was much lower than for non-Indigenous children in 2009.
- Just over half the Indigenous people aged 15–64 years (51%) were employed in 2008 and 10% were unemployed. In comparison, 91% of non-Indigenous people in this age group were employed.
- Indigenous people were 11 times as likely as non-Indigenous people to be imprisoned in 2009 (1,700 and 153 per 100,000 respectively).

- Indigenous children aged 0–16 years were more likely than other children to be the subject of child protection substantiation (24 compared to 4 per 1,000 in 2008–09) and the proportion of Indigenous children who were the subject of substantiation increased over the period from 1999–00 to 2008–09.
- In 2007, Indigenous mothers were nearly 3 times as likely as non-Indigenous mothers to smoke during pregnancy (44% compared to 16%).

Health system performance

Areas of improvement

- 97% of Indigenous mothers attended at least one antenatal care session during pregnancy in 2007.
- A high proportion of Indigenous children aged 2 and 5 years were fully immunised (91% and 86% respectively) in 2009. This was higher than the proportions of other children immunised.
- Although the proportion of Indigenous women aged 50–69 years participating in the BreastScreen Australia program is lower compared to all women, between 2003–04 and 2007–08 there was an increase in the proportion of Indigenous women screened (22% to 24%).
- In 2006, 73% of discrete Indigenous communities reported that one or more health promotion programs had been conducted, with well babies programs reported by 65%, women's health programs reported by 62% and men's health programs reported by 61% of communities.
- In 2006–08, 100% of hospital admitted episodes for Indigenous and other persons occurred in accredited hospitals.

Areas needing further work

- Approximately 61% of hospitalisations for Indigenous Australians had a procedure reported compared to 78% for other Australians in 2006–08.
- Indigenous persons were hospitalised for ambulatory care sensitive conditions at over 4 times the rate of other persons (170 compared to 40 per 1,000) in 2006–08. The rate for acute conditions increased by 37% and for chronic conditions by 98% between 2001–02 and 2007–08.
- Indigenous persons were much more likely to be discharged from hospital against medical advice than other persons across all age groups in 2006–08. Indigenous children aged 0 to 4 years were 27 times as likely as other children to be discharged against medical advice.
- In 2006 in the Northern Territory, Indigenous people aged 15 years and over accounted for around 9% of the total health workforce which was much lower than the proportion of the Northern Territory population that is Indigenous (30%).

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

Health status and health outcomes		Determinants of health		Health system performance	
Improving	**Needs improvement**	**Improving**	**Needs improvement**	**Improving**	**Needs improvement**
Infectious and parasitic disease Hospitalisation rate for children aged 0–14 years decreased by 32% (2000–01 to 2009–10) **Disease of the respiratory system** Hospitalisation rate for children aged 0–14 years decreased by 18% (2000–01 to 2009–10) **Syphilis notifications** Rate of notifications declined by 42% for Indigenous persons, no significant change for other persons. Gap has narrowed (1994–96 to 2006–08)	**Low birthweight** Indigenous babies are twice as likely to be of low birthweight at birth. Rate difference between Indigenous and non-Indigenous increased. Gap has widened (2000 to 2008) **Top reasons for hospitalisation** Indigenous people are 6 times as likely as other Australians to be hospitalised and the rate has increased by 18% for Indigenous persons. Gap has widened (2001–02 to 2007–08) **Injury and poisoning** Hospitalisation rate is 6 times the rate of other Australians and the rate has increased by 45% for Indigenous persons (2001–02 to 2007–08)	**Anaemia among Indigenous children 0–4 years** Proportion of children with anaemia declined significantly from 29% to 22% (2004–2010) **Nutritional anaemia** Hospitalisation rate for nutritional anaemia among children aged 0–14 years declined by 61% (2000–01 to 2009–10) **Malnutrition** Hospitalisation rate for malnutrition in children aged 0–14 years declined by 40% (2000–01 to 2009–10) **Syphilis notifications** Although the syphilis notifications for Indigenous people are 19 times the rate of non-Indigenous people, there has been a significant decline in the rate of notifications (1994–96 to 2006–08)	**Overcrowding in housing** In 2008, 58% of Indigenous persons aged 15 years and over were living in overcrowded households compared to 6% of non-Indigenous **Environmental tobacco smoke** In 2007–08, 77% of Indigenous children aged 0–14 years lived in households with a daily smoker, compared with 36% of non-Indigenous children **Literacy and numeracy** The proportion of Indigenous children in Years 3, 5, 7 and 9 achieving all aspects of literacy and numeracy benchmarks was much lower than their non-Indigenous counterparts in 2009 **Employment** In 2008, 51% Indigenous people aged 15–64 years were employed and 10% were unemployed compared to 91% of non-Indigenous people who were employed **Income** Indigenous Australians aged 18 years had a mean equivalised gross weekly household income of $489 per week compared to $1,120 per week for non-Indigenous Australians in 2008	**Antenatal care** In 2007, 97% of Indigenous mothers in the Northern Territory attended at least one antenatal care session during pregnancy **Child Immunisation** In 2009, 85% of children at 1 year of age, 91% at 2 years of age and 86% at 5 years of age were fully immunised **Adult Immunisation** In 2004–05, 77% of Indigenous persons aged 50 years and over had been vaccinated against influenza, and 56% had been vaccinated against pneumonia. These proportions were higher than those reported nationally **Breast screening for 50–69 years** Gap has narrowed: the rate increased by 7% for Indigenous women, decreased by 5% for all women (2003–04 to 2007–08)	**Procedures** During 2006–08, approximately 61% of hospitalisations for Indigenous Australians had a procedure reported compared to 78% for other Australians **Potentially preventable acute conditions** Hospitalisation rate increased by 37% for Indigenous persons, by 26% for others persons. Gap has widened (2001–02 to 2007–08) **Potentially preventable chronic conditions** Gap widening: Hospitalisation rate increased by 98% for Indigenous persons, by 68% for other persons. Gap has widened (2001–02 to 2007–08)

Summary of progress against key indicators in the Health Performance Framework, NT (continued)

Health status and health outcomes		Determinants of health		Health system performance	
Improving	**Needs improvement**	**Improving**	**Needs improvement**	**Improving**	**Needs improvement**
Infant mortality Infant mortality rate declined by 49% for Indigenous infants, by 46% for other infants. Gap narrowed: (1991–2007) **Perinatal deaths** Deaths in the perinatal period declined from 22.8 to 20.7 per 1,000 births during 1999–2003 and 2004–2008, contributing to the overall decline in infant deaths **All-causes mortality** Mortality rate declined by 33% for Indigenous Australians, Gap has narrowed (1991 to 2007) **Avoidable deaths** Mortality from avoidable causes declined by 35% for Indigenous people. Gap narrowed (1991–2007)	**End-stage renal disease** The incidence rate of ESRD is 26 times that of non-Indigenous people and the rate has increased by 217% for Indigenous persons. Gap has widened (1991–2008) STIs The notification rates for gonorrhoea among Indigenous people increased significantly from 939 to 1,839 per 100,000. Gap has widened (1994–96 to 2006–08) **Mental health** Hospitalisation rate increased by 79% for Indigenous persons, by 37% for other persons. Gap has widened (2001–02 to 2007–08) **Life expectancy at birth** Life expectancy for Indigenous males (61.5) and females (69.2) in the Northern Territory was lower than for other males (72) and females (78) (2005–07)	**Breastfeeding** In 2008, 88% of Indigenous infants aged 0–3 years in the Northern Territory had ever been breastfed compared to 77% of Indigenous infants of the same age in Australia **Growth measures** Indigenous children aged 0–4 years have shown significant improvements against various growth measures: proportions of children who were underweight declined from 10% to 8% respectively), wasted declined from 7% to 5% and stunted from16% to 14% (2004–2010)	**Criminal justice** Rate of imprisonment for Indigenous people was 11 times the rate of non-Indigenous people in 2009 (1,700 and 153 per 100,000 respectively) **Child protection** Indigenous children aged 0–16 years were more likely than other children to be the subject of child protection substantiation (24 compared to 4 per 1,000 in 2008–09) and the proportion of Indigenous children who were the subject of substantiation increased (1999–00 to 2008–09) **Smoking in pregnancy** Indigenous mothers were 2.8 times as likely as non-Indigenous mothers to smoke during pregnancy (44% compared to 16%) in 2007	**Health promotion** In 2006, 73% of discrete Indigenous communities reported that one or more health promotion program had been conducted, with well babies programs reported by 65%, women's health programs reported by 62% and men's health reported by 61% of communities **Hospitalisation accreditation** In 2006–08, 100% of hospital admitted episodes for Indigenous and other persons occurred in accredited hospitals	**Discharge against medical advice** Indigenous persons were much more likely to discharge from hospital against medical advice than other persons across all age groups in 2006–08. Indigenous children aged 0 to 4 years were 27 times as likely to discharge against medical advice as other children **Health workforce** Indigenous people aged 15 years and over accounted for around 9% of the total health workforce in 2006

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 the Northern Territory. 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 tier covers measures of prevalence of health conditions (for example circulatory disease, diabetes), human function (for example disability), life expectancy and wellbeing and deaths. This tier aims to provide an overall indication of current health status and recent trends in the health status of Aboriginal and Torres Strait Islander peoples on a range of health issues. These issues include child and maternal health, chronic diseases, injury, communicable diseases, social and emotional wellbeing and overall health status.

Tier 2—Determinants of health. This tier consists of measures of the determinants of health which focus on factors outside the health system that impact on the health of Aboriginal and Torres Strait Islander people. The domains covered in this tier include 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 both disease and ill-health.

Tier 3—Health systems performance. This tier includes measures of 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 these indicators can be reported for the Northern Territory due to issues related to data availability and data quality. 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

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

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

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

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

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

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

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

Accessible
3.12 Access to services by types of service compared to need
3.13 Access to prescription medicines*
3.14 Access to after-hours primary health care

Continuous
3.15 Regular GP or health service
3.16 Care planning for client with chronic diseases

Capable
3.17 Accreditation
3.18 Aboriginal and Torres Strait Islander people in Tertiary Education for health related disciplines

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 Northern Territory data are unavailable, or data are not of sufficient quality for reporting.

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

Demographic information

In 2010, there were an estimated 68,661 Aboriginal and Torres Strait Islander people in the Northern Territory, accounting for 12.2% of the Indigenous population in Australia. Indigenous people represent 30.2% of the Northern Territory population, higher than the proportion they represent in the total Australian population (2.6%).

Table 1: Estimated resident population by Indigenous status, the Northern Territory and Australia, 2010

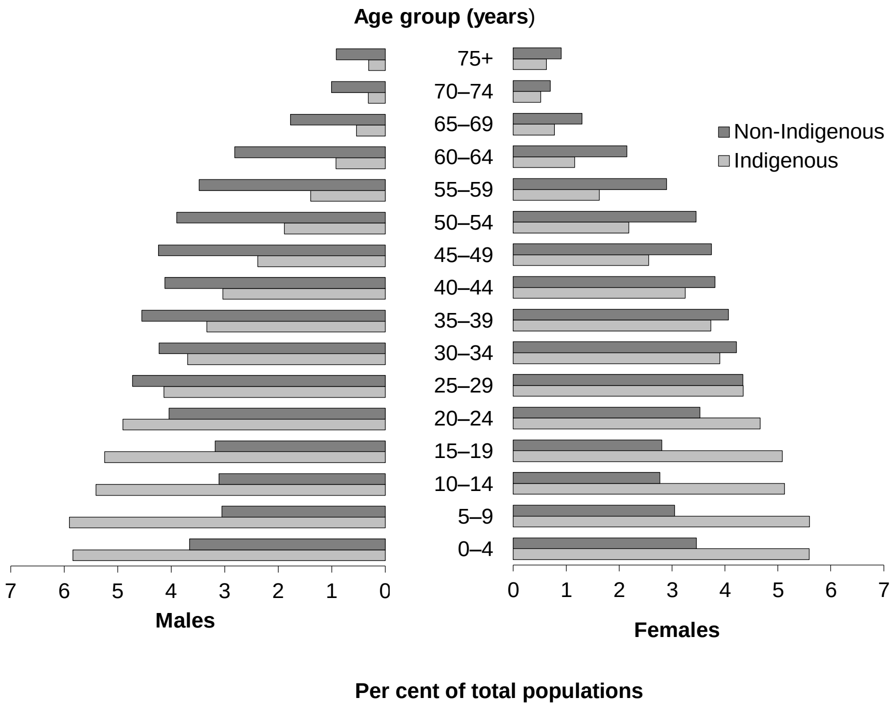
	Indigenous		Non-Indigenous		Total			
	No.	%	No.	%	No.	%	% Indig.	% Non-Indig.
Northern Territory	68,661	12.2	158,542	0.7	227,203	1.0	30.2	69.8
Australia[(a)]	**563,101**	**100.0**	**21,427,910**	**100.0**	**21,991,011**	**100.0**	**2.6**	**97.4**

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

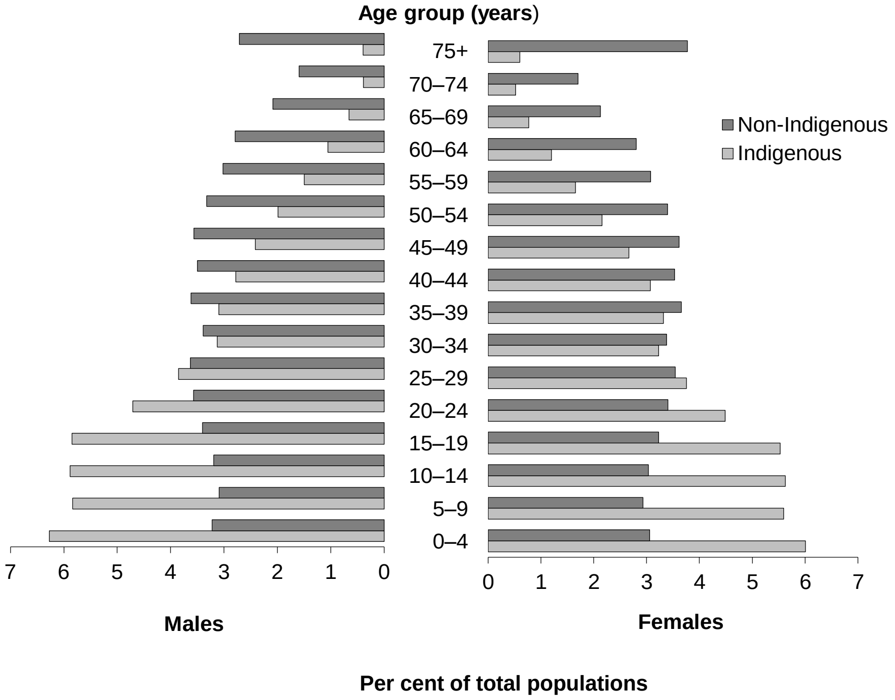
Source: AIHW analysis of ABS population estimates based on 2006 Census.

Aboriginal and Torres Strait Islander people have an age structure that is significantly younger than that of other Australians. For example, in Northern Territory, Aboriginal and Torres Strait Islander people aged less than 15 years constitute 33.5% of the Indigenous population, whereas this age group represents about 23.4% of the total population. Conversely, those aged 65 years and over comprise only 3.1% of the Indigenous population, compared with 5.5% of the total Northern Territory population (Figure 2).

Northern Territory



Australia



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

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

In the Northern Territory, over one-fifth of Aboriginal and Torres Strait Islander people live in the *Outer regional* (20.2%) and *Remote* (23.4%) areas each. Nearly three-fifths (56.4%) of them live in the *Remote* area. 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 residing in *Remote* (9%) and *Very remote* areas (15%).

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

	Indigenous		Non-Indigenous		Total			
	No.	Per cent	No.	Per cent	No.	Per cent	Per cent Indig.	Per cent Non-Indig.
				Northern Territory				
Outer regional	12,951	20.2	102,434	69.9	115,385	54.8	11.2	88.8
Remote	14,985	23.4	31,562	21.5	46,547	22.1	32.2	67.8
Very remote	36,069	56.4	12,626	8.6	48,695	23.1	74.1	25.9
Northern Territory	**64,005**	**100.0**	**146,622**	**100.0**	**210,627**	**100.0**	**30.4**	**69.6**
				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.

Note: no parts of the Northern Territory are classified as Inner regional or Major cities

Data sources and methodology

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

Health-related administrative data sets used in the report include the Australian Institute of Health and Welfare (AIHW) National Hospital Morbidity Datasets, the AIHW National Perinatal Data Collection, Australia and New Zealand Dialysis and Transplant Registry and the National Notifiable Diseases Surveillance System. Administrative data sets related to education are 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 sets 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 the Indigenous population fares relative to 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 presented throughout this report have used linear regression analysis to determine whether there have been significant increases or decreases in the observed rates over the period. Many of the tables also include an asterisk * 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 available data presented in this report that should be noted when interpreting data analyses and making comparisons across jurisdictions and over time. 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 for these data collections. 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 when reading the indicator and interpreting the data.

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 as having a varying level of completeness across diseases and jurisdictions. The Northern Territory was assessed to have adequate identification for chlamydia, 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 of Aboriginal and Torres Strait Islander people. 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 population estimates used in this report are the Indigenous estimated resident population (ERP) figures, based on the 2006 Census (ABS 2009b). The 2006 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 Indigenous population from the Census, and adjusted for under-count based on results from The Post Enumeration Survey (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 gave 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 where possible 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 to those based on the 2001 ERP, often resulting in a significant closing of the gap in measures such as mortality between Indigenous and non-Indigenous Australians. However, the two sets of rates are not comparable. While the greatest impact of the 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 the Indigenous population between 2001 and 2006 is about 12 per cent, compared to about 6 per cent 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 less 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)

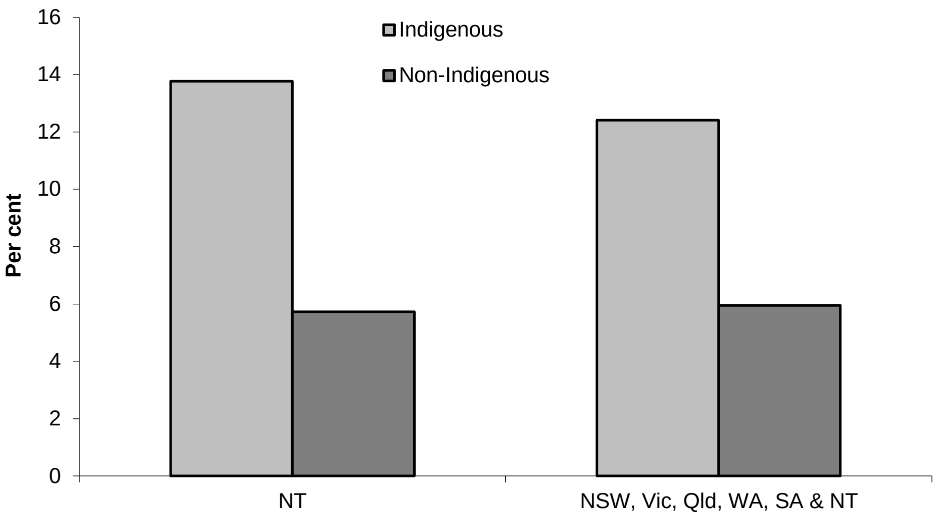
1.01 Low birthweight infants

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

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

Low birthweight by Indigenous status

- Over the period 2006 to 2008 in the Northern Territory, of all live-born babies, those born to Indigenous mothers were more than twice as likely to be of low birthweight (that is less than 2,500 grams) as those born to non-Indigenous mothers (13.8% compared to 5.7%). These figures were similar in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, where Indigenous mothers were still around twice as likely to have low birthweight babies (12.4% compared to 6.0%) compared to 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.

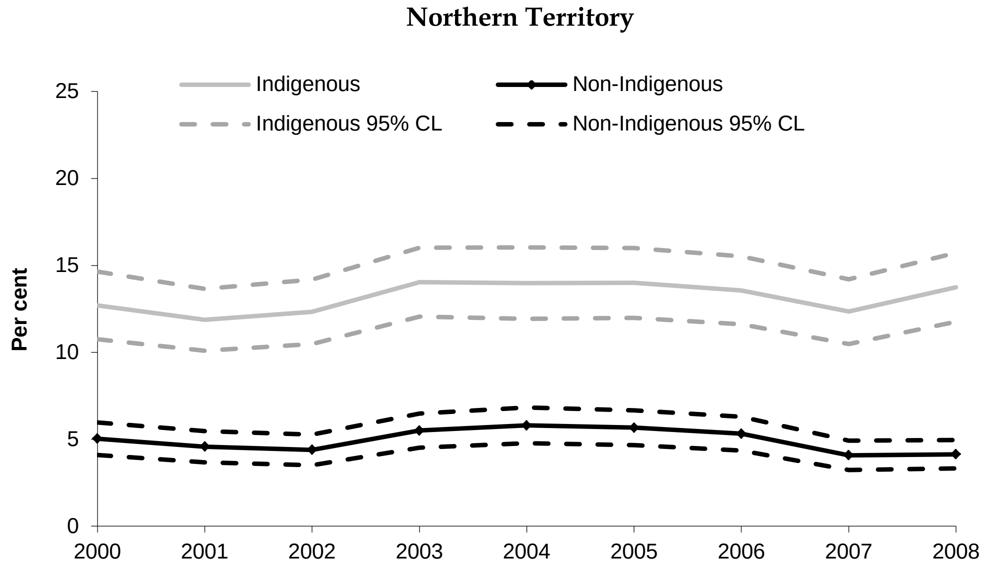
Note: NT residents who gave birth in Tasmania and the Australian Capital Territory were excluded as data from these jurisdictions are not considered stable enough to be included in trend analyses because of small population size or data quality over the reporting period (AIHW: Leeds et al. 2007).

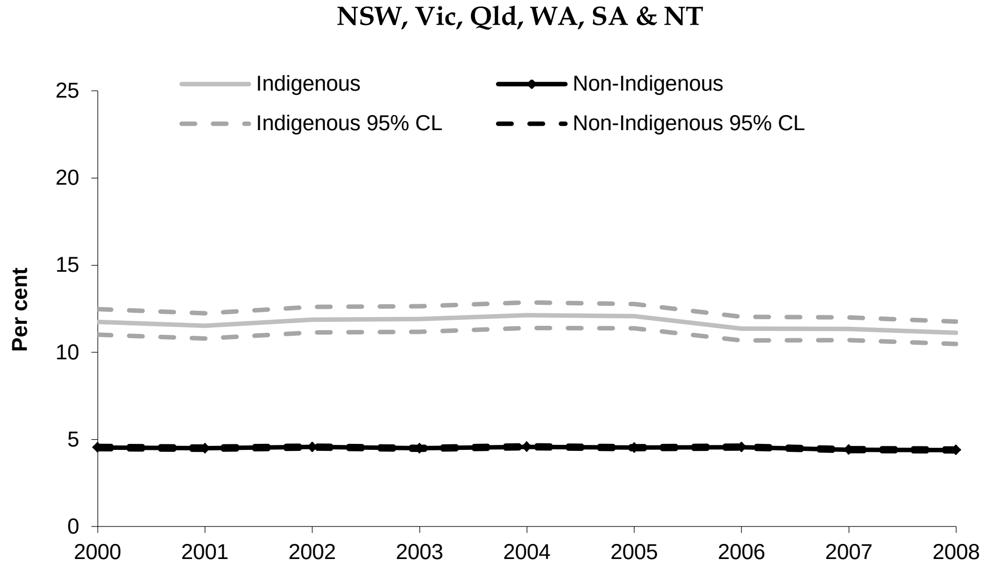
Source: AIHW analysis of the National Perinatal Epidemiology and Statistics Unit (NPESU) National Perinatal Data Collection (unpublished).

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

Low birthweight trends

- Over the period 2000 to 2008 in the Northern Territory, there was no significant change in the proportion of low birthweight babies born to either Indigenous or non-Indigenous mothers. However, there was a significant increase in the rate difference between singleton live-born babies of low birthweight born to Indigenous mothers, compared to non-Indigenous mothers. The fitted trend implies an average yearly increase of 0.19% in the rate difference for this period.
- Over 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 proportion of low birthweight babies born to either Indigenous or non-Indigenous mothers (Table 1.01.1 and Figure 1.01.2).





(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: NT 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).

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

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

	2000	2001	2002	2003	2004	2005	2006	2007	2008	Annual change[(b)]
					Northern Territory					
Rate per 100 live births (%)										
Indigenous	12.7	11.9	12.3	14.0	14.0	14.0	13.6	12.3	13.7	0.13
Non-Indigenous	5.0	4.6	4.4	5.5	5.8	5.7	5.3	4.1	4.1	–0.05
Rate ratio	2.5	2.6	2.8	2.6	2.4	2.5	2.5	3.0	3.3	0.07
Rate difference	7.7	7.3	7.9	8.5	8.2	8.3	8.2	8.3	9.6	0.19*
					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: NT 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).

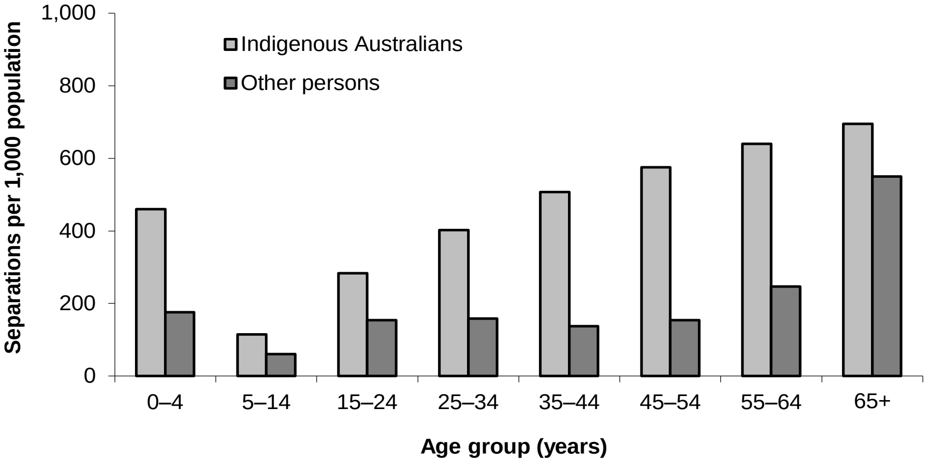
Source: AIHW analysis of NPESU National Perinatal Data Collection (unpublished).

1.02 Top reasons for hospitalisation

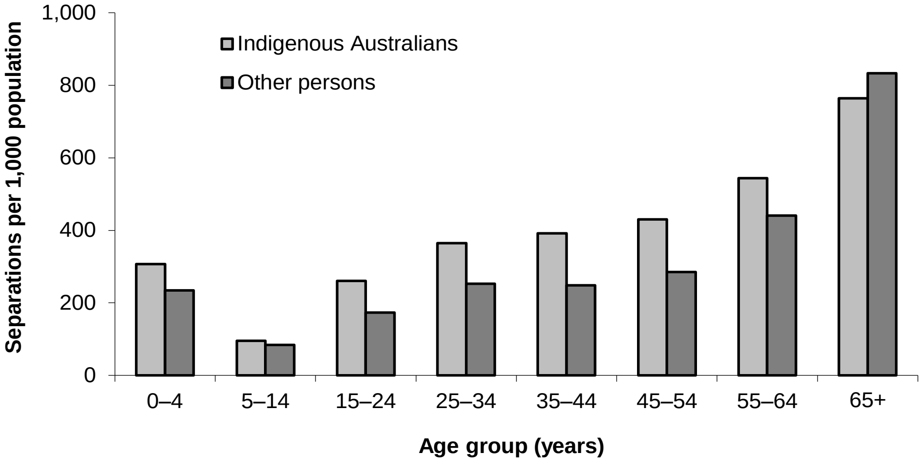
Hospitalisations for the leading ICD-10-AM categories for Aboriginal and Torres Strait Islander people expressed as a rate by age group, age-standardised rate and rate ratio

Hospitalisations by age

- For the 2-year period July 2006 to June 2008 in the Northern Territory there were 169,505 hospitalisations, 66% of which were Indigenous Australians.
- Overall, Indigenous Australians were hospitalised at 6.1 times the rate of other people in the Northern Territory. In the six jurisdictions combined, Indigenous Australians were hospitalised at 2.3 times the rate of other people.
- Excluding dialysis (due to the frequent admissions for the same disease), Indigenous Australians were hospitalised at twice the rate of other people in the Northern Territory. In the six jurisdictions combined, Indigenous Australians were hospitalised at 1.3 times the rate of other people.
- For the 2-year period July 2006 to June 2008 in the Northern Territory, when hospitalisations for dialysis are excluded, Indigenous Australians had higher hospitalisation rates than other people across all age groups. In New South Wales, Victoria, Queensland, Western Australia, South Australia, and the Northern Territory combined, when hospitalisations for dialysis are excluded, Indigenous Australians had higher hospitalisation rates than other people across all age groups with the exception of those aged 65 years and over.
- The greatest difference in hospitalisation rates between Indigenous and other people in the Northern Territory was among those aged 35–44 and 45–54 years, where Indigenous Australians were hospitalised at around 4 times the rate of other people in those age groups. These age groups also had the greatest difference in hospitalisation rates for New South Wales, Victoria, Queensland, Western Australia, South Australia, and the Northern Territory combined.
- For both the Northern Territory alone, and the six jurisdictions combined, hospitalisation rates were highest among those aged 65 years and over and lowest among those aged 5–14 years for Indigenous and other Australians.



Northern Territory



NSW, Vic, Qld, WA, SA & NT

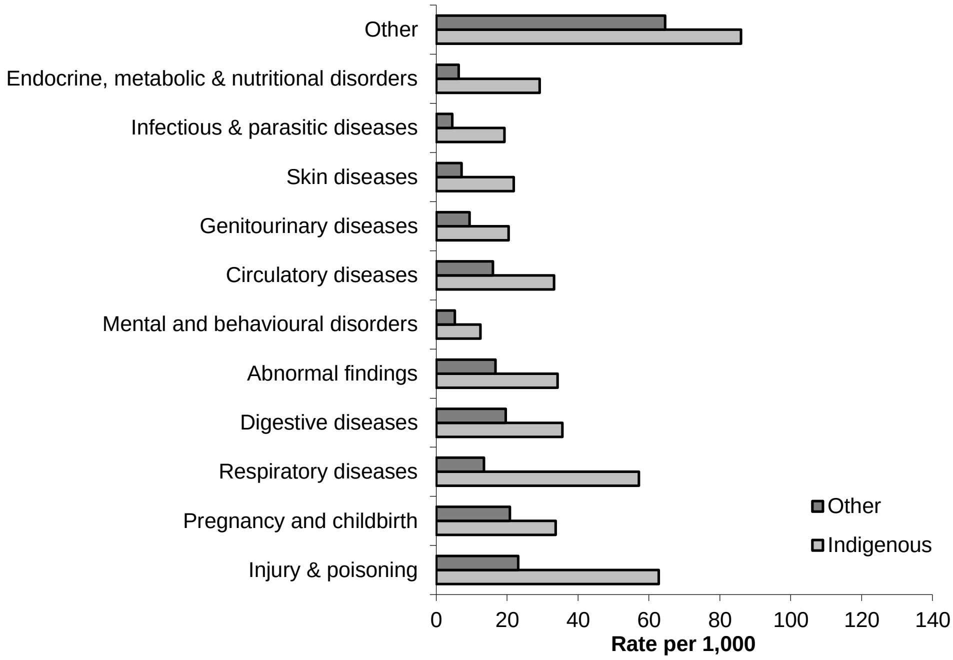
Source: AIHW analyses of National Hospital Morbidity Database (NHMD).

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

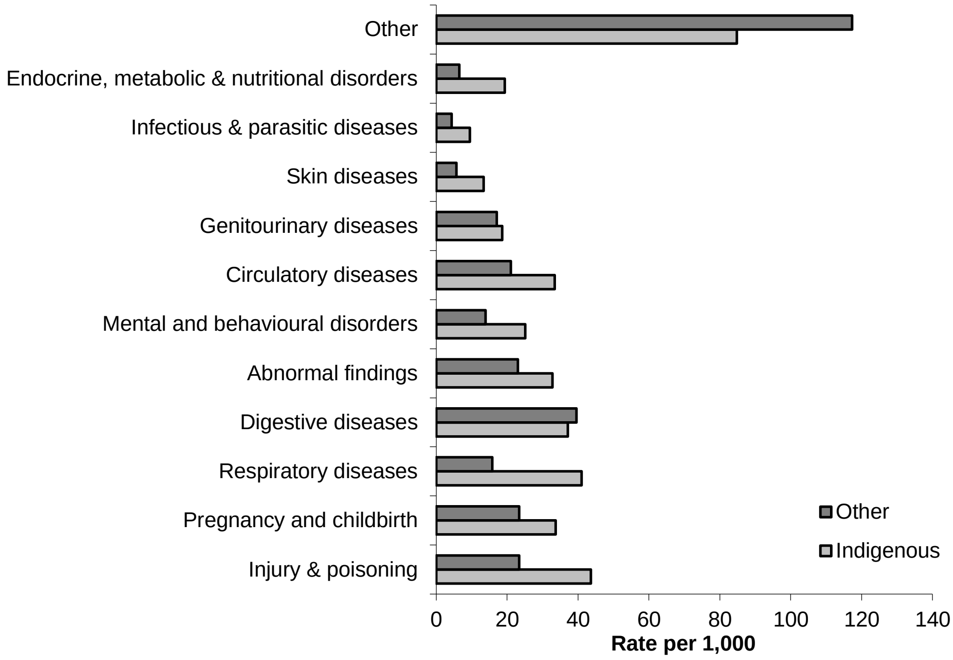
Hospitalisations by principal diagnosis

- The most common principal diagnosis among Indigenous Australians in the Northern Territory was injury and poisoning, followed by respiratory disease. These diagnoses, as well as digestive system diseases, were also the most common among Indigenous Australians in New South Wales, Victoria, Queensland, Western Australia, South Australia, and the Northern Territory combined.
- The greatest differences in hospitalisation rates between Indigenous and other people in the Northern Territory were for endocrine, metabolic and nutritional disorders, for which Indigenous Australians were hospitalised at around 5 times the rate of other people. In addition, Indigenous Australians in the Northern Territory were hospitalised at over 4 times the rate of other people for respiratory diseases and infectious and parasitic diseases.
- Hospitalisation rates for Indigenous Australians in the Northern Territory were higher than for Indigenous Australians in the six jurisdictions combined for most principal diagnoses (Figure 1.02.2).
- Rate ratios between Indigenous and other Australian hospitalisation rates were higher in the Northern Territory than in the six jurisdictions combined for all principal diagnoses, in particular infectious and parasitic diseases, endocrine, metabolic and nutritional disorders, and respiratory diseases (Figure 1.02.3).

Northern Territory

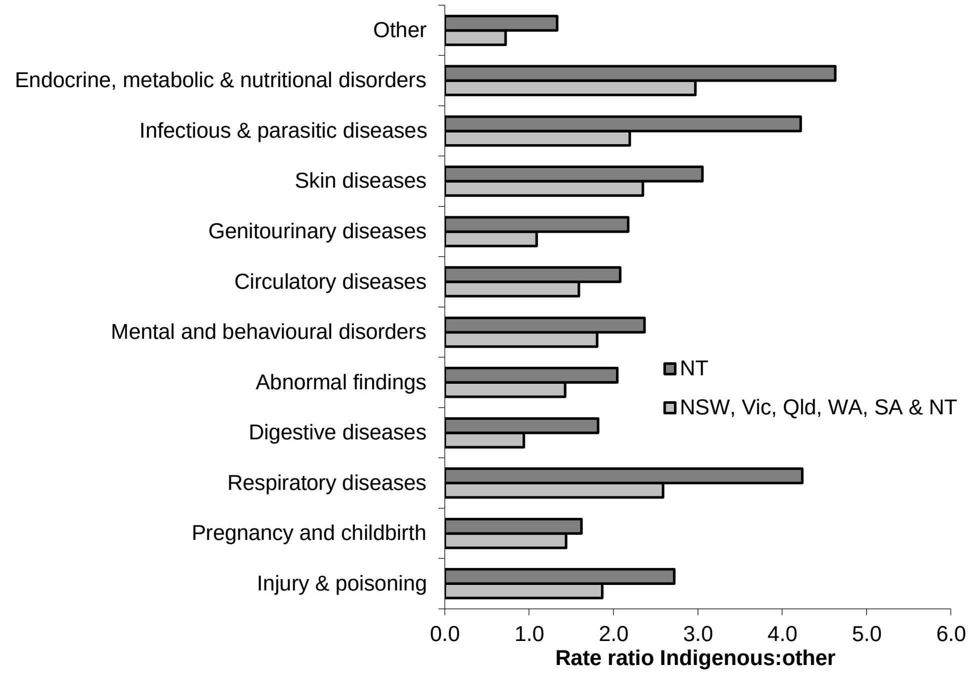


NSW, Vic, Qld, WA, SA & NT



Source: AIHW analyses of NHMD.

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



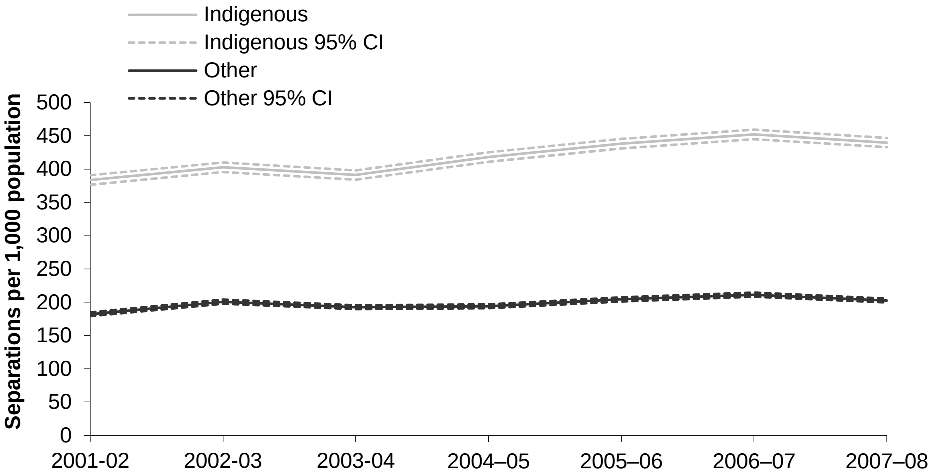
Source: AIHW analyses of NHMD.

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

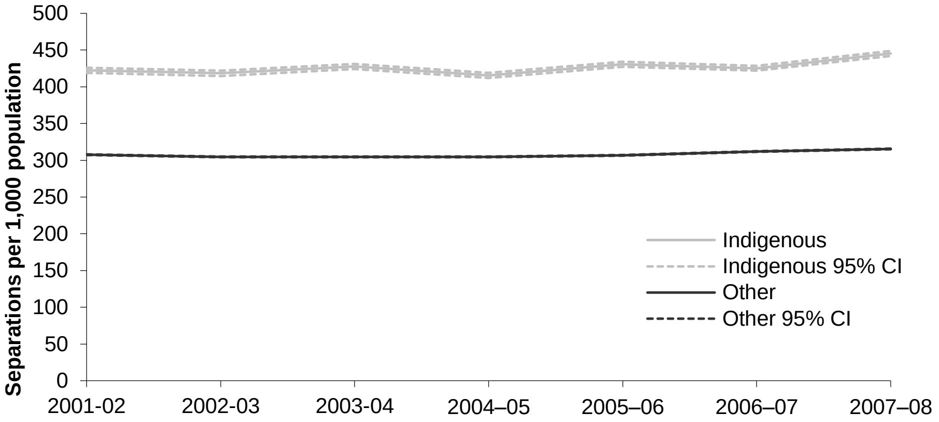
Hospitalisation trends

- There was a significant increase in hospitalisation rates for Indigenous Australians in the Northern Territory over the 7-year period 2001–02 to 2007–08. The fitted trend implies an average yearly increase in hospitalisation rates of 11.2 per 1,000 population, equivalent to an increase of 18% over the period.
- There was a significant increase of 11% in hospitalisation rates for other people in the Northern Territory over the same period.
- Significant increases were also seen in the hospitalisation rate ratio and rate difference between Indigenous and other people in the Northern Territory. The fitted trend implies an average yearly increase of 0.02 in the rate ratio and 7.9 per 1,000 in the rate difference.
- In Queensland, Western Australia, South Australia and the Northern Territory combined, there were significant increases in hospitalisation rates among Indigenous and other people over the 7-year period 2001–02 to 2007–08 (an average yearly increase of 3.1 per 1,000 for Indigenous Australians and 1.4 per 1,000 for other people).

Northern Territory



Qld, WA, SA & NT



Source: AIHW analyses of NHMD.

Figure 1.02.4: Trends in hospitalisation rates (excluding dialysis) by Indigenous status, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08

Hospitalisation for selected conditions among Indigenous children in the Northern Territory

Over the period 2000–01 to 2009–10, among Indigenous children aged 0–14 years in the Northern Territory:

- There were no significant changes in the overall hospitalisation rate.
- There was a significant decrease in the hospitalisation rate for infectious and parasitic disease. The fitted trend implies an average yearly decrease of 1.6 hospitalisations per 1,000 population. This is equivalent to a 32% change over the period.
- There were no significant changes in the hospitalisation rate for diseases of the respiratory system.
- There was a significant increase in the hospitalisation rate for injury, poisoning and certain other consequences of external causes. The fitted trend implies an average yearly increase of 0.6 hospitalisations per 1,000 population. This is equivalent to a 25% change over the period.

Table 1.02.1: Age-standardised hospitalisation rates[(a)] of Indigenous children aged 0–14 years, selected principal diagnoses, Northern Territory, 2000–01 to 2009–2010

	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	Annual change[(b)]	% change over period[(c)]
Infectious and parasitic disease	45.5	47.1	42.7	41.6	37.7	44.4	35.9	37.2	33.1	31.4	–1.6*	–31.5
Disease of the respiratory system	64.1	61.2	69.7	68.8	54.0	52.8	52.1	51.1	59.6	58.0	–1.3	–17.9
Injury, poisoning and certain other consequences of external causes	21.1	22.7	25.1	24.8	24.1	24.6	24.3	25.0	25.9	29.3	0.6*	24.6
Total hospitalisations	**253.6**	**252.0**	**257.1**	**250.6**	**233.5**	**240.8**	**225.8**	**237.9**	**258.9**	**258.1**	**–0.5**	**–1.2**

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 2000–01 to 2009–10.

(a) Directly-age-standardised by 1-year age groups using the 2006 Indigenous children population in the Northern Territory.

(b) Average annual change in rates determined using linear regression analysis.

(c) Per cent change between 2000–01 and 2009–10 based on the average annual change over the period.

Source: AIHW analysis of NHMD.

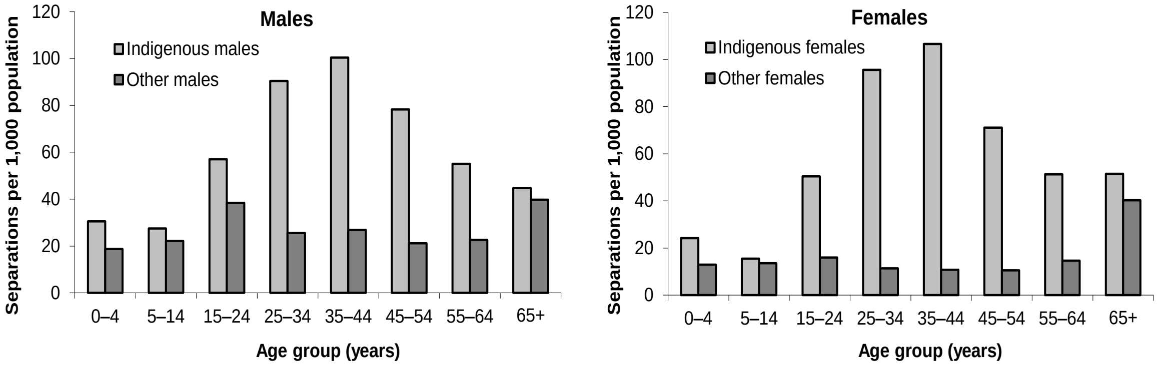
1.03 Hospitalisation for injury and poisoning

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

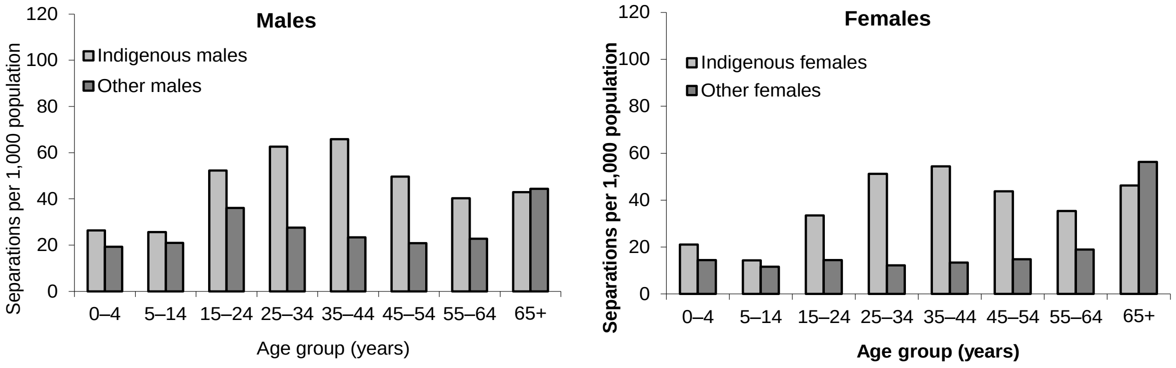
Hospitalisations by age and sex

- For the 2-year period July 2006 to June 2008, in the Northern Territory, Indigenous males and females had higher hospitalisation rates for injury and poisoning than other males and females across all age groups.
- 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 years and over.
- In the Northern Territory, the greatest difference in hospitalisation rates occurred in the 35–44 year age group for males and females. Indigenous males were hospitalised at 4 times the rate of other males, and Indigenous females were hospitalised at around 10 times the rate of other females in this age group.
- For Indigenous males and females in the Northern Territory, hospitalisation rates for injury and poisoning were highest among those aged 35–44 years, while for other males and females rates were highest among those aged 65 years and over (Figure 1.03.1).

Northern Territory



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, Northern Territory and NSW, Vic, Qld, WA, SA & NT, July 2006 to June 2008

Hospitalisations by external causes of injury and poisoning

- In the 2-year period July 2006 to June 2008 in the Northern Territory, assault was the most common cause of hospitalisation for Indigenous males and females with a principal diagnosis of injury and poisoning (31% and 46% respectively). This was followed by accidental falls (14% and 13% respectively) and medical/surgical complications (13% and 14% respectively). In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory, assault was also 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 and females in the Northern Territory was for assault. Indigenous males and females were hospitalised for assault at 8 and 69 times the rate of other males and females respectively.
- Aboriginal and Torres Strait Islander males and females in the Northern Territory were also more than twice as likely as other males and females to be hospitalised for other accidental exposures (ratio of 2 for males and 3 for females), exposure to animate mechanical forces (ratio of 2 for males and 3 for females), intentional self-harm (ratio of 3), and exposure to electric current/smoke/fire/animals/nature (ratio of 3).
- Hospitalisation rate for assault for Indigenous Australians was twice as high in the Northern Territory as in the six jurisdictions combined (23 compared to 11 per 1,000).

Table 1.03.1: Hospitalisations for external causes of injury and poisoning for Aboriginal and Torres Strait Islander people by sex, Northern Territory 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)]**
						Northern Territory						
Assault	1,181	31.2	19.4	7.8*	1,727	46.0	26.2	69.1*	2,908	38.6	22.9	15.3*
Accidental falls	523	13.8	8.2	1.3*	501	13.3	9.6	1.5*	1,024	13.6	9.2	1.4*
Exposure to inanimate mechanical forces	450	11.9	6.5	1.4*	243	6.5	3.4	2.5*	693	9.2	4.9	1.6*
Transport accidents	341	9.0	5.4	1.1	181	4.8	2.8	1.3*	522	6.9	4.0	1.1
Medical/ surgical complications	495	13.1	11.3	2.6*	511	13.6	10.6	3.5*	1,006	13.3	10.9	2.9*
Other accidental exposures[(h)]	150	4.0	2.5	2.1*	108	2.9	2.1	2.5*	258	3.4	2.3	2.3*
Exposure to animate mechanical forces	199	5.3	3.0	2.0*	133	3.5	2.0	2.6*	332	4.4	2.5	2.2*
Intentional self-harm	153	4.0	2.6	3.0*	177	4.7	2.6	2.3*	330	4.4	2.5	2.5*
Exposure to electric current/smoke/ fire/animals/ nature[(i)]	214	5.6	3.3	2.6*	104	2.8	1.4	3.1*	318	4.2	2.3	2.6*
Accidental poisoning by and exposure to noxious substances	42	1.1	0.6	1.0	36	1.0	0.7	2.3*	78	1.0	0.7	1.6*
Other external causes[(j)]	34	0.9	0.5	3.1*	31	0.8	0.4	4.8*	65	0.9	0.5	3.6*
Total (all categories)[(k)]	**3,789**	**100.0**	**63.5**	**2.2***	**3,753**	**100.0**	**61.8**	**2.6***	**7,542**	**100.0**	**62.8**	**2.7***

(continued)

Table 1.03.1 (continued): Hospitalisations for external causes of injury and poisoning for Aboriginal and Torres Strait Islander people by sex, Northern Territory 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, Northern Territory 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 in the period 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)

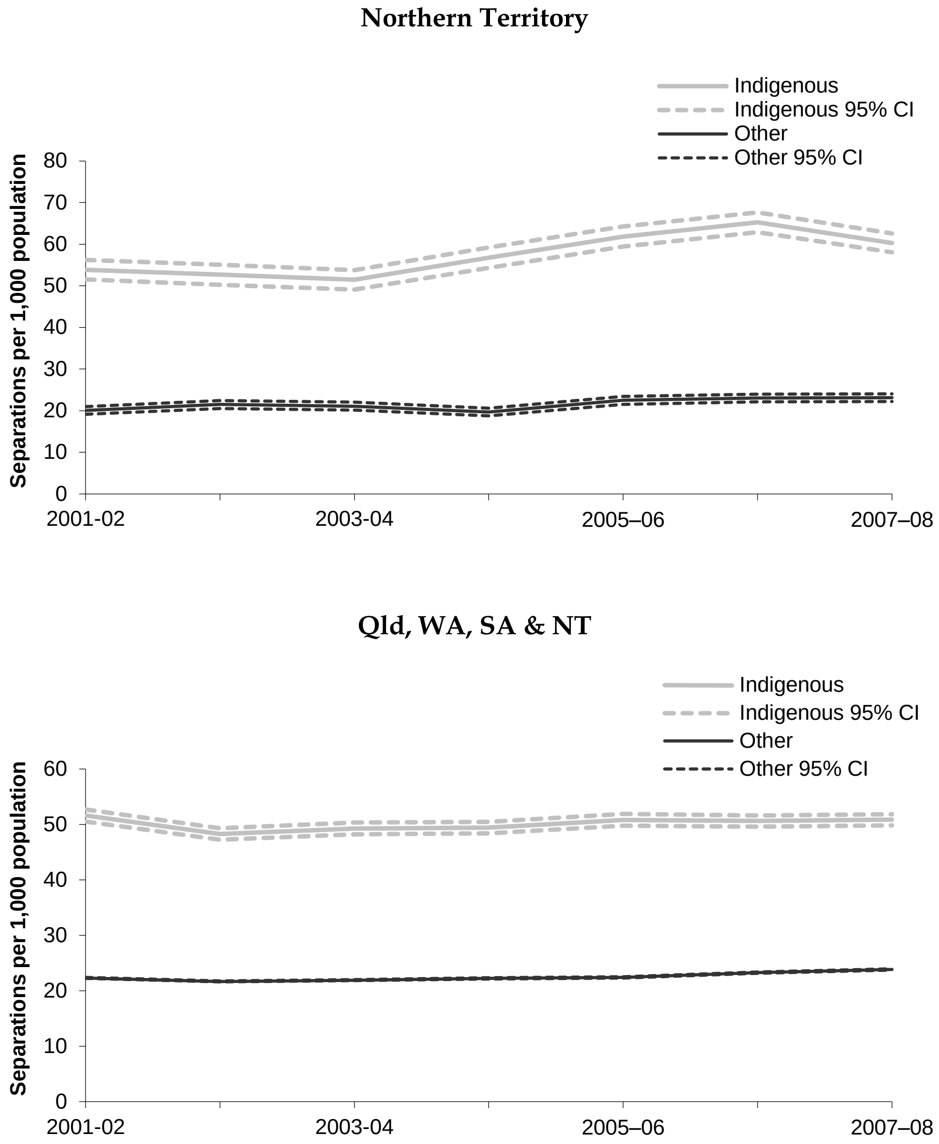
(j) Includes event of undetermined intent (Y10–Y34), legal intervention and operation of war (Y35–Y36), sequelae of external causes of morbidity and mortality (Y85–Y89), supplementary factors classified elsewhere (Y9–Y98).

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

Source: AIHW analyses of NHMD.

Hospitalisation trends

- In the Northern Territory there were significant increases in the hospitalisation rates for injury and poisoning among both Indigenous and other people during the period 2001–02 to 2007–08. The fitted trend implies an average yearly increase in the rate of 2.0 per 1,000 for Indigenous Australians (45% increase over the period), and 0.5 per 1,000 for other people (30% increase over the period).
- There was no significant change in the hospitalisation rate ratio between Indigenous and other people for injury and poisoning in the Northern Territory; however, there was a significant increase in the rate difference (an average yearly increase of 0.03 in the rate ratio and 1.5 per 1,000 in the rate difference).
- There was no significant change in the hospitalisation rates for injury and poisoning among Indigenous Australians in Queensland, Western Australia, South Australia and the Northern Territory combined during the period 2001–02 to 2007–08. There was however a significant increase in the hospitalisation rates for injury and poisoning among other people in the four jurisdictions combined (an average yearly increase of 0.3 per 1,000).



Source: AIHW analyses of NHMD.

Figure 1.03.2: Hospitalisation rates for injury and poisoning, Aboriginal and Torres Strait Islander peoples and other Australians, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08

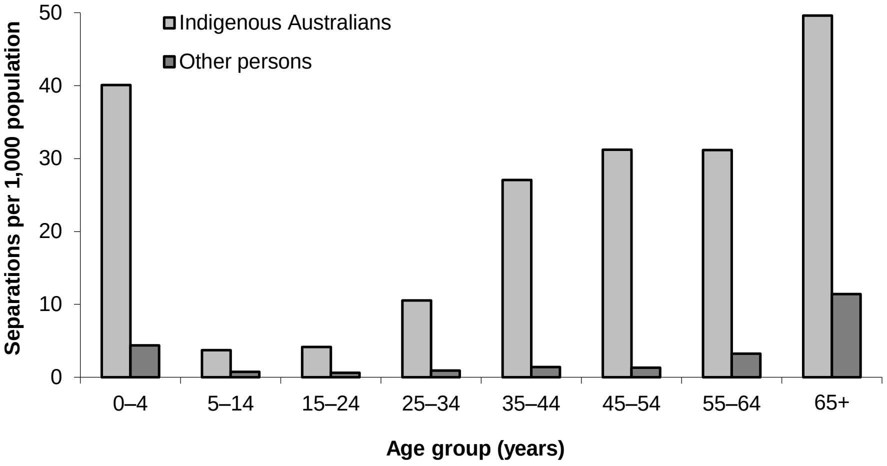
1.04 Hospitalisation for pneumonia

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

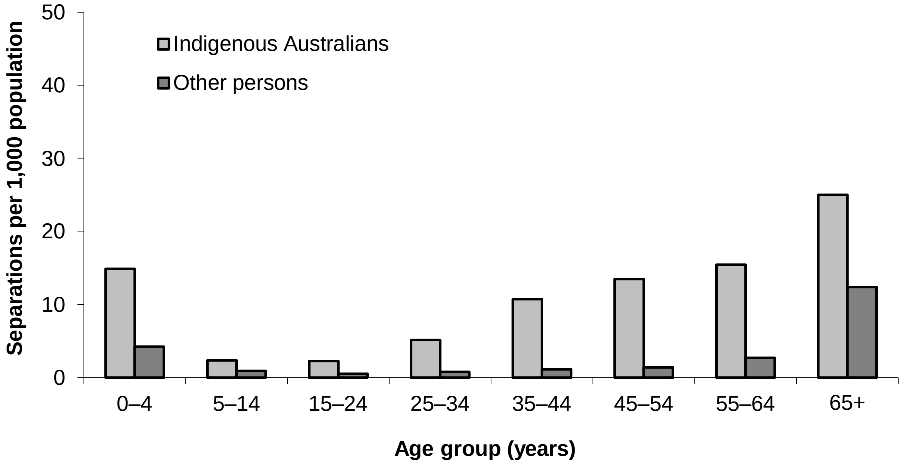
Hospitalisations by age

- In the 2-year period July 2006 to June 2008, Indigenous Australians had higher hospitalisation rates for pneumonia than other people across all age groups in both the Northern Territory, and New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined.
- The greatest difference in hospitalisation rates for pneumonia in the Northern Territory occurred in the 35–44 and 45–54 year age groups where Indigenous Australians were hospitalised at 19 and 24 times the rate of other people respectively.
- For both Indigenous and other people in the Northern Territory hospitalisation rates for pneumonia were highest among those aged 65 years and over, followed by those aged 0–4 years.
- Hospitalisation rates for Indigenous Australians in the Northern Territory were around 4 times as high as that for Indigenous Australians in the six jurisdictions combined across all age groups.

Northern Territory



NSW, Vic, Qld, WA, SA & NT



Source: AIHW analyses of NHMD.

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

Hospitalisations by sex

- For the 2-year period July 2006 to June 2008, approximately 51% of Indigenous Australians in the Northern Territory hospitalised for pneumonia were males, and 49% were females. This is similar to the pattern evident in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined.
- Indigenous Australians in the Northern Territory were hospitalised for pneumonia at a rate of 8 times that of other people in the Northern Territory. This is compared to a rate ratio of around 4 in the six jurisdictions combined.
- Hospitalisation rates for pneumonia were similar for Indigenous males and females in the Northern Territory alone and in the six jurisdictions combined. The rate ratio of Indigenous to other Australian hospitalisations for pneumonia were higher for females than males in the Northern Territory (9 compared to 7) but it was the same for males and females in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined (both about 4).

Table 1.04.1: Hospitalisations for pneumonia for Aboriginal and Torres Strait Islander people – number, age-standardised rate ratios by sex, Northern Territory and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008[a][b][c]

	NT			NSW, Vic, Qld, WA, SA & NT[d]		
	Number	**Rate per 1,000[e]**	**Ratio[f]**	**Number**	**Rate per 1,000[e]**	**Ratio[f]**
Males	1,149	25.7	7.2*	**3,987**	**11.5**	**3.6***
Females	1,099	21.1	8.9*	**3,892**	**10.5**	**4.2***
Persons	2,248	22.9	7.6*	**7,943**	**10.7**	**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.

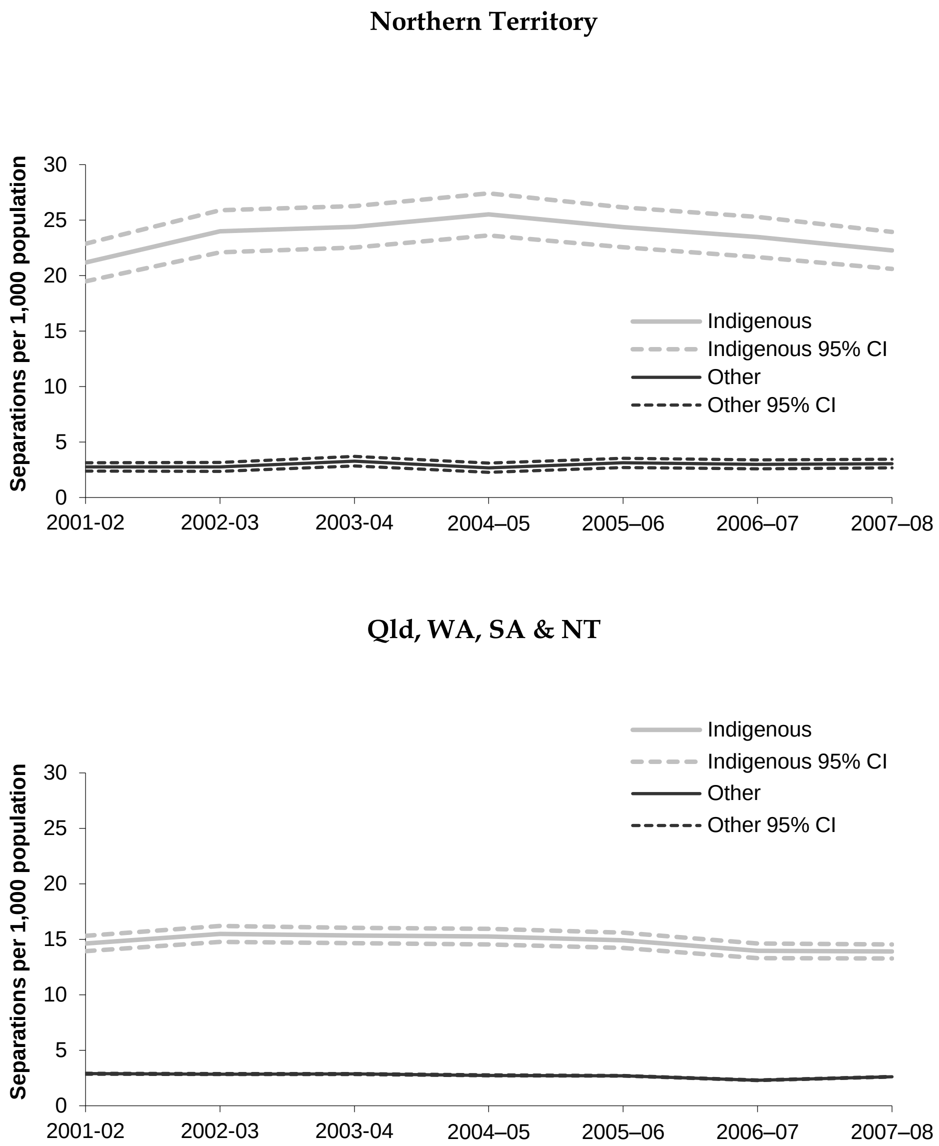
Source: AIHW analyses of NHMD.

Hospitalisation trends

- In the Northern Territory, there were no significant changes in the hospitalisation rate for pneumonia among Indigenous Australians over the 7-year period from 2001–02 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 were no significant changes in the hospitalisation rates for pneumonia among other people in the Northern Territory over the same period.
- There were no significant changes in the hospitalisation rate ratios and rate differences between Indigenous and other people in the Northern Territory for pneumonia (average

yearly decrease of 0.1 in the rate ratio and average yearly increase of 0.04 per 1,000 population in the rate difference for the period 2001–02 to 2007–08).

- Over the same period there were significant declines in hospitalisation rates for pneumonia among Indigenous and other people in Queensland, Western Australia, South Australia and the Northern Territory combined.



Source: AIHW analyses of NHMD.

Figure 1.04.2: Hospitalisation rates for pneumonia, Aboriginal and Torres Strait Islander peoples and other Australians, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08

1.05 Circulatory disease

Prevalence, incidence and number of hospitalisations 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 is the number of proportion (of cases, instances and so forth) present in a population at a given time.

Self-reported prevalence

- In 2004–05 in the Northern Territory, 11% of Indigenous males and 15% of Indigenous females reported heart or circulatory conditions as a long-term condition. This compared to 10% and 14% of Indigenous males and females in Australia (Table 1.05.1).
- Prevalence of heart and circulatory conditions was highest among Indigenous Australians aged 55 years and over (around 50% in the Northern Territory and 54% in Australia).

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

	Indigenous			Non-Indigenous		
	Males	**Females**	**People**	**Males**	**Females**	**People**
			Northern Territory			
			Number			
0–4	0	28	28	1,160	0	1,160
5–14	214	108	322	0	0	0
15–24	183	309	492	533	0	533
25–34	354	1,180	1,534	0	0	0
35–44	1,066	782	1,849	801	2109	2,910
45–54	517	720	1,237	1,602	1055	2,656
55+	702	1,273	1,975	4,134	3584	7,718
Total	**3,036**	**4,400**	**7,437**	**8,230**	**6748**	**14,978**
			Proportion			
0–4	0.0	0.8	0.4	20.6	0.0	13.3
5–14	3.1	1.7	2.4	0.0	0.0	0.0
15–24	3.1	5.3	4.2	4.2	0.0	2.8
25–34	7.6	23.1	15.7	0.0	0.0	0.0
35–44	30.4	19.4	24.5	5.6	23.5	12.6
45–54	23.6	29.2	26.6	19.7	10.9	14.9
55+	39.2	58.2	49.6	46.7	41.3	44.0
Total	**10.6**	**14.8**	**12.8**	**12.5**	**11.3**	**11.9**
Total age-standardised[(a)]	**18.5**	**24.2**	**21.6**	**20.6**	**0.0**	**13.3**

(continued)

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

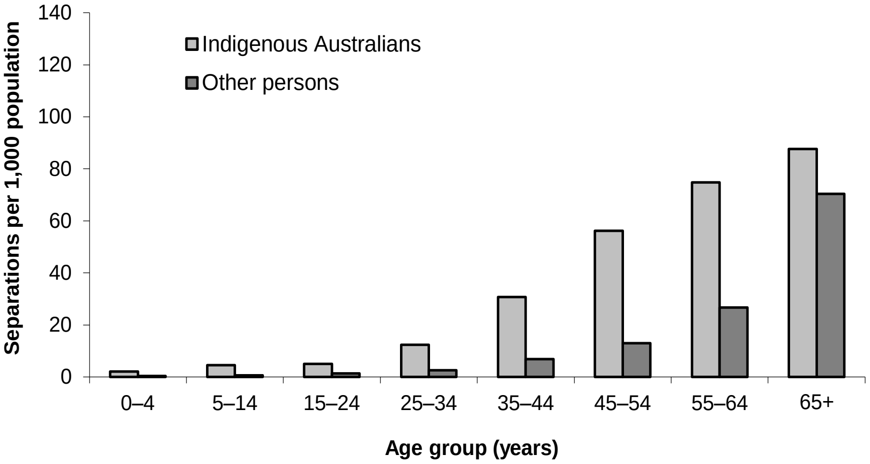
	Indigenous			Non-Indigenous		
	Males	**Females**	**People**	**Males**	**Females**	**People**
				Australia		
				Number		
0–4	471	962	1,433	7,511	5,024	12,535
5–14	725	558	1,283	23,915	12,920	36,835
15–24	1,037	1,963	3,000	35,797	45,996	81,793
25–34	2,518	5,101	7,618	77,067	141,316	218,384
35–44	4,978	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**

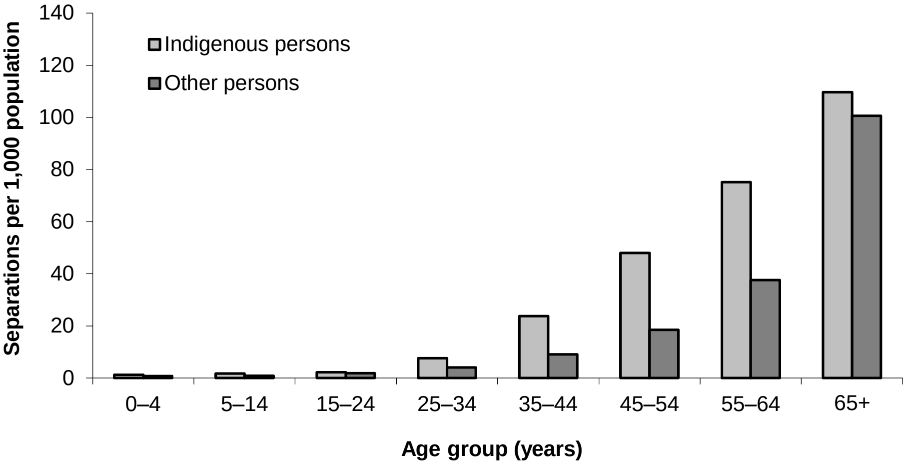
(a) Directly age-standardised proportions to the 2001 Australian standard population.

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

- For the 2-year period July 2006 to June 2008 in the Northern Territory, Indigenous Australians had higher hospitalisation rates for circulatory disease than other people across all age groups.
- The greatest difference in hospitalisation rates occurred in the 5–14 and 0–4 year age groups where Indigenous Australians were hospitalised at 7 and 5 times the rate of other people in these age groups respectively.
- In New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, the greatest difference in hospitalisation rates occurred in the 35–44 and 45–54 year age groups. Indigenous Australians were hospitalised at around 3 times the rate of other people in these age groups.
- Indigenous Australians below the age of 55 years in the Northern Territory were hospitalised at higher rates for circulatory disease than Indigenous Australians in the six jurisdictions combined.
- Hospitalisation rates for circulatory diseases increased with age for both Indigenous and other people in the Northern Territory, and were highest among those aged 65 years and over.


Northern Territory


NSW, Vic, Qld, WA, SA & NT

Source: AIHW analyses of NHMD.

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

Hospitalisations by principal diagnosis

- For the 2-year period July 2006 to June 2008, in both the Northern Territory and New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, of all hospitalisations with a principal diagnosis of diseases of the circulatory system, ischaemic heart disease was the most common cause for hospitalisation among Aboriginal and Torres Strait Islander people (36% and 44% respectively) (Table 1.05.2).
- Indigenous males in the Northern Territory were hospitalised for circulatory disease at twice the rate of other males, whilst Indigenous females were hospitalised at 2.5 times the rate of other females. These figures were slightly lower for the six jurisdictions combined.
- Aboriginal and Torres Strait Islander people in the Northern Territory were hospitalised for rheumatic heart disease at 14 times the rate of other Australians. This compared to 7 times the rate of other people in the six jurisdictions combined (Table 1.05.2).

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, Northern Territory 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)**
						Northern Territory						
Ischaemic heart disease	521	40.2	17.7	2.4*	383	31.9	10.5	3.0*	904	36.2	13.4	2.4*
Acute myocardial infarction	261	*20.2*	*8.3*	*2.5**	166	*13.8*	*4.7*	*3.7**	427	*17.1*	*6.2*	*2.6**
Other heart disease	416	32.1	11.0	1.7*	389	32.4	9.9	2.7*	805	32.3	10.5	2.0*
Cerebrovascular disease	121	9.3	4.6	2.4*	111	9.3	3.6	3.0*	232	9.3	4.0	2.6*
Stroke	105	*8.1*	*4.0*	*2.5**	96	*8.0*	*3.3*	*3.0**	201	*8.1*	*3.6*	*2.6**
Rheumatic heart disease	117	9.0	1.5	9.2*	192	16.0	2.8	16.9*	309	12.4	2.2	13.5*
Hypertension disease	13	1.0	0.3	2.9*	22	1.8	0.6	6.1*	35	1.4	0.5	4.3*
Other circulatory diseases(h)	107	8.3	2.9	0.9	103	8.6	2.4	0.7*	210	8.4	2.6	0.8*
Total	**1,295**	**100.0**	**38.1**	**2.0***	**1,200**	**100.0**	**29.8**	**2.5***	**2,495**	**100.0**	**33.3**	**2.1***

(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, Northern Territory 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***

*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 in the period 2006–07 to 2008–09.

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

(g) Rate ratio Indigenous: Other.

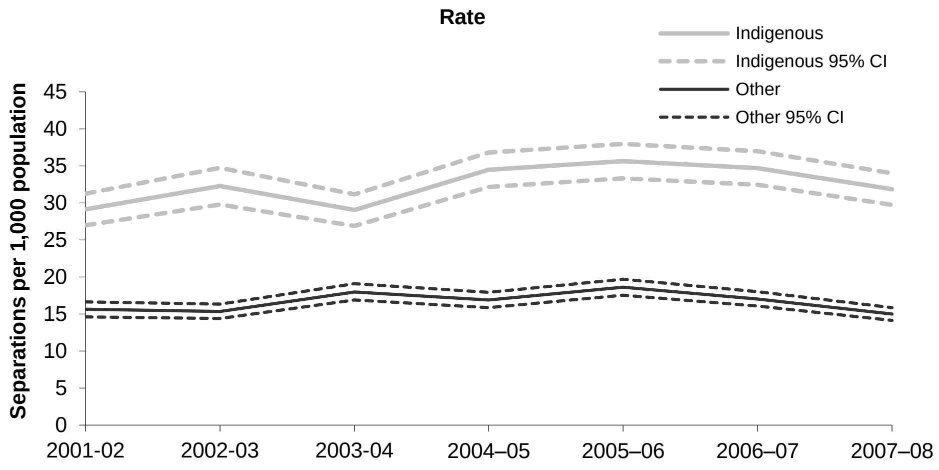
(h) Includes disease of arteries, arterioles and capillaries, diseases of veins, lymphatic vessels and lymph nodes and other unspecified disorders of the circulatory system.

Source: AIHW analyses of NHMD.

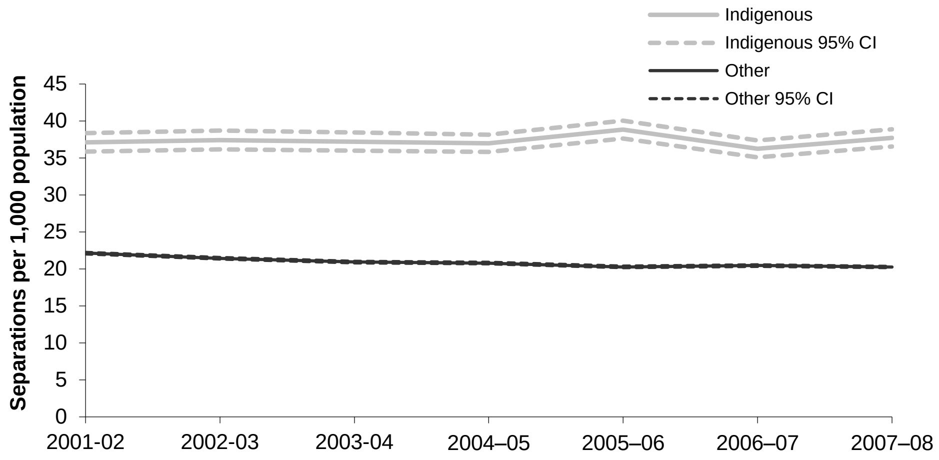
Hospitalisation trends

- In the Northern Territory, there was no significant change in the hospitalisation rate for circulatory disease among Indigenous Australians for the 7-year period 2001–02 to 2007–08. The fitted trend implies an average yearly increase in the rate of 0.7 per 1,000 (Figure 1.05.2).
- There was no significant change in the hospitalisation rate for circulatory disease among other people in the Northern Territory for the same period.
- The hospitalisation rate ratios and rate differences between Indigenous and other people in the Northern Territory showed no significant change during the period 2001–02 to 2007–08 (an average yearly increase of 0.03 in the rate ratio, and 0.6 per 1,000 in the rate difference).
- In Queensland, Western Australia, South Australia and the Northern Territory combined there was no significant change in the hospitalisation rate for circulatory diseases among Indigenous Australians during the period 2001–02 to 2007–08; however, there was a significant decline in the hospitalisation rate among other people. Rate ratios and rate differences both showed increases over this period; however, only the rate ratio showed a statistically significant increase.

Northern Territory



Qld, WA, SA & NT



Source: AIHW analyses of NHMD.

Figure 1.05.2: Hospitalisation rates for circulatory diseases, Aboriginal and Torres Strait Islander peoples and other Australians, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08

1.06 Acute rheumatic fever and rheumatic heart disease

Incidence and prevalence of acute rheumatic fever and rheumatic heart disease among Aboriginal and Torres Strait Islander people expressed as a rate by age group

Incidence and prevalence by age

- Over the 3-year period 2006–2009, there were 213 new or recurrent episodes of acute rheumatic fever among Indigenous Australians in the Top End of the Northern Territory and Central Australia, with an overall rate of 0.8 per 1,000.
- The incidence of acute rheumatic fever among Aboriginal and Torres Strait Islander people was highest among children aged 5–14 years (2.3 per 1,000), and lowest among adults aged 45+ years.
- As at 31 December 2009 there were 1,374 cases of rheumatic heart disease among Indigenous Australians in the Top End of the Northern Territory and Central Australia, with an overall rate of 21.5 per 1,000.
- Rheumatic heart disease was most prevalent among Indigenous Australians aged 5–14 years (23.1 per 1,000), and least prevalent among those aged 65 years and over (3.2 per 1,000).

Table 1.06.1: Acute rheumatic fever incidence (2006–2009(a)) and rheumatic heart disease prevalence (31/12/2009) in Top End and Central Australia Northern Territory Indigenous Australians, by age group

	ARF incidence				**RHD prevalence**		
	No.	**%**	**Rate per 1,000(b)**		**No.**	**%**	**Rate per 1,000(c)**
0–4	n.p.	n.p.	n.p.	0–14	137	10.0	6.1
5–14	133	62.4	2.3	15–24	318	23.1	25.1
15–24	44	20.7	0.9	25–34	309	22.5	29.6
25–34	18	8.5	0.4	35–44	286	20.8	34.2
35–44	7	3.3	0.2	45–54	190	13.8	34.5
45+	n.p.	n.p.	n.p.	55–64	90	6.6	32.6
				65+	44	3.2	23.7
Total	**213**	**100.0**	**0.8**	**Total**	**1,374**	**100.0**	**21.5**

(a) Calendar year reporting. Data are presented in 4-year groupings because of small numbers each year.

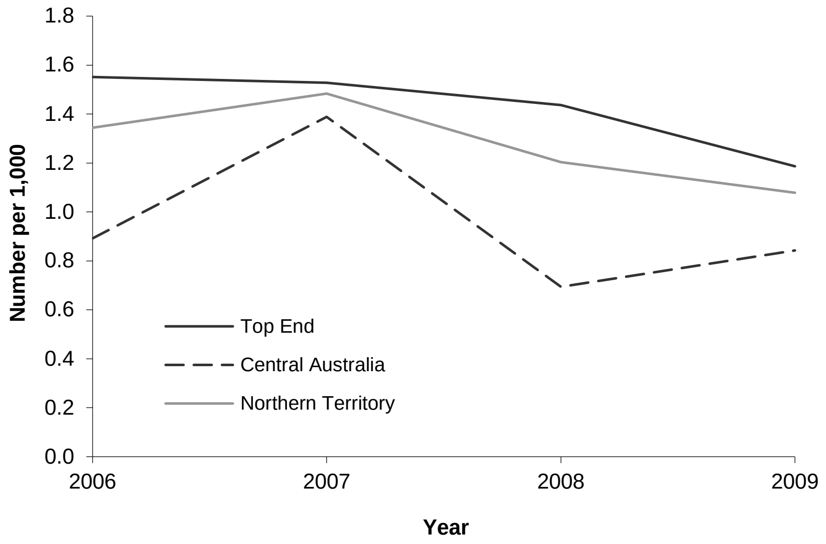
(b) Age-specific rates calculated using the average number of registrations for 2006–2009 divided by the 2006 estimated resident Indigenous population for the Top End and Central Australia.

(c) Age-specific rates calculated using the 2006 estimated resident Indigenous population for the Top End and Central Australia.

Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program data.

Incidence trends

- Over the period 2006 to 2009, the Top End had a higher incidence rate of acute rheumatic fever than Central Australia and the total Northern Territory.



Source: AIHW analysis of Northern Territory Rheumatic Heart Disease Program data.

Figure 1.06.1: Acute rheumatic fever incidence, NT Indigenous Australians, by time period, Central Australia and the Top End, 2006 to 2009

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 rate is the number of proportion (of case, 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 the Northern Territory, after adjusting for differences in age structure between the Indigenous and non-Indigenous populations, approximately 15% of Indigenous males and 17% of Indigenous females reported high blood pressure or hypertension compared to 14% of Indigenous males and 16% of Indigenous females in Australia.
- In both the Northern Territory and Australia, high blood pressure or hypertension was most prevalent among Indigenous people aged 55 years and over. In the Northern Territory, 34% of Indigenous males and 44% of Indigenous females in this age group reported high blood pressure/hypertension, compared to 39% of Indigenous males and 46% of Indigenous females in this age group in Australia.
- In 2004–05, self-reported prevalence of high blood pressure/hypertension among Indigenous people in the Northern Territory (9% for both males and females) was slightly higher than among Indigenous people in Australia (7% for males and 8% for females).

Table 1.07.1: People reporting high blood pressure/hypertension, by Indigenous status, sex and age group, Northern Territory and Australia, 2004–05

	Northern Territory				Australia			
	Males		Females		Males		Females	
Age group	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
	%	%	%	%	%	%	%	%
25–34	8	n.a.	10	n.a.	4	3	5	2
35–44	26	n.a.	15	n.a.	14	6	11	4
45–54	18	n.a.	21	n.a.	22	15	24	13
55+	34	n.a.	44	n.a.	39	32	46	36
Total	**9**	**n.a.**	**9**	**n.a.**	**7**	**10**	**8**	**12**
Total standardised[(a)]	**15**	**n.a.**	**17**	**n.a.**	**14**	**10**	**16**	**10**

(a) Age-standardised proportions.

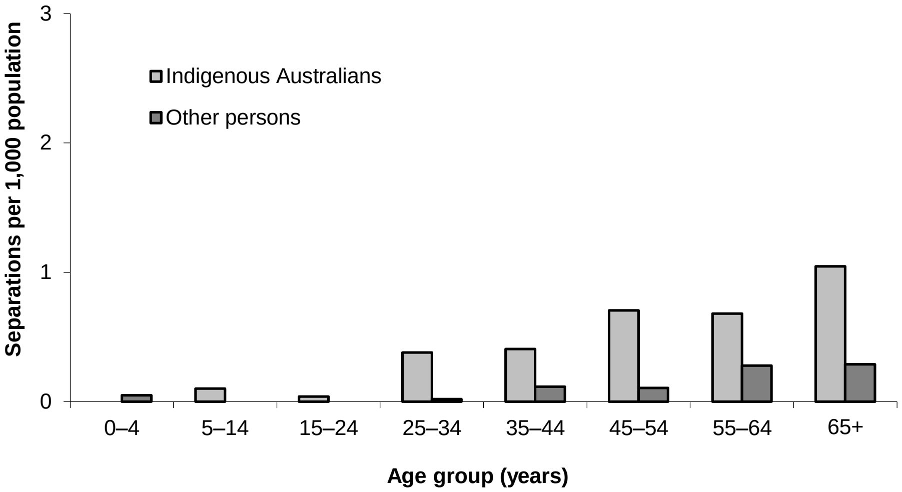
Note: Non-Indigenous proportions for the Northern Territory are not publishable due to the small sample size of Non-indigenous Australians in the NT in NHS 2004–05.

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

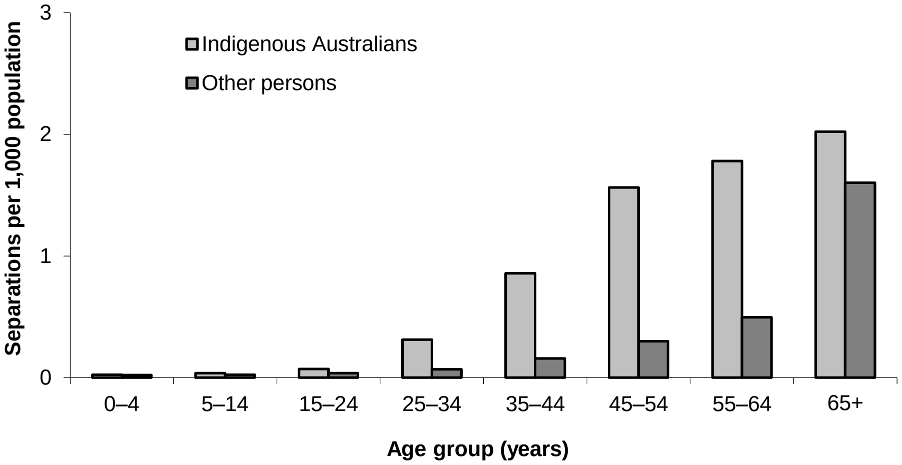
Hospitalisations

- For the 2-year period July 2006 to June 2008 in the Northern Territory, Indigenous Australians had higher hospitalisation rates for hypertensive disease than other people across all age groups with the exception of those aged 0–4 years.
- Indigenous Australians in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined had higher hospitalisation rates across all age groups.
- In the Northern Territory, the greatest difference in rates occurred in the 25–34 year age group where Indigenous Australians were hospitalised at 20 times the rate of other people in this age group. In the six jurisdictions combined, the greatest difference in rates occurred in the 35–44 year age group, with Indigenous Australians hospitalised at 5 times the rate of other people in this age group.
- In the Northern Territory, hospitalisation rates for hypertensive disease were highest among those aged 65 years and over for Indigenous and other people.

Northern Territory



NSW, Vic, Qld, WA, SA & NT



Source: AIHW analyses of NHMD.

Figure 1.07.1: Age specific hospitalisation rates for principal diagnosis of hypertensive disease, by Indigenous status, Northern Territory 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, after adjusting for differences in age structure, approximately 15% of Indigenous people in the Northern Territory reported diabetes or high sugar levels compared to 13% of Indigenous people in Australia.
- In both the Northern Territory and Australia, prevalence of diabetes among Indigenous people increased with age. In the Northern Territory, prevalence of diabetes increased from 10% among those aged 25–34 years to 34% among those aged 55 years and over. Correspondingly, for Indigenous Australians in Australia overall, prevalence of diabetes varied from around 4% among those aged 25–34 years to 33% among those aged 55 years and over.
- In 2004–05, self-reported prevalence of diabetes/high blood sugar among Indigenous people in the Northern Territory (7% for males and 9% for females) was higher than for Indigenous people in Australia (6% for males and 7% for females).
- For both the Northern Territory and Australia, the prevalence of diabetes/high blood sugar was higher among Indigenous females than among Indigenous males.

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

	Northern Territory		Australia	
Age group	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
	%	**%**	**%**	**%**
25–34	9.6	n.a.	4.4	0.8
35–44	17.3	n.a.	10.1	2.3
45–54	21.4	n.a.	21.0	4.1
55 years and over	33.8	n.a.	33.4	11.8
Total age-standardised[(a)]	**14.7**	**n.a.**	**12.6**	**3.7**

(a) Total is directly age-standardised proportion.

Note: Non-Indigenous proportions for the Northern Territory are not publishable due to the small sample size of Non-Indigenous Australians in the NT in NHS 2004–05.

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, Northern Territory and Australia, 2004–05

	Male	**Female**	**Total**
	%	%	%
Northern Territory	7.3	9.1	8.2
Australia	5.5	7.1	6.3

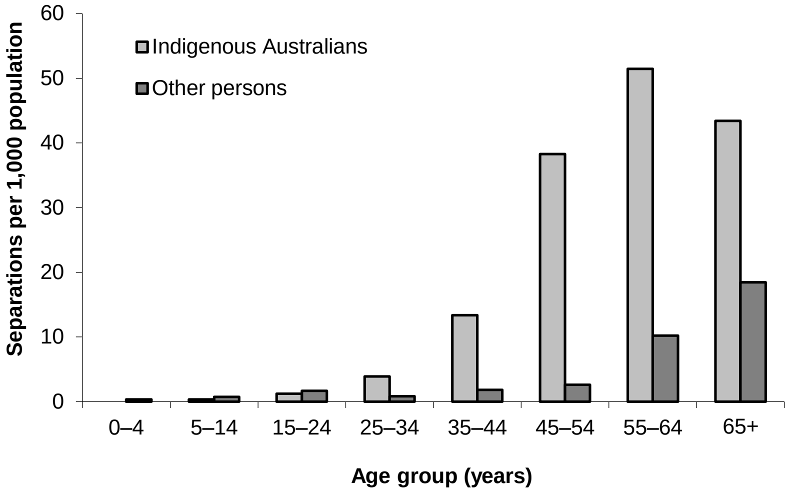
Source: AIHW analyses of NATSIHS 2004–05.

Hospitalisations

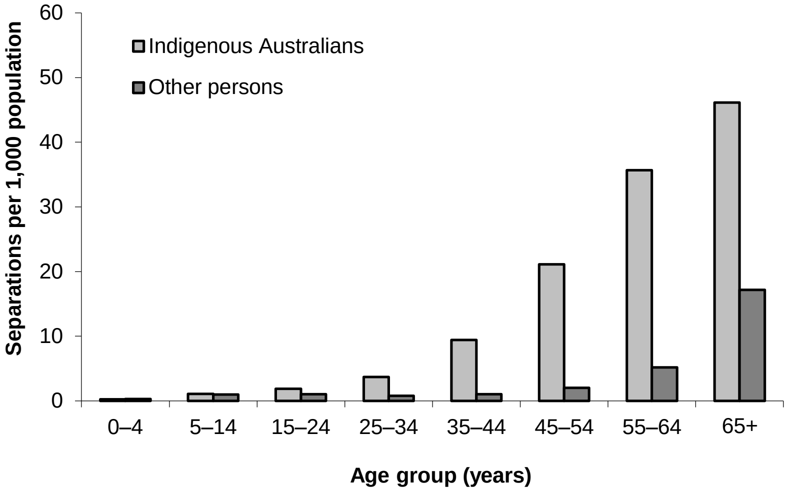
Hospitalisations by age

- For the 2-year period July 2006 to June 2008 in the Northern Territory, Indigenous Australians had much higher hospitalisation rates for diabetes than other people across all age groups from age 25–34 years onwards. The greatest difference in rates occurred in the 45–54 year age group where Indigenous Australians in the Northern Territory were hospitalised at 15 times the rate of other people.
- Indigenous Australians in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined had higher rates of hospitalisation for diabetes than that of other people in all age groups from age 5–14 onwards. The greatest difference in rates occurred in the 45–54 year age group where Indigenous Australians were hospitalised at 11 times the rate of other people.
- Hospitalisation rates for diabetes among Indigenous Australians in the Northern Territory were higher than among Indigenous Australians in the six jurisdictions combined for those aged between 25 and 64 years.

Northern Territory



NSW, Vic, Qld, WA, SA & NT



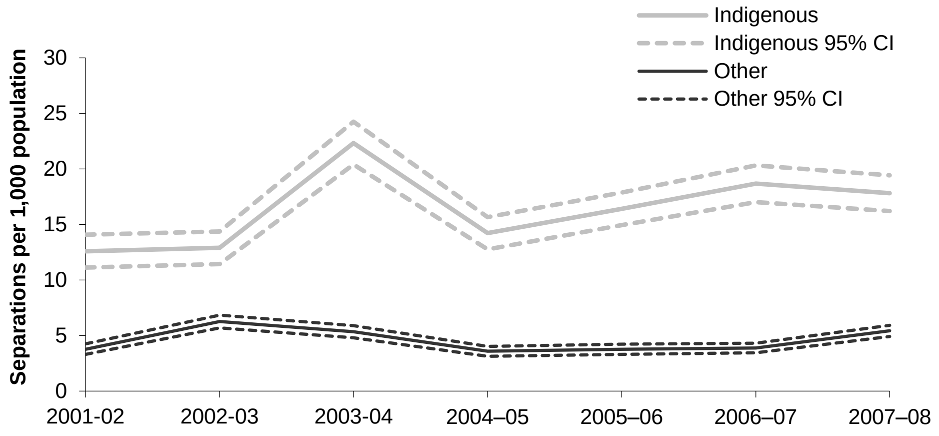
Source: AIHW analyses of NHMD.

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

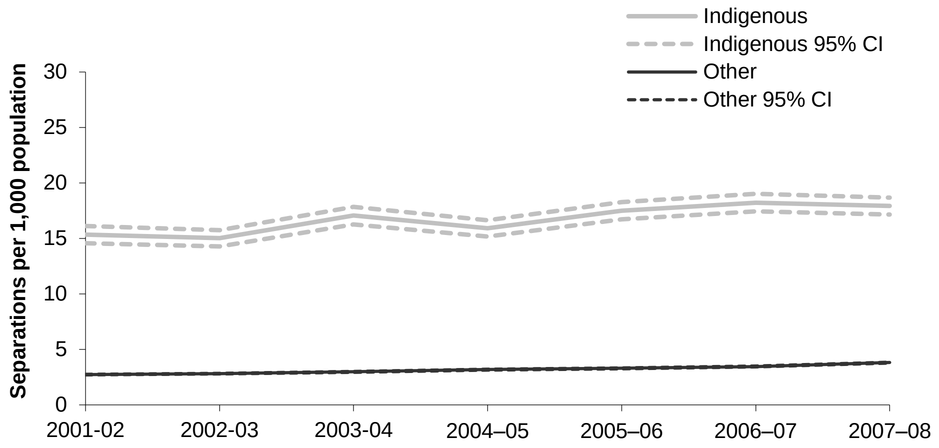
Hospitalisation trends

- In the Northern Territory there was no significant change in hospitalisation rates for diabetes among Indigenous or other people during the period 2000–01 to 2005–06.
- Over the same period hospitalisation rates for diabetes increased significantly among Indigenous and other people in Queensland, Western Australia, South Australia and the Northern Territory combined (average yearly increase in the rate for Indigenous Australians of 0.5 hospitalisations per 1,000 population, and 0.2 per 1,000 for other people).
- There was significant change in the rate difference between Indigenous and other people in Queensland, Western Australia, South Australia and the Northern Territory during the period 2001–02 to 2007–08 (average yearly increase of 0.3 hospitalisations per 1,000).

Northern Territory



Qld, WA, SA & NT



Source: AIHW analyses of NHMD.

Figure 1.08.2: Hospitalisation rates for diabetes, Aboriginal and Torres Strait Islander peoples and other Australians, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08

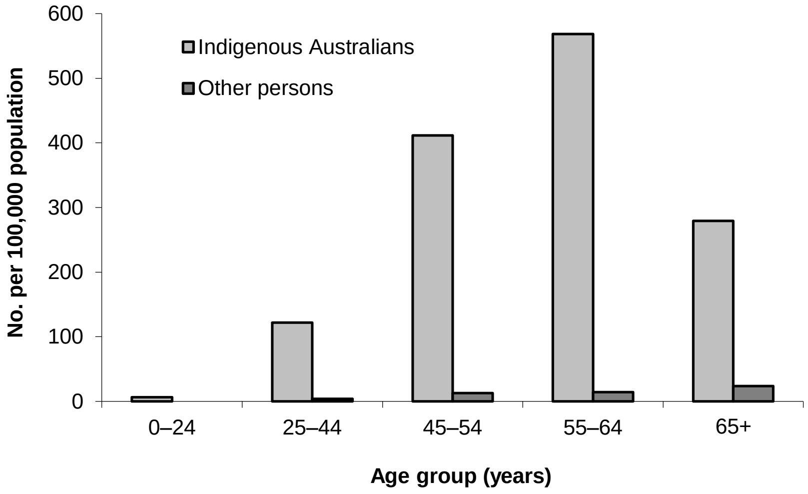
1.09 End-stage renal disease

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

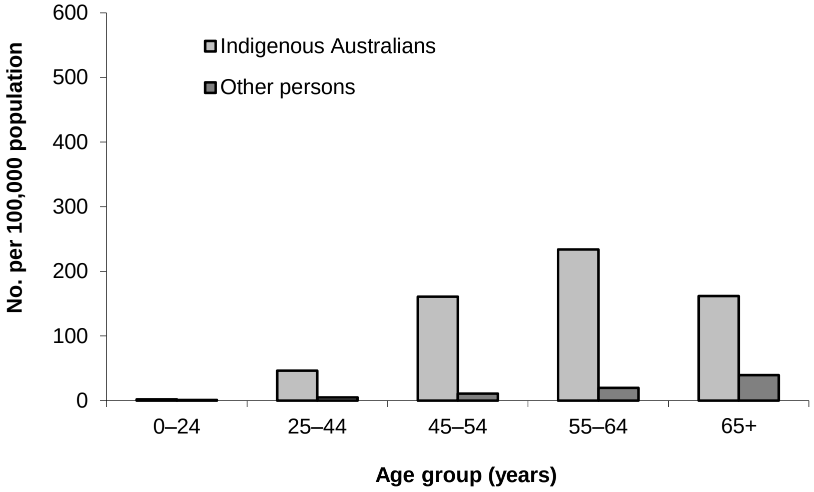
Incidence by age

- For the period 2006–2008 in the Northern Territory, the incidence rate of ESRD for Indigenous Australians was higher than for non-Indigenous Australians across all age groups. The greatest difference in incidence rates between Indigenous and non-Indigenous Australians was in the 55–64 years age group, where Indigenous Australians were 39 times as likely to be registered for ESRD treatment as non-Indigenous Australians.
- The incidence rates for ESRD were much lower among Indigenous Australians in Australia than among Indigenous Australians in the Northern Territory. In Australia the greatest difference in incidence rates between Indigenous and non-Indigenous Australians was in the 45–54 years age group, where Indigenous Australians were 15 times as likely to be registered for ESRD treatment as non-Indigenous Australians (Figure 1.09.1).

Northern Territory



Australia



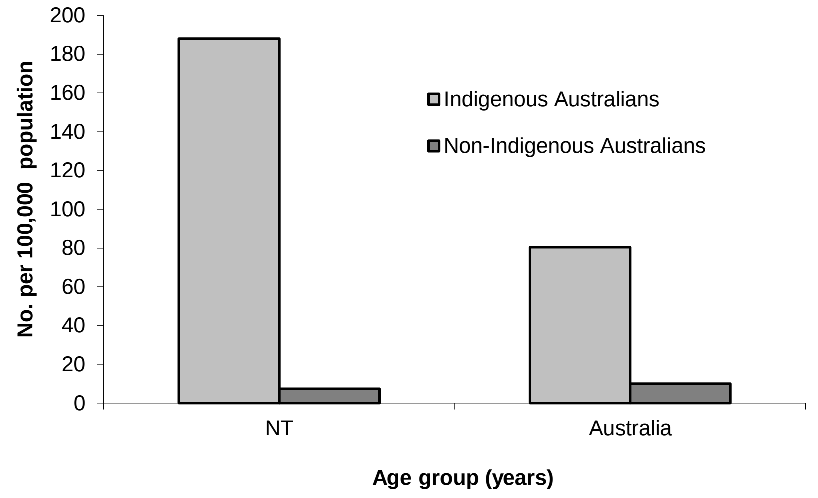
Source: AIHW analyses of Australian and New Zealand Dialysis and Transplant Registry.

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

Incidence by Indigenous status

- For the period 2006–2008, Indigenous Australians were 26 times as likely to be registered with ESRD as non-Indigenous Australians in the Northern Territory but only 8 times as likely in Australia as a whole.
- The incidence rate of ESRD was considerably higher for Indigenous Australians in the Northern Territory than for Indigenous Australians throughout Australia (188 per

100,000 compared to 80 per 1,000). The incidence rate for non-Indigenous Australians in the Northern Territory was slightly lower than that in Australia (7 per 100,000 compared to 10 per 100,000).



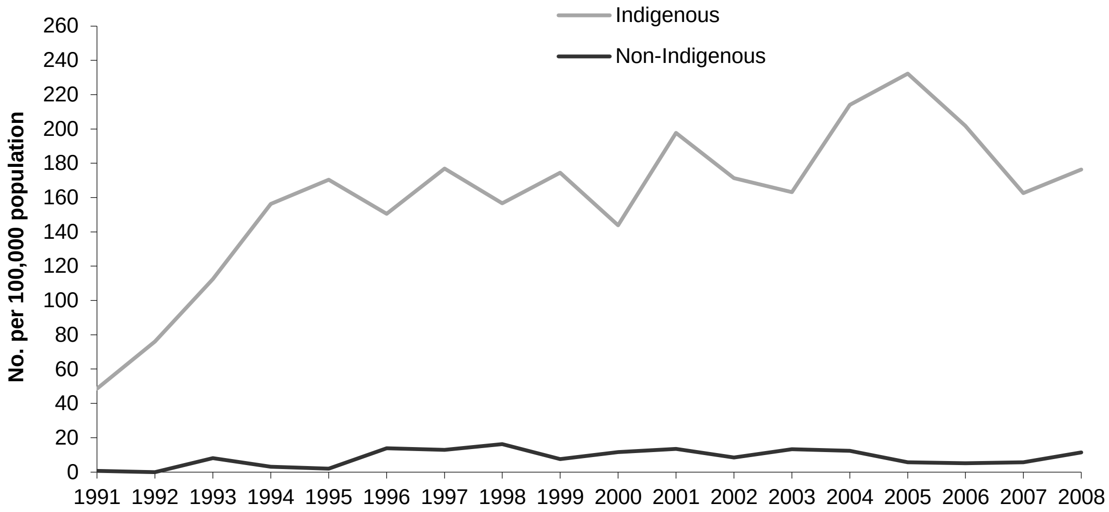
Source: AIHW analyses of Australian and New Zealand Dialysis and Transplant Registry.

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

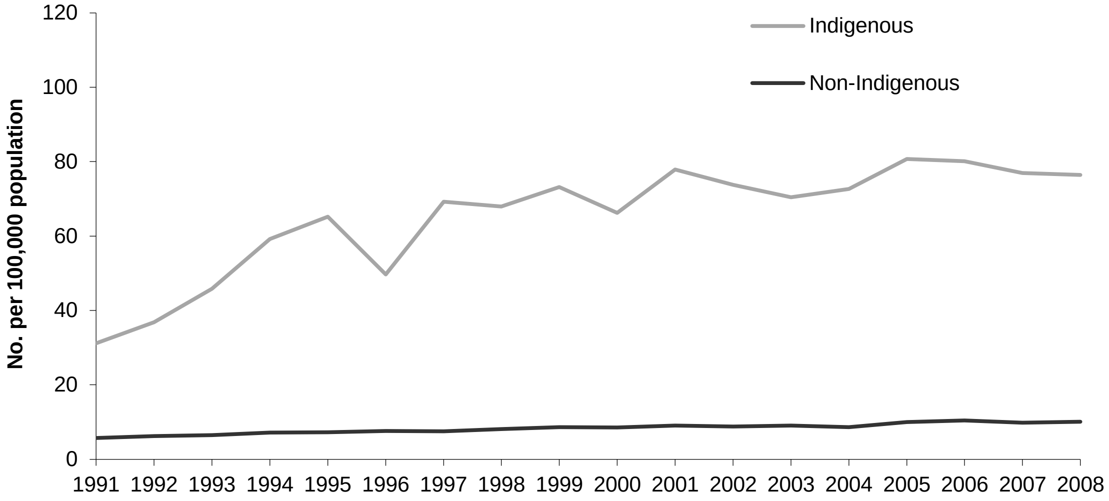
Time trends

- Over the period 1991–2008 there were significant increases in the incidence rate of ESRD among Indigenous Australians in the Northern Territory, with the rate increasing by an average of 6.2 cases per 100,000 population per year. This is equivalent to a 217% increase over the period.
- There was no significant change in the incidence rate of ESRD among non-Indigenous Australians in the Northern Territory.
- The rate difference between Indigenous and non-Indigenous Australians in the Northern Territory for ESRD increased significantly during the period 1991–2008 by an average of 5.9 per 100,000 population per year.
- Among Indigenous and non-Indigenous people in Australia there were significant increases in the incidence rate of ESRD over the same period. The rate increased by an average yearly amount of 2.4 per 100,000 population for Indigenous Australians, and 0.2 per 100,000 population for non-Indigenous Australians.
- There was no significant change in the incidence rate ratio between Indigenous and non-Indigenous Australians over the period 1991–2008; however, there was a significant increase in the rate difference with an average yearly increase of 2.1 per 100,000 population.

Northern Territory



Australia



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, Northern Territory and Australia, 1991–2008

1.10 Decayed, missing, filled teeth

The number of decayed, missing and filled deciduous infant teeth (dmft) and the number of decayed, missing and filled permanent adult teeth (DMFT) for Aboriginal and Torres Strait Islander people

Children's oral health

- In 2002 in the Northern Territory, the mean number of decayed and missing teeth (dmft/DMFT) for Indigenous children aged 4–6 years, 8–10 years, and 12–14 years was higher than for non-Indigenous children. The mean number of filled teeth was lower for Indigenous than non-Indigenous children.
- The mean number of decayed, missing, and filled teeth (dmft) for Indigenous children aged 4–6 years in the Northern Territory was higher than for Indigenous children in New South Wales and South Australia. The mean number of DMFT for Indigenous children aged 8–10 years and 12–14 years in the Northern Territory was higher than for Indigenous children in New South Wales but lower than for Indigenous children in South Australia.

Table 1.10.1: Mean number of decayed, missing or filled teeth for Aboriginal and Torres Strait Islander and other Australian children, NSW (2000), SA (2003) and NT (2002)

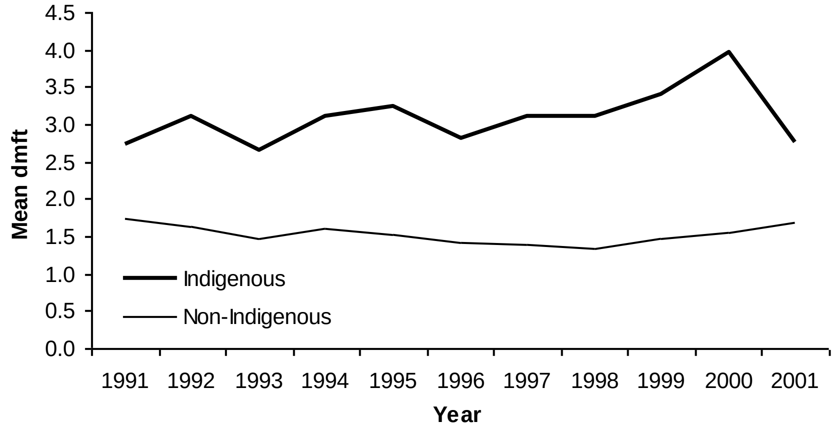
	NSW			SA			NT		
	Indigenous	Non-Indigenous	Ratio	Indigenous	Non-Indigenous	Ratio	Indigenous	Non-Indigenous	Ratio
4–6 year olds, deciduous teeth									
decayed	1.63	0.71	2.30	2.23	0.91	2.40	3.26	0.86	3.80
missing	0.22	0.04	5.00	0.33	0.08	4.00	0.14	0.05	2.70
filled	0.41	0.21	1.90	1.10	0.58	1.90	0.42	0.46	0.90
dmft	2.26	0.97	2.30	3.66	1.58	2.30	3.82	1.37	2.80
8–10 year olds, permanent teeth									
Decayed	0.32	0.15	2.20	0.48	0.19	2.50	0.51	0.14	3.60
Filled	0.13	0.10	1.30	0.31	0.25	1.20	0.14	0.16	0.90
DMFT	0.46	0.25	1.80	0.83	0.45	1.80	0.68	0.31	2.20
12–14 year olds, permanent teeth									
Decayed	0.67	0.32	2.10	0.94	0.41	2.30	1.16	0.41	2.80
Filled	0.37	0.33	1.10	0.86	0.65	1.30	0.37	0.52	0.70
DMFT	1.09	0.67	1.60	1.85	1.08	1.70	1.62	1.00	1.60

Source: AIHW Dental Statistics Research Unit.

Time series analysis

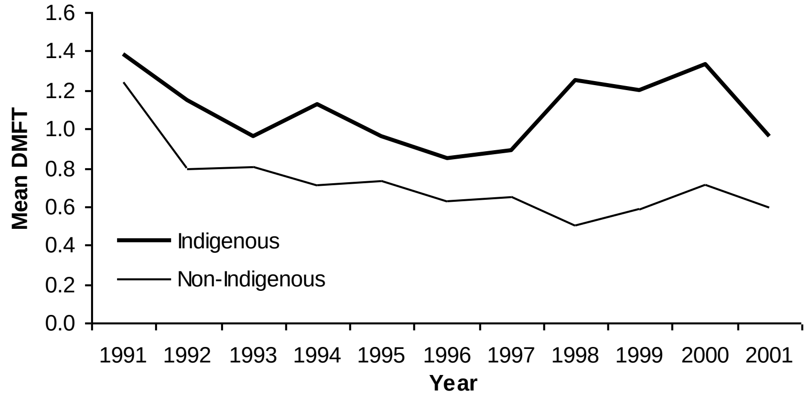
- Between 1991 and 2001, the mean number of decayed, missing and filled deciduous teeth (DMFT) for Indigenous children in the Northern Territory at 6 and 12 years of age varied from year to year, showing a sharp decline in 2001. The decline in Indigenous DMFT in 2001 may be part of normal variation in Indigenous data which may relate to particular *Remote* communities receiving school dental services in any particular year.

- The mean DMFT and DMFT scores for children aged 6 years and 12 years were higher for Indigenous children than non-Indigenous children over the period 1991–2001.



Source: AIHW Dental Statistics Research Unit.

Figure 1.10.1: Mean DMFT scores for children at 6 years of age in the Northern Territory, by Indigenous status, 1991–2001



Source: AIHW Dental Statistics Research Unit.

Figure 1.10.2: Mean DMFT scores for children at 12 years of age in the Northern Territory, by Indigenous status, 1991–2001

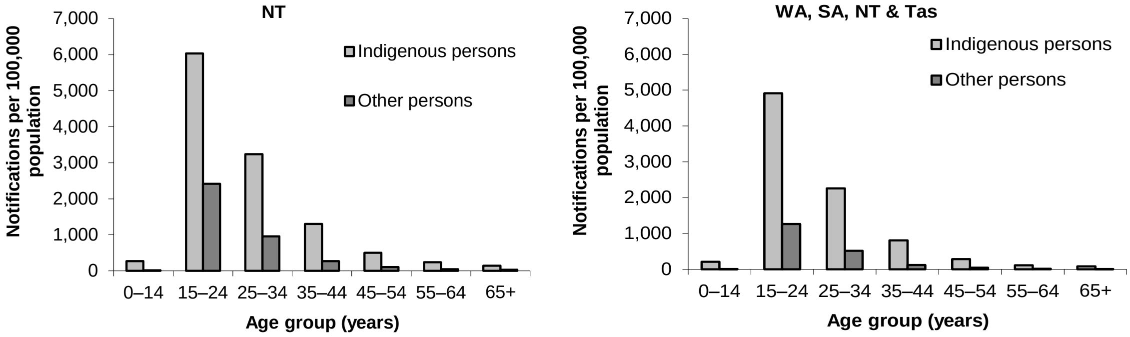
1.11 Hepatitis C and sexually transmissible infections

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

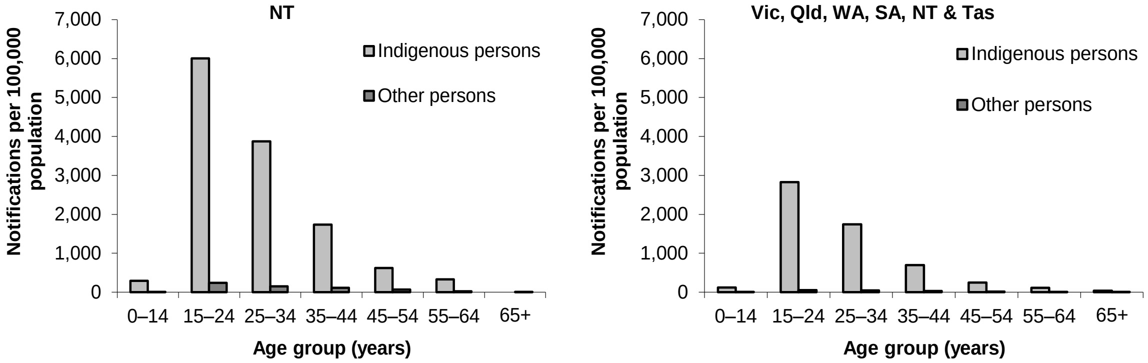
Notifications by age

- For the 3-year period 2006–2008 in the Northern Territory, notification rates for chlamydia, gonorrhoea and syphilis were higher among Indigenous Australians than among other people across all age groups. In Victoria, Queensland, Western Australia, South Australia, Northern Territory and Tasmania combined, rates for gonorrhoea and syphilis were higher among Indigenous Australians than among other people across all age groups. A similar pattern was seen for chlamydia rates among Indigenous Australians in Western Australia, South Australia, Northern Territory and Tasmania combined.
- In the Northern Territory, rates of chlamydia, gonorrhoea and syphilis were highest among those aged 15–24 years for Indigenous Australians. Chlamydia and gonorrhoea were also highest among those aged 15–24 years for other people; however syphilis was highest among those aged 35–44 years for other people in the Northern Territory.
- The greatest difference in notification rates between Indigenous and other people occurred in the 0–14 year age group for chlamydia (ratio of 16); in the 15–24 year age group for syphilis (ratio of 35); and in the 0–14 year age group for gonorrhoea (ratio of 24).

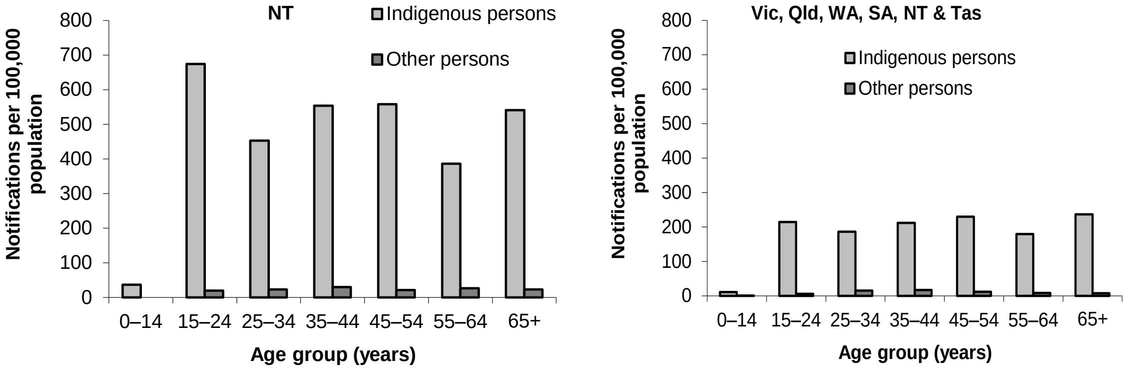
Chlamydia



Gonorrhoea



Syphilis



Notes

1. Numbers of Hepatitis C notifications in the Northern Territory are too small to calculate rates.
2. Data for Chlamydia refer to Western Australia, South Australia, Northern Territory and Tasmania only.

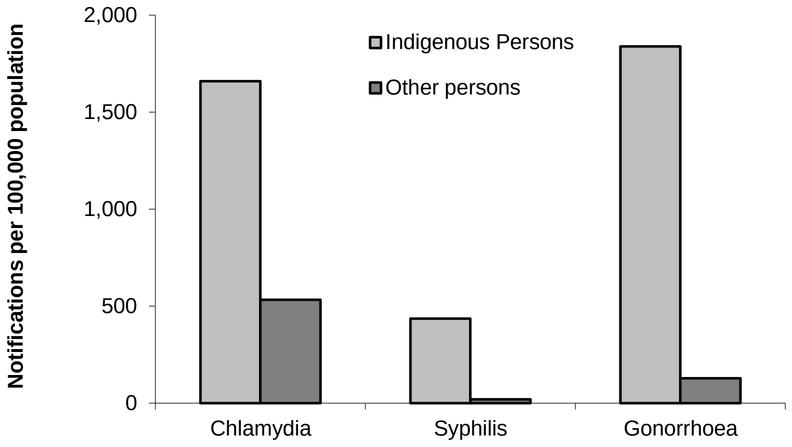
Source: AIHW analysis of National Notifiable Disease Surveillance System (NNDSS).

Figure 1.11.1: Age specific notification rates per 100,000 for chlamydia, gonorrhoea and syphilis, by Indigenous status, the Northern Territory and Vic, Qld, WA, SA & NT combined, 2006–2008

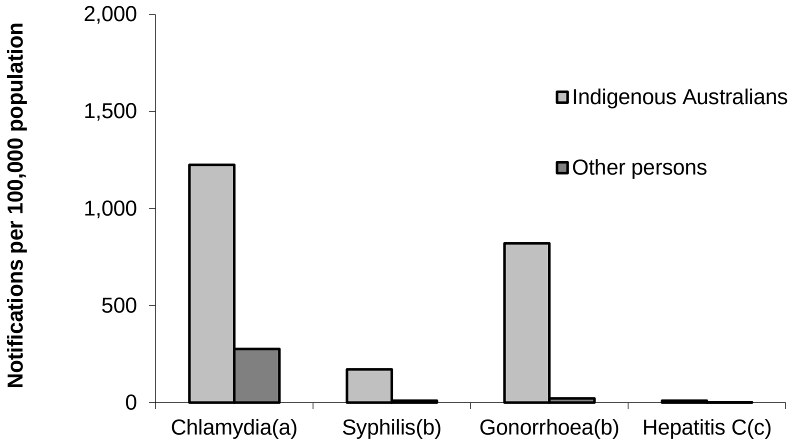
Notifications by Indigenous status

- For the period 2006–2008, rates of chlamydia, syphilis and gonorrhoea were higher in the Indigenous population than in the other Australian population in the Northern Territory. Chlamydia notification rates were 4 times higher, syphilis notification rates 19 times higher, and gonorrhoea notification rates 16 times higher among Indigenous Australians than among other people.
- For the period 2006–2008, syphilis and gonorrhoea were also 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. A similar pattern was seen for chlamydia notification rates among Indigenous Australians living in Western Australia, South Australia, the Northern Territory and Tasmania combined.
- Notification rates for syphilis and gonorrhoea for Indigenous Australians were higher in the Northern Territory than in Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined. A similar pattern was seen for chlamydia notification rates among Indigenous Australians living in Western Australia, South Australia, the Northern Territory and Tasmania combined.

Northern Territory



NSW, Vic, Qld, WA, SA, NT & Tas



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

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

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

Source: AIHW analyses of NNDSS.

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

Notification trends

Chlamydia

- Over the period 1994–96 to 2006–08 in the Northern Territory, there were significant increases in the notification rates for Indigenous and other people for chlamydia (average yearly increase of around 96 cases per 100,000 population for Indigenous Australians, and 30 cases per 100,000 for other people).
- Over the same period the rate difference between notification rates for Indigenous and other people for chlamydia increased significantly, by an average of 66 per 100,000 per year.
- Over the period 1994–96 to 2006–08 in Western Australia, South Australia and the Northern Territory combined, there were significant increases in the notification rates for Indigenous and other people for chlamydia (average yearly increase of around 73 per 100,000 for Indigenous Australians, and 18 per 100,000 for other people).

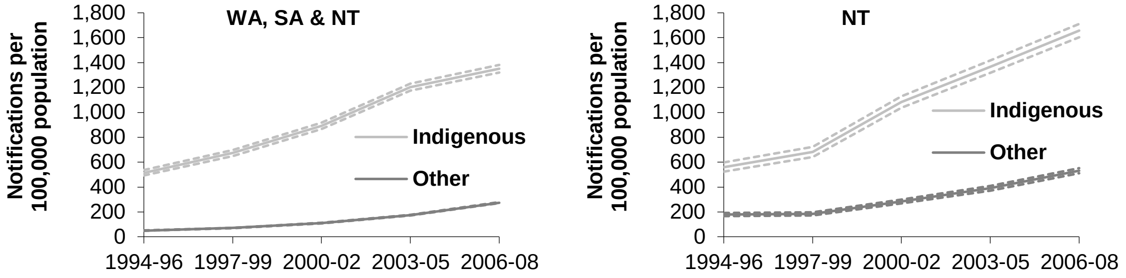
Gonorrhoea

- Over the period 1994–96 to 2006–08, there were significant increases in notification rates for gonorrhoea among Indigenous Australians in the Northern Territory with an average yearly increase of around 75 notifications per 100,000. Over the same period, there was no significant change in the notification rates for gonorrhoea among other people in the Northern Territory.
- Over the same period there were significant increases in the rate ratios and rate differences between notification rates for Indigenous and other people for gonorrhoea in the Northern Territory (average yearly increase of around 0.5 for the rate ratio and 74 for the rate difference).
- In Western Australia, South Australia and the Northern Territory combined over the period 1994–96 to 2006–08, there were significant increases in the notification rates for Indigenous and other people for gonorrhoea.

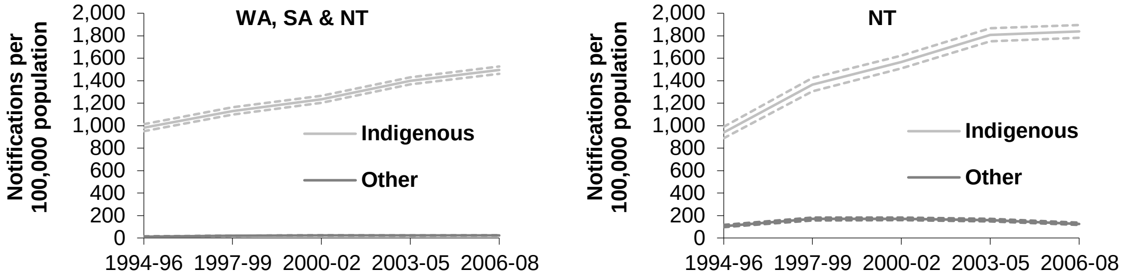
Syphilis

- There were significant declines in notification rates for syphilis among Indigenous Australians in the Northern Territory over the period 1994–96 to 2006–08 (average of 19 per 100,000 per year or a 42% decline over time). Over the same period there was no significant change in notification rates for syphilis among other people in the Northern Territory.
- In Western Australia, South Australia and the Northern Territory combined, there was no significant change in syphilis notification rates for Indigenous Australians but significant increases in syphilis notification rates for other people over the period 1994–96 to 2006–08.

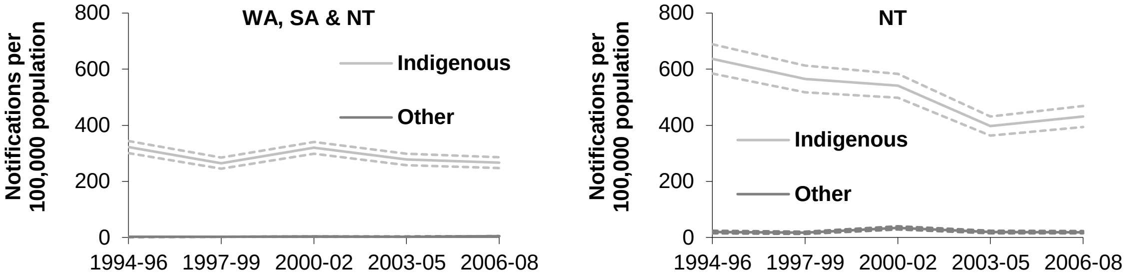
Chlamydia



Gonorrhoea



Syphilis



Note: Numbers of Hepatitis C notifications in the Northern Territory are too small to calculate rates.

Source: AIHW analyses of NNDSS.

Figure 1.11.3: Age-standardised notification rates per 100,000 for chlamydia, gonorrhoea and syphilis, by Indigenous status, the Northern Territory and WA, SA & NT combined, 1994–96 to 2006–08

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 in Northern Territory (12%) was higher than that reported nationally (9%).
- The reported prevalence of total or partial hearing loss as a ear and hearing problem was 3.9% among Indigenous children in Northern Territory while this was lower nationally (2.8%).

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

Type of ear/hearing problem	Northern Territory	Australia
	Per cent	
Total has ear/hearing problems(a)	*12.1*	*8.6*
Total or partial hearing loss	3.9	2.8
Runny ears or glue ear (otitis media)	2.7[(a)]	3.1
Other	4.5	2.7
Does not have ear/hearing problems	87.9	91.4
Total[(c)]	**100**	**100**
Total number	**21,977**	**191,543**
Not known	0.5[(b)]	0.9

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

(b) Estimate has a relative standard error of greater than 50% and is considered too unreliable for general use.

(c) Excludes not known responses.

Source: AIHW analyses of 2008 NATSISS.

Prevalence by age and sex

- In 2004–05, approximately 13% of Indigenous children aged 0–14 years in the Northern Territory were found to have ear or hearing problems compared with 10% of all the Indigenous children of the same age in Australia.
- In the Northern Territory, diseases of the ear and mastoid process were more prevalent among Indigenous children aged 5–14 years than among children aged 0–4 years (14% compared to 12%).
- Approximately 10% of Indigenous children aged 0–14 years in the Northern Territory reported otitis media which was much higher than the national rate for this age group (4%). Around 4% of Indigenous children aged 0–14 years in the Northern Territory reported complete/partial deafness or hearing loss.

Table 1.12.2: Diseases of the ear and mastoid reported for children aged 0–14 years, by Indigenous status, Northern Territory and Australia, 2004–05

	0–4 years		5–14 years		Total 0–14 years	
	Indig.	Non-Indig.	Indig.	Non-Indig.	Indig.	Non-Indig.
	%	%	%	%	%	%
			Northern Territory			
Complete/ partial deafness or hearing loss	2.4	n.p.	4.0	n.p.	3.5	n.p.
Otitis media	9.8	n.p.	9.3	n.p.	9.5	n.p.
Other diseases of the ear and mastoid	1.1	n.p.	0.8	n.p.	0.9	n.p.
Total	**12.0**	**n.p.**	**13.5**	**n.p.**	**12.9**	**n.p.**
			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**

n.p. Not published as the sample does not support non-Indigenous estimates for the Northern Territory.

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

- In the Northern Territory in 2004–05, prevalence of diseases of the ear and mastoid process was higher among Indigenous girls aged 0–14 years (16%) than Indigenous boys of the same age group (10%). For Australia overall, prevalence of diseases of the ear and mastoid process was similar for males and females (9% and 10%).

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

	Males	Females
	%	%
Northern Territory	10	16
Australia	10	9

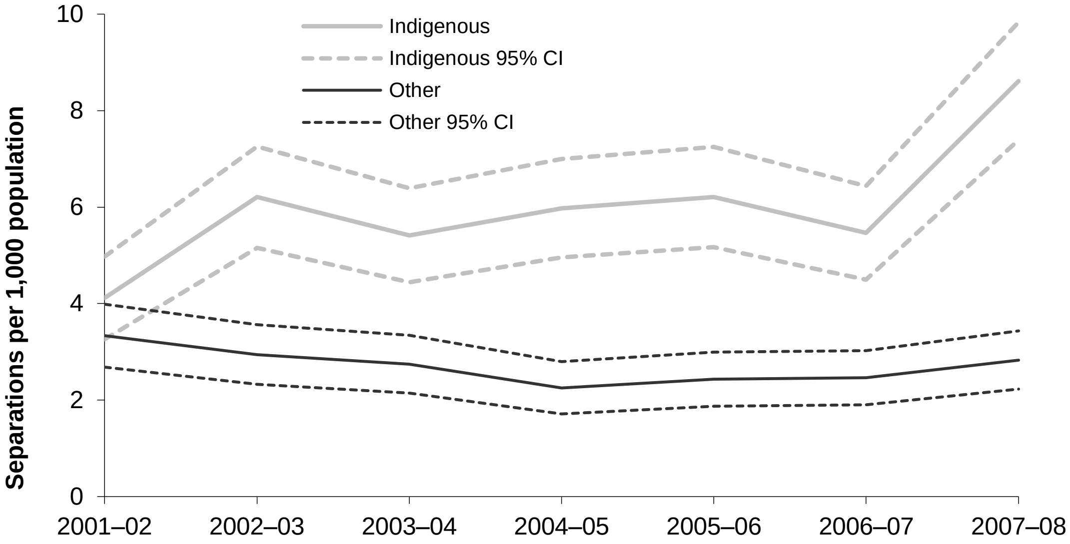
Source: ABS and AIHW analyses of NATSIHS 2004–05.

Hospitalisation trends

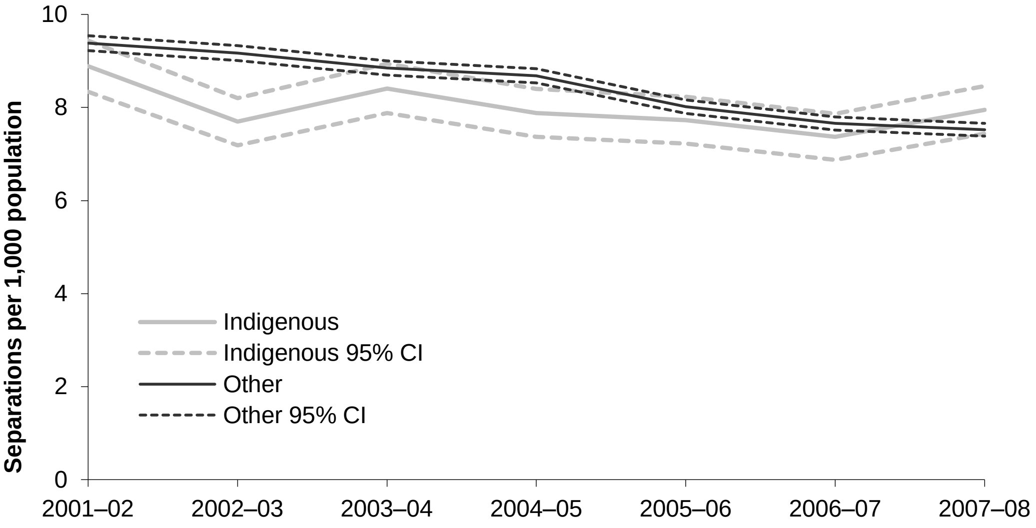
- In the Northern Territory, there was a significant increase in hospitalisation rates for diseases of the ear and mastoid process among Indigenous children aged 0–14 years during the period 2001–02 to 2007–08, with an average yearly increase in the rate of 0.5 hospitalisations per 1,000 population. This is equivalent to a 67% increase over the same period.
- Over the same period, there was no significant change in hospitalisation rates for diseases of the ear and mastoid process among Indigenous children aged 0–14 years in Queensland, Western Australia, South Australia and the Northern Territory combined, with an average yearly decline of 0.1 hospitalisations per 1,000.

- The rate ratio and rate difference between hospitalisations rates for diseases of the ear and mastoid process for Indigenous and other children aged 0–14 years in the Northern Territory increased significantly during the period 2001–02 to 2007–08 (average yearly increase in the rate ratio of 0.2, and 0.6 per 1,000 in the rate difference).
- In 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 years showed no significant change during the period 2001–02 to 2007–08. However, among other children there was a significant decline over the same period (average yearly decline of 0.3 hospitalisations per 1,000).

Northern Territory



Qld, WA, SA & NT



Source: AIHW analyses of NHMD.

Figure 1.12.1: Hospitalisation rates for Indigenous and other children aged 0–14 years from diseases of the ear and mastoid, Northern Territory and Qld, WA, SA & NT combined, 2001–02 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 Northern Territory, 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.

Table 1.13.1: Disability status among Indigenous persons aged 18 years and over in non-remote areas of Northern Territory and Australia, 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
			Northern Territory (Per cent)		
Indigenous	11.8[(a)]	46.5	*58.3**	41.7	100
Non-Indig.	n.p.	n.p.	*35.7**	64.3	100
Ratio	n.a.	n.a.	*1.6*	0.7	. .
			Australia (Per cent)		
Indigenous	10.3	48.5*	*58.9**	41.1*	100
Non-Indig.	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 2007-08.

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 the Northern Territory, around 90% of Indigenous Australians reported no stressors related to discrimination or racism and 54% could visit their homelands.
- Almost one-quarter (21%) of Indigenous Australians reported involvement with an Aboriginal and Torres Strait Islander organisation and 89% had support in a time of crisis.

Connectedness to family land and history

- Approximately 92% of Indigenous Australians in the Northern Territory reported recognition of their homeland.
- Around 78% of Indigenous Australians aged 15 years and over reported they were not removed from their natural family and 50% reported that their relatives were not removed from their natural family.

Health, chronic disease and substance use

- Around 57% of Indigenous Australians aged 15 years and over in the Northern Territory reported excellent or very good health.
- Around 90% of Indigenous Australians had not drunk alcohol at risky/high-risk levels in the last 12 months and 82% had not used illicit substances in the last 12 months.

Culture

- The majority (87%) of Indigenous Australians in the Northern Territory participated in at least one cultural event in the last 12 months and around three-quarters (77%) reported they spoke an Aboriginal or Torres Strait Islander language.

Identity

- Around 88% of Indigenous Australians in the Northern Territory reported identifying with a tribal group or clan.

Continuing employment

- In 2002, approximately 28% of Indigenous Australians in the Northern Territory were employed in Community Development Employment Projects (CDEP) and a further 18% were employed (not in CDEP).

Education

- Around 14% of Indigenous Australians aged 15 years and over in the Northern Territory completed Year 12 and 23% of Indigenous Australians aged 25–64 years had a non-school qualification.

Infrastructure and community

- Around 40% of Indigenous Australians in the Northern Territory were living in a dwelling that had no major structural problems and 38% were living in a dwelling that was not overcrowded.
- Approximately 37% of Indigenous Australians reported having a working telephone, 31% had used a computer in the last 12 months and 19% had used the Internet in the last 12 months.
- Over half (41%) of Indigenous Australians aged 15 years and over reported having access to a motor vehicle.

Coping within the internal world and external world

- Around 28% of Indigenous Australians in the Northern Territory reported no community problems and 12% reported experiencing no stressors in the last 12 months.
- Over three-quarters (83%) of Indigenous Australians reported they were not a victim of physical violence in the last 12 months and 87% reported they did not need legal services in the last 12 months.

Structure and routine

- Approximately 82% of Indigenous Australians in the Northern Territory reported living in only one dwelling in the last 12 months.
- Around 17% of Indigenous Australians reported they did not have a cash flow problem.

Income

- Around 12% of Indigenous Australians aged 15 years and over in the Northern Territory were in the third quintile or above of equivalised household income.
- Approximately 42% of Indigenous Australians reported that government support was not the main source of income during the last 2 years and 20% could raise $2,000 within a week.

Table 1.14.1: Variables contributing to community functioning, Indigenous Australians aged 15 years and over, Northern Territory and Australia 2002

	NT	Aust
Themes and community infrastructure	%	%
Power to control choices and options		
No stressors reported for discrimination/racism	90.2	82.3
Can visit homelands	54.1	46.2
Has support in a time of crisis	88.6	90.4
Involvement with Aboriginal/Torres Strait Islander organisation	21.4	26.1
Work allows for cultural responsibilities – can meet responsibilities	37.3	22.3
Used strategies to meet living expenses	44.9	48.5
Connectedness to family land and history		
Access to traditional lands		
Recognition of homelands	92.3	69.6
Lives in homelands	37.1	21.9
Removal		
Respondent not removed from natural family	77.8	87.2
Relatives not removed from natural family	50.0	44.4
Health, chronic disease and substance use		
Self-assessed health status excellent or very good	56.8	44.1
Has no disability or long term health condition	73.3	63.5
Not a regular smoker(a)	44.1	50.7
Has not drunk alcohol in last 12 months at risky/high risk levels(b)	90.4	84.1
Has not used substances illicitly in last 12 months(c)	82.3	70.7
Culture		
Protection and maintenance of culture:		
Main language spoken at home is Aboriginal language/ Torres Strait Islander Language	63.2	12.0
Speaks an Aboriginal/Torres Strait Islander language	76.6	21.1
Participating in cultural events		
Attended Aboriginal and Torres Strait Islander cultural event in last 12 months		
Attended funeral	73.3	46.6
Attended ceremony	57.6	23.5
Attended sports carnival	47.9	29.8
Attended festival/carnival involving arts, crafts, music or dance	41.3	35.7
Sub-total attended in last 12 months	86.6	68.1
Identity		
Identification with tribal group or language group/clan	88.4	54.1
Continuing employment		
Employed in CDEP	27.5	12.1
Employed not in CDEP	17.6	34.1

(continued)

Table 1.14.1 (continued): Variables contributing to community functioning, Indigenous Australians aged 15 years and over, Northern Territory and Australia 2002

	NT	Aust
Themes and community infrastructure	%	%
Education		
Year 12 highest year of school completed[(d)]	14	18
Subtotal people 15 years and over not at school	*100*	*100*
Has a non-school qualification[(e)]	23	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	9.8	27.6
Expected to have the same employment in 12 months	43.0	40.6
Infrastructure of community		
Housing		
Living in a dwelling that has no major structural problems	39.5	60.4
Living in a dwelling that is not overcrowded (Canadian Occupancy standard)	38.0	74.0
Working household facilities for:		
washing people	94.4	98.6
washing clothes and bedding	93.9	98.1
Storing/preparing foods	68.5	92.3
Sewerage facilities	92.7	98.1
Communication services		
Has working telephone	36.9	71.3
Used computer in last 12 months	31.2	55.5
Used internet in last 12 months	19.3	41.0
Transport		
Access to motor vehicles	41.0	54.6
Can easily get to places needed	67.6	70.1
Main reasons for not using public transport:		
Prefer to use own transport	20.4	29.2
No service available	61.6	29.1
No service available/convenient time	2*	4.3
Cost considerations	**	1.2
Other[(f)]	2*	6.9
Coping within the internal world and external world/ role models		
Community problems		
No community problems reported	28.4	25.3
Community problems reported, but less than three types	19.8	28.8
No problems reported for theft	62.5	57.0
No problems reported for alcohol	56.6	66.5
No problems reported for illicit drugs	66.3	67.7

(continued)

Table 1.14.1 (continued): Variables contributing to community functioning, Indigenous Australians aged 15 years and over, Northern Territory and Australia 2002

	NT	Aust
Themes and community infrastructure	%	%
No problems reported for family violence	67.1	78.8
No problems reported for assault	62.8	80.1
No problems reported for sexual assault	91.6	91.9
Subtotal no. of people who reported a community problem	70.2	73.6
Stressors		
No stressors reported in last 12 months	12.2	17.7
Less than three types of stressors reported in the last 12 months(g)	46	56
No stressors reported for death of a family member or close friend	46.5	54.3
No stressors reported for serious illness of disability	65.3	69.2
No stressors reported for not able to get a job	74.2	73.0
No stressors reported for witness to violence	70.4	84.3
No stressors reported for member of family sent to jail/currently in jail	77.2	80.5
Subtotal no. of people who reported a stressor	87.8	82.3
Crime and justice		
Not a victim of physical or threatened violence in the last 12 months	82.6	75.7
Did not need legal services in the last 12 months	85.4	77.1
Did not use legal services in the last 12 months	86.9	80.2
Not arrested by police in the last 5 years	87.1	83.6
Not incarcerated in the last 5 years	92.2	92.9
Structure and routine		
Has no difficulties communicating with service providers in English(h)	83.3	86.9
In the last 12 months has lived in only one dwelling	81.7	69.1
No days without money for basic living expenses in the last 12 months(i)	66.4	56.3
No days without money for basic living expenses in the last 2 weeks(i)	70.7	68.2
Did not have a cash flow problem(i)	17.1	45.9
Income		
Equivalised gross household income		
3rd quintile or above	11.9	24.6
Main current source of personal income		
CDEP	24.8	10.3
Other wages/salaries	16.2	29.0
Government pensions and allowances	49.5	50.2
Total in labour force	51.6	60.0
Other sources(j)	**1	3.1
Government support was not the main source of income during the last 2 years	41.7	40.0

(continued)

Table 1.14.1 (continued): Variables contributing to community functioning, Indigenous Australians aged 15 years and over, Northern Territory and Australia 2002

	NT	Aust
Themes and community infrastructure	%	%
Household financial stress and cash flow problems		
Has a bank account	86.7	94.2
Could raise $2,000 within a week	19.6	40.6
Total people aged 15 years and over	**36,178**	**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 stated.
(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.

Discrete Indigenous communities

Characteristics contributing to community functioning

Table 1.14.2 below presents data on characteristics contributing to community functioning in discrete Indigenous communities as collected in the 2006 Community Housing and Infrastructure Needs Survey (CHINS).

Housing

- In 2006, around 21% of permanent dwellings managed by Indigenous Housing Organisations in the Northern Territory needed major repair.
- In 2006, 95% of the discrete Indigenous communities in the Northern Territory reported having an organised water supply, 77% reported having an organised sewerage supply and 97% reported having an organised electricity supply.

Health and medical services

- Around 18% of discrete Indigenous communities in the Northern Territory were located less than 100 kilometres from the nearest hospital and 58% were located less than 100 kilometres from the nearest Aboriginal primary health-care centre.
- In 2006, around 30% of discrete Indigenous communities reported having access to medical emergency air services.

Educational services

- Around 21% of discrete Indigenous communities in the Northern Territory reported having a primary school located in the community and 48% reported having a primary school located less than 50km away. While only 2% of communities reported having a secondary school up to Year 12 located in the community, 23% reported having a secondary school located less than 50km away.

Communication services

- Around 61% of discrete Indigenous communities in the Northern Territory (representing 92% of the population) reported having access to a public telephone and one-third of communities (representing 63% of the population) reported having access to the Internet.

Transport

- In 2006, 84% of discrete Indigenous communities in the Northern Territory reported road as the main mode of transport to the nearest town with major services.

Community services

- Around 31% of discrete Indigenous communities in the Northern Territory reported having visitor accommodation facilities; 11% reported aged care, 6% disability and 11% women's refuge accommodation facilities.
- Around one-quarter (27%) of discrete Indigenous communities reported having an arts/cultural centre and a child care centre (28%).
- Half of discrete Indigenous communities in the Northern Territory reported having sports grounds.

Community priority needs plan

- In 2006, 59% of discrete Indigenous communities in the Northern Territory reported having a community priority needs plan and 28% were developing a community priority needs plan.
- Of those communities with a community priority needs plan, 93% identified more housing, 56% identified upgrading water supply, 43% identified health care facilities and 44% identified rubbish collection/disposal as main planning priorities.

Table 1.14.2: Proportion[(a)] of discrete Indigenous communities by characteristics contributing to community functioning, Northern Territory and Australia, 2006

	Northern Territory		Australia	
Community infrastructure	**Dwellings**	**Reported usual population**	**Dwellings**	**Reported usual population**
Housing	%	%	%	%
Condition of permanent dwellings managed by Indigenous Housing Organisations				
needing minor or no repairs	68.7	n.a.	69.5	n.a.
needing major repairs	21.0	n.a.	23.4	n.a.
needing replacement	10.2	n.a.	7.2	n.a.
Total dwellings	**100.0**	**n.a.**	**100.0**	**n.a.**
	Communities	**Reported usual population**	**Communities**	**Reported usual population**
No-one in community living in temporary dwellings	71.6	69.6	65.3	64.5
Population living in temporary dwellings	n.a.	4.2	n.a.	4.4
No-one in community requiring permanent dwelling	73.1	74.3	68.2	68.5
Population requiring permanent housing	n.a.	4.0	n.a.	4.2
Access to clean water				
Organised water supply[(b)]	95.1	98.6	96.4	99.2
No organised water supply	4.9	1.4	3.6	0.8
Drinking water failed testing in last 12 months[(c)]	21.3	27.0	29.3	24.1
Drinking water not sent away for testing[(d)]	21.9	7.4	21.5	8.7
Experienced 5 or more water interruptions over last 12 months[(d)]	24.5	39.1	18.9	25.7
Experienced interruptions to water supply greater than 24 hours[(d)]	23.0	20.1	21.9	18.9
Access to sewerage				
Organised sewerage supply[(e)]	77.4	94.7	83.8	97.1
No organised system	22.6	5.3	16.2	2.9
Experienced overflows or leakage[(d)]	43.2	38.6	39.3	36.5
Over a 12-month period 10 or more overflows[(d)]	9.4	6.4	8.6	6.5
Overflows or leakages longer than 48 hours [(d)]	17.3	9.8	22.4	17.4
Not all dwellings connected	11.0	3.3	18.8	4.5
Access to electricity				
Organised electricity supply	96.5	99.8	97.0	99.7
No organised supply	3.5	0.2	3.0	0.3
20 or more interruptions in the last 12 months[(d)]	10.8	22.6	11.2	16.1
At least one interruption greater than 24 hours in last 12 months[(d)]	23.0	24.8	26.2	29.0
Not all dwellings connected[(d)]	2.2	0.6	3.3	1.9

(continued)

Table 1.14.2 (continued): Proportion(a) of discrete Indigenous communities by characteristics contributing to community functioning, Northern Territory and Australia, 2006

	Northern Territory		Australia	
Community infrastructure	**Communities**	**Reported usual population**	**Communities**	**Reported usual population**
	%	%	%	%
Access to rubbish disposal				
Community has organised rubbish collection[(d)]	90.6	97.4	92.1	96.9
Community does not have organised rubbish disposal[(d)]	9.4	2.6	7.9	3.1
Health and medical services				
Aboriginal primary health care centre				
Located within community	8.2	48.1	10.2	47.0
Located less than 100km	57.8	26.6	50.3	24.0
Located 100km or more	34.0	25.3	39.6	28.9
Total stated	100.0	100.0	100.0	100.0
Hospital				
Located within community	0.0	0.0	0.9	15.3
Located less than 100km	17.7	19.7	29.0	28.3
Located 100km or more	82.3	80.3	70.0	56.4
Total stated	100.0	100.0	100.0	100.0
Other (state-funded) community health centre				
Located within community	6.1	34.1	9.9	42.9
Located less than 100km	46.3	27.6	54.8	29.2
Located 100km or more	47.6	38.3	35.4	28.0
Total stated	100.0	100.0	100.0	100.0
Emergency services[(f)]				
Access to medical emergency air services	30.3	75.7	32.3	75.2
No access to medical emergency air services	69.7	24.3	67.7	24.8
Whether health professionals visiting or working in the community[(f)]				
Male Indigenous health worker daily, weekly, fortnightly	44.7	66.8	42.4	64.2
Male Indigenous health worker monthly or longer	4.9	2.8	9.0	6.0
No male Indigenous health worker	50.4	30.4	48.6	29.8
Female Indigenous health worker daily, weekly, fortnightly	54.5	78.7	55.2	79.7
Female Indigenous health worker monthly or longer	6.5	4.0	7.3	3.7
No female Indigenous health worker	39.0	17.3	37.5	16.5
Doctor daily, weekly, fortnightly	39.0	60.6	41.0	60.9
Doctor monthly or longer	27.6	25.6	25.7	25.9

(continued)

Table 1.14.2 (continued): Proportion(a) of discrete Indigenous communities by characteristics contributing to community functioning, Northern Territory and Australia, 2006

Community infrastructure	Northern Territory Communities	Northern Territory Reported usual population	Australia Communities	Australia Reported usual population
	%	%	%	%
No doctor	33.3	13.8	33.3	13.1
Registered nurse daily, weekly, fortnightly	71.5	90.9	63.9	86.5
Registered nurse monthly or longer	11.4	3.4	9.4	4.5
No registered nurse	17.1	5.7	26.7	9.0
Educational services				
Primary				
Located within community	20.7	74.3	22.6	72.8
Located less than 50km	48.2	18.8	49.2	22.5
Located 50km or more	31.1	7.0	28.2	4.7
Total stated	100.0	100.0	100.0	100.0
Secondary school up to Year 10				
Located within community	3.8	30.8	4.7	30.8
Located less than 50km	31.5	24.9	39.4	34.7
Located 50km or more	64.7	44.2	55.9	34.5
Total stated	100.0	100.0	100.0	100.0
Secondary school up to Year 12				
Located within community	2.1	24.9	3.7	23.0
Located less than 50km	22.8	17.1	27.3	28.1
Located 50km or more	75.1	58.0	69.0	48.9
Total stated	100.0	100.0	100.0	100.0
Access to educational services other than school				
Pre-primary	29.5	52.6	34.4	56.1
Homework centre	5.0	11.2	7.9	10.1
TAFE courses	10.8	26.7	19.1	37.4
Other adult education	19.4	32.5	13.7	21.4
Other educational services	6.5	7.0	4.9	7.0
No other educational services	55.4	24.2	54.1	28.5
Communication services				
Public access to community telecommunication facilities				
Public telephones	60.7	91.9	58.1	84.0
Satellite dish	52.5	76.8	49.2	67.8
Radio	87.8	93.6	92.1	96.2
Television	91.4	97.3	95.4	98.6

(continued)

Table 1.14.2 (continued): Proportion(a) of discrete Indigenous communities by characteristics contributing to community functioning, Northern Territory and Australia, 2006

	Northern Territory		Australia	
Community infrastructure	**Communities**	**Reported usual population**	**Communities**	**Reported usual population**
	%	%	%	%
Internet	33.1	62.8	37.2	57.8
Community has no access to a public telephone	39.3	8.1	41.9	16.0
Community has no access to internet	66.9	37.2	62.8	42.2
Transport				
Access to community not located in town				
Main mode of transport				
Road	83.9	73.1	88.0	78.0
Air	14.3	25.9	9.4	18.9
Sea	1.8	1.0	2.7	3.1
Usual method of transport(d)				
Private	89.5	82.7	85.8	78.7
Public	8.8	16.5	8.6	17.7
Community-owned vehicle	1.8	0.8	4.3	2.2
Other	0.0	0.0	1.3	1.4
Whether transport services available to/from community(d)				
Public	12.3	22.0	17.8	32.6
Community	9.6	8.2	23.8	25.1
Road access(d)				
Road access not cut	35.6	31.0	42.6	29.7
Road access cut 5 or more times	12.5	10.1	13.9	16.8
Inaccessible by road	12.3	28.3	11.5	23.1
Airstrip(d)				
airstrip located in community	61.4	82.4	48.5	69.1
airstrip open all year round	71.4	81.0	74.1	75.9
airstrip not open all year round	28.6	19.0	25.9	24.1
Community services(d)				
Accommodation facilities				
Visitor	30.9	59.1	32.5	56.8
Camping	8.6	6.7	14.2	13.0
Single men's	13.7	18.3	13.1	19.7
Single women's	7.2	11.7	6.8	13.0
Hostel	2.2	4.5	2.2	2.6
Contract workers	26.6	59.9	23.2	53.8

(continued)

Table 1.14.2 (continued): Proportion (a) of discrete Indigenous communities by characteristics contributing to community functioning, Northern Territory and Australia, 2006

	Northern Territory		Australia	
Community infrastructure	**Communities**	**Reported usual population**	**Communities**	**Reported usual population**
	%	%	%	%
Disability	5.8	11.6	6.3	13.7
Aged	10.8	23.2	12.0	34.4
Women's refuge	10.8	27.8	8.7	34.9
Other	0.7	2.3	1.1	3.2
No accommodation facilities	48.2	20.4	48.6	20.4
Public facilities				
Hall/meeting area	49.6	68.5	56.8	75.8
Administration building	54.0	84.5	61.2	85.5
Store	54.7	85.3	47.8	80.0
Library	12.9	40.0	12.0	37.6
Arts/cultural centre	27.3	53.5	31.1	56.5
Women's centre	36.7	69.1	30.9	55.6
Child care centre	28.1	56.6	29.5	58.3
Youth centre	16.5	38.8	19.4	43.9
Canteen	16.5	38.6	12.8	34.9
Broadcasting facilities	37.4	73.1	30.9	63.2
Other	10.1	10.4	10.7	16.5
No public facilities	22.3	5.9	24.3	6.7
Recreation facilities				
Sports grounds	49.6	83.3	46.2	78.9
Outdoor basketball/netball courts	50.4	74.6	48.4	72.4
Indoor or covered sporting facilities	15.1	36.5	12.6	39.2
Swimming pools	6.5	19.7	7.4	23.4
Other buildings used for sport	18.0	45.2	15.6	36.8
Other community sporting facilities	4.3	10.8	6.0	10.2
No sporting facilities	40.3	12.1	38.5	12.1
Community priority needs plan[(d)]				
Communities with a community priority needs plan	59.0	69.5	51.6	58.9
Of those with plan needs identified include:				
More housing	92.6	97.9	89.9	93.9
Upgrade water supply	55.6	47.2	45.5	46.8
Upgrade electricity supply	40.7	36.2	37.6	32.2
Upgrade sewerage	49.4	37.3	43.4	46.2

(continued)

Table 1.14.2 (continued): Proportion(a) of discrete Indigenous communities by characteristics contributing to community functioning, Northern Territory and Australia, 2006

	Northern Territory		Australia	
Community infrastructure	**Communities**	**Reported usual population**	**Communities**	**Reported usual population**
	%	%	%	%
Rubbish collection/disposal	44.4	40.4	45.0	40.1
Transport	37.0	51.1	40.7	40.3
Communication facilities	27.2	38.9	27.0	33.0
Education facilities	37.0	38.1	31.2	37.3
Sports facilities	54.3	72.4	55.6	62.9
Health care facilities	43.2	51.1	41.8	47.3
Animal control	44.4	60.9	38.6	50.8
Broadcasting capabilities	30.9	38.6	27.0	35.4
Other	22.2	35.3	25.4	26.9
Communities developing a community priority needs plan	28.1	22.7	35.2	34.3
No community priority needs plan being developed	12.9	7.8	13.1	6.9
Total no. of communities	**639**	**41,553**	**1,187**	**92,960**

(a) All proportions were calculated excluding not stated from denominator.

(b) Excluding communities with carted and other organised water supply.

(c) Percentage calculated as a proportion of all discrete Indigenous communities with a reported usual population of 50 people or more, and communities which have a reported usual population of less than 50 people but which are not administered by a larger discrete Indigenous community or Resource Agency, excluding communities where water not sent away for testing and communities connected to town supply.

(d) Percentage calculated as a proportion of all discrete Indigenous communities with a reported usual population of 50 people or more, and communities which have a reported usual population of less than 50 people but which are not administered by a larger discrete Indigenous community or Resource Agency.

(e) Excluding communities who reported pit and pan toilets as the main sewerage system type.

(f) Percentage calculated as a proportion of all discrete Indigenous communities with a reported usual population of 50 people or more, and communities which have a reported usual population of less than 50 people but which are not administered by a larger discrete Indigenous community or Resource Agency, and are located 10 kilometres or more from a hospital.

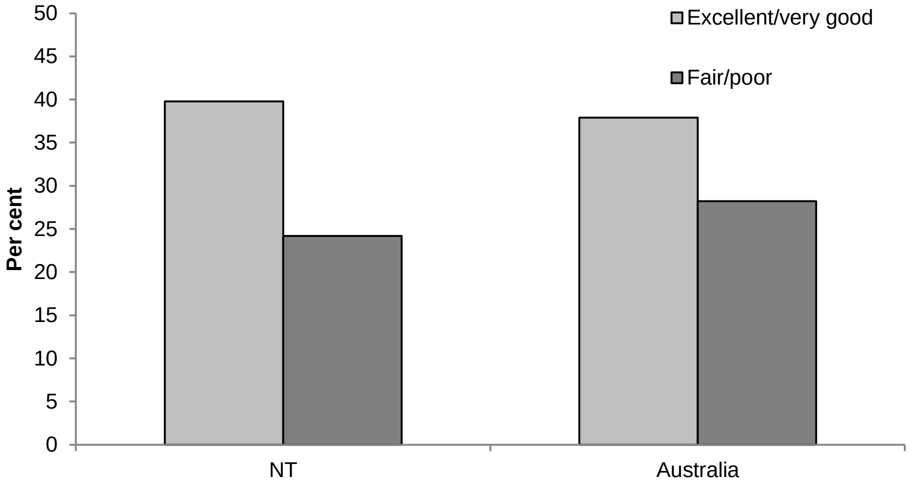
Source: AIHW analyses of Community Housing and Infrastructure Needs Survey (CHINS) 2006.

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 Australians aged 15 years and over reporting fair or poor health in the Northern Territory (24%) was lower than for Australia (28%).
- The proportion of Indigenous Australians aged 15 years and over reporting excellent or very good health in the Northern Territory (40%) was higher than that of Australia (38%).

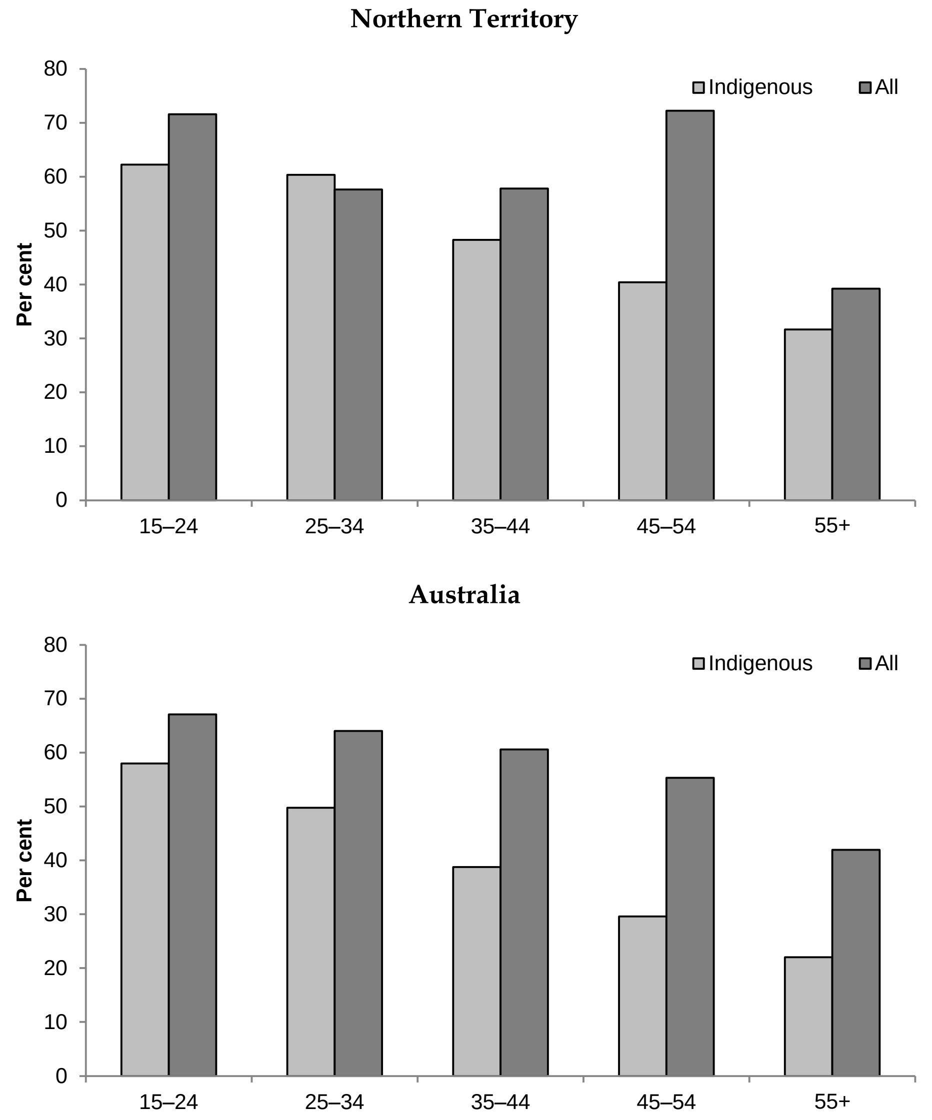


Source: ABS and AIHW analysis of 2008 NATSISS and NHS 2007–08.

Figure 1.15.1: Self-assessed health status, Indigenous Australians aged 15 years and over, Northern Territory and Australia, 2007–08

Self-assessed health status by age

- In both the Northern Territory and Australia, the proportion of Indigenous people reporting excellent or very good health decreased with age. In the Northern Territory, the proportion of Indigenous Australians aged 15–24 years reporting excellent or very good health was 62% compared with 32% of those aged 55 years and over. In Australia, the proportion of Indigenous Australians aged 15–24 years reporting excellent or very good health was 58% compared with 22% of those aged 55 years and over.



Note: Comparison with non-Indigenous Australians in the Northern Territory is not possible due to the small sample size of non-Indigenous Australians in the Northern Territory in the NATSIHS. Instead comparison between Indigenous and all people (incudes Indigenous and non-Indigenous) are presented.

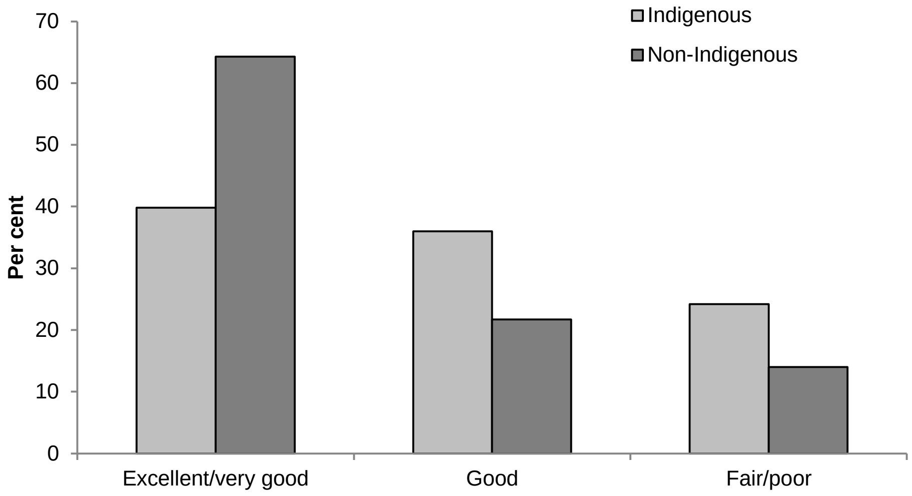
Source: AIHW analyses of NATSISS 2008 and NHS 2007–08.

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

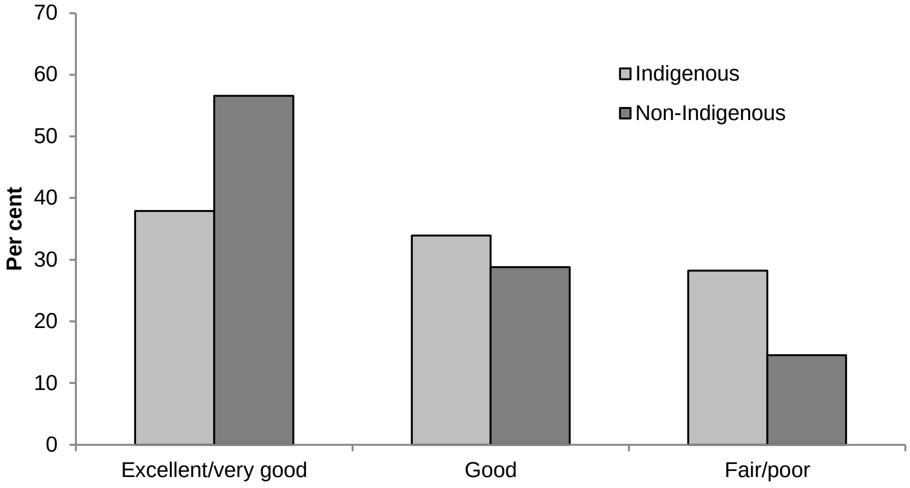
Self-assessed health status by Indigenous status (age-standardised)

- In 2007–08, after adjusting for differences in age structure between the Indigenous and non-Indigenous populations, around 40% of the Indigenous population in the Northern Territory aged 15 years or over reported their health as being very good or excellent, 36% reported their health as being good and 24% reported their health as being fair or poor.
- A higher proportion of Indigenous people in the Northern Territory reported excellent or very good health, and a lower proportion of Indigenous people in the Northern Territory reported fair or poor health when compared to the proportions reported for Indigenous people in Australia.

Northern Territory



Australia



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

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

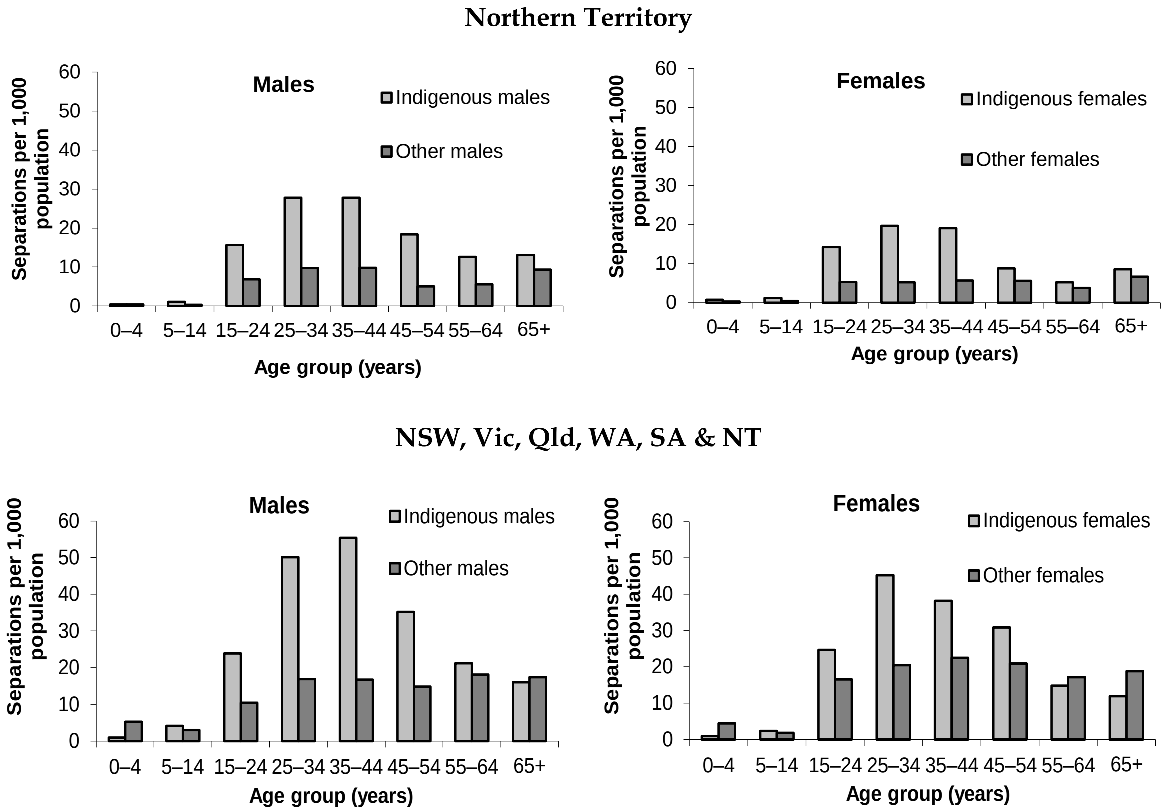
1.16 Social and emotional wellbeing

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

- For the 2-year period July 2006 to June 2008 in the Northern Territory, Indigenous males and females had higher hospitalisation rates for mental health related conditions than other males and females across all age groups with the exception of the 0–4 years age group for males where the rates were equivalent.
- For Indigenous males and females in the Northern Territory the hospitalisation rate for mental health related conditions was highest among those aged 25–34 years and 35–44 years. A similar pattern was evident for Indigenous males and females in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, however hospitalisation rates were much higher 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 males and other males in the Northern Territory occurred in the 25–34, 35–44 and 45–54 year age groups. A similar pattern was seen for Indigenous females and other females in the 15–24, 25–34 and 35–44 year age groups. Indigenous males and females were hospitalised at around 3 times the rate of other males and other females in these age groups.

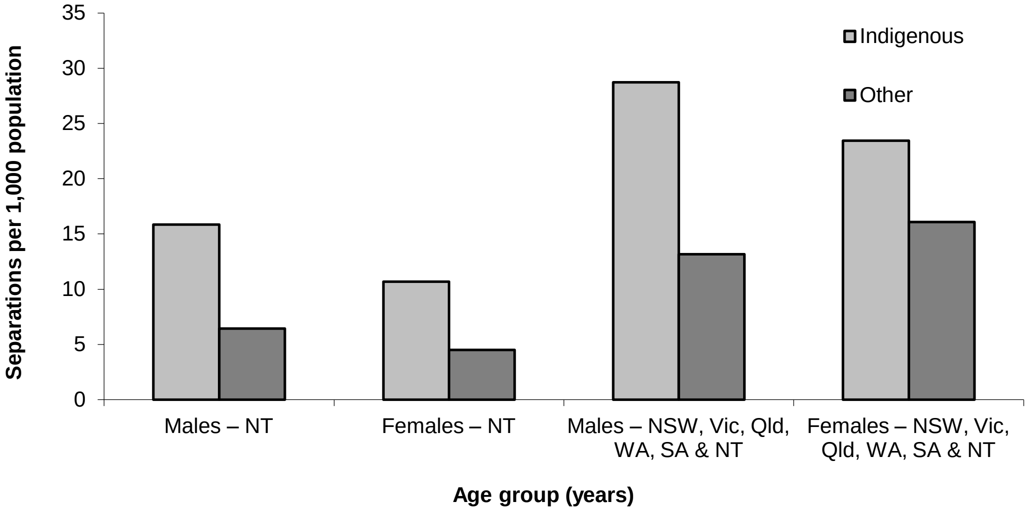


Source: AIHW analyses of NHMD.

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

Hospitalisations by Indigenous status

- For the 2-year period July 2006 to June 2008, Indigenous males and females in the Northern Territory were twice as likely as other males and females in the Northern Territory to be hospitalised for mental-health related conditions.
- 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.
- There were significant increases in the hospitalisation rate ratios for mental health related conditions between Indigenous and other Australians in the Northern Territory and in the four jurisdictions combined (Figure 1.16.4).

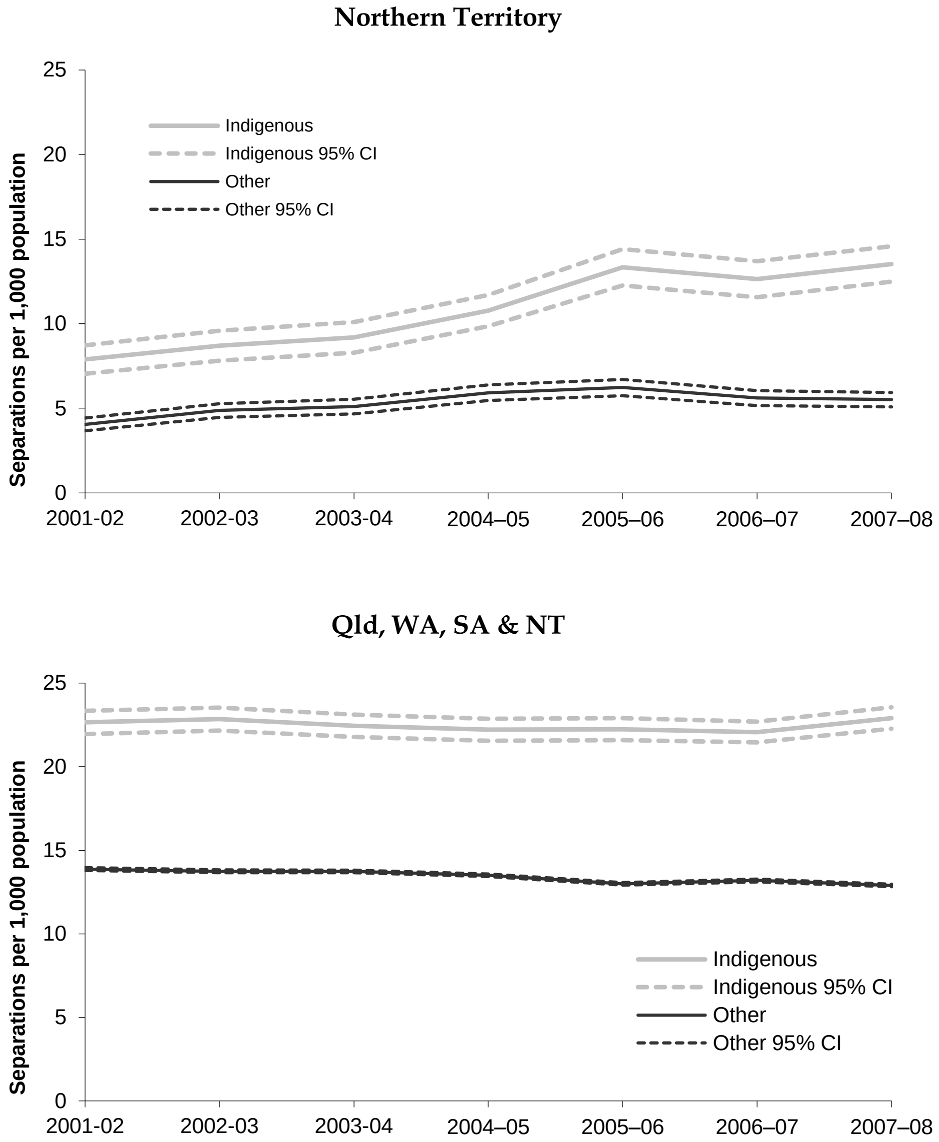


Source: AIHW analyses of NHMD.

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

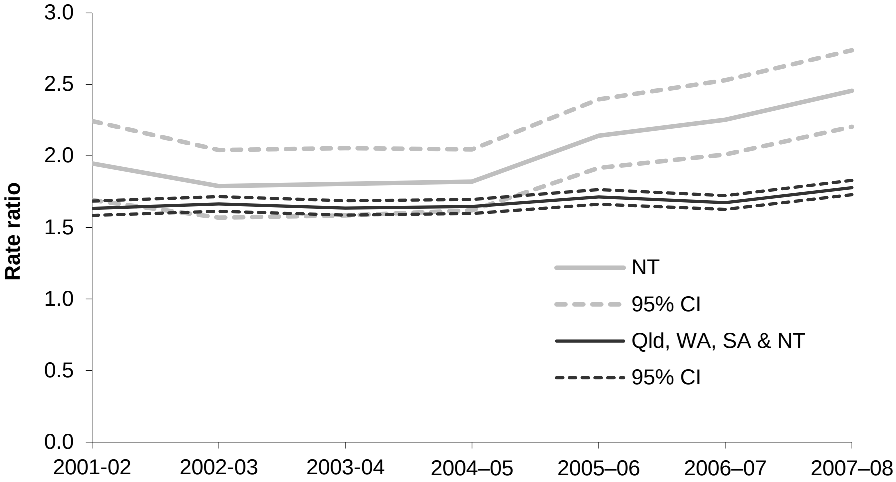
Hospitalisation trends

- In the Northern Territory there were significant increases in hospitalisation rates for mental health related conditions among Indigenous and other people during the period 2001–02 to 2007–08. There was an average yearly increase in the rate of 1.0 hospitalisations per 1,000 population, equivalent to a 79% increase over the period for Indigenous Australians and 0.2 per 1,000 or a 37% increase for other people (Figure 1.16.3).
- In Queensland, Western Australia, South Australia and the Northern Territory combined there was no significant change in hospitalisation rates for mental health related conditions among Indigenous Australians over the same period. The hospitalisation rate of other people decreased significantly, with an average yearly decline in the rate of 0.2 per 1,000.
- There were significant increases in the hospitalisation rate ratios between Indigenous and other Australia hospitalisation rates for mental-health related conditions in the Northern Territory and in the four jurisdictions combined (Figure 1.16.4).



Source: AIHW analyses of NHMD.

Figure 1.16.3: Hospitalisation rates from mental health-related conditions by Indigenous status, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08



Source: AIHW analyses of NHMD.

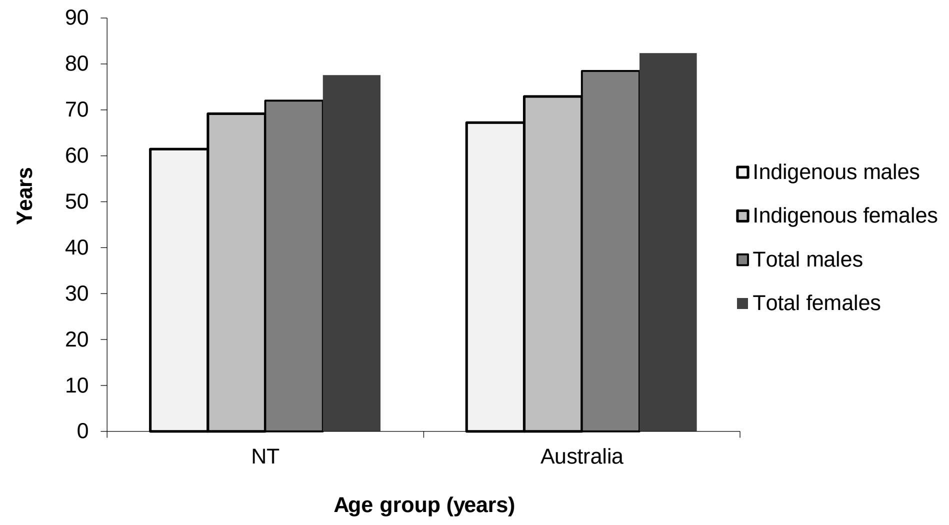
Figure 1.16.4: Hospitalisation rate ratios between Indigenous and other Australians from mental health-related conditions, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08

1.17 Life expectancy at birth

The life expectancy of Aboriginal and Torres Strait Islander males and females for a given period

Life expectancy by sex and Indigenous status

- Over the period 2005–2007, the life expectancy at birth for Indigenous people in the Northern Territory was estimated to be around 62 years for males and 69 years for females. Life expectancy was considerably higher for both total males (72 years) and total females (78 years) in the Northern Territory.
- Life expectancy was lower for Indigenous males and females in the Northern Territory than in Australia.
- For the total population in the Northern Territory, life expectancy was considerably lower than for Australia (Table 1.17.1 and Figure 1.17.1).



Source: ABS 2009.

Figure 1.17.1: Life expectancy at birth, Indigenous and total population 2005–2007, by sex, Northern Territory and Australia

Table 1.17.1: Life expectancy at birth, Indigenous and total population 2005–2007, Northern Territory and Australia

	Indigenous		Total population	
	Males	**Females**	**Males**	**Females**
Northern Territory	61.5	69.2	72.0	77.6
Australia	**67.2**	**72.9**	**78.5**	**82.4**

Source: ABS 2009.

1.18 Median age at death

The age at which exactly half the deaths registered (or occurring) in a given time period were deaths of people above that age and half were deaths below that age

- For the period 2004 to 2008, in the Northern Territory, the median age at death for Indigenous males was 46 years and for Indigenous females was 54 years. This compared to 64 years for non-Indigenous males and 71 years for non-Indigenous females in the Northern Territory (Table 1.18.1).
- The median age at death for Indigenous males and females in the Northern Territory was lower than for Indigenous males and females in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined (Table 1.18.1).

Table 1.18.1: Median age at death by Indigenous status and sex, Northern Territory and NSW, Qld, WA, SA & NT combined, 2004–2008

	Indigenous		Non-Indigenous	
	Male	**Female**	**Male**	**Female**
Northern Territory	46	54	64	71
NSW, Qld, WA, SA & NT	**52**	**59**	**77**	**83**

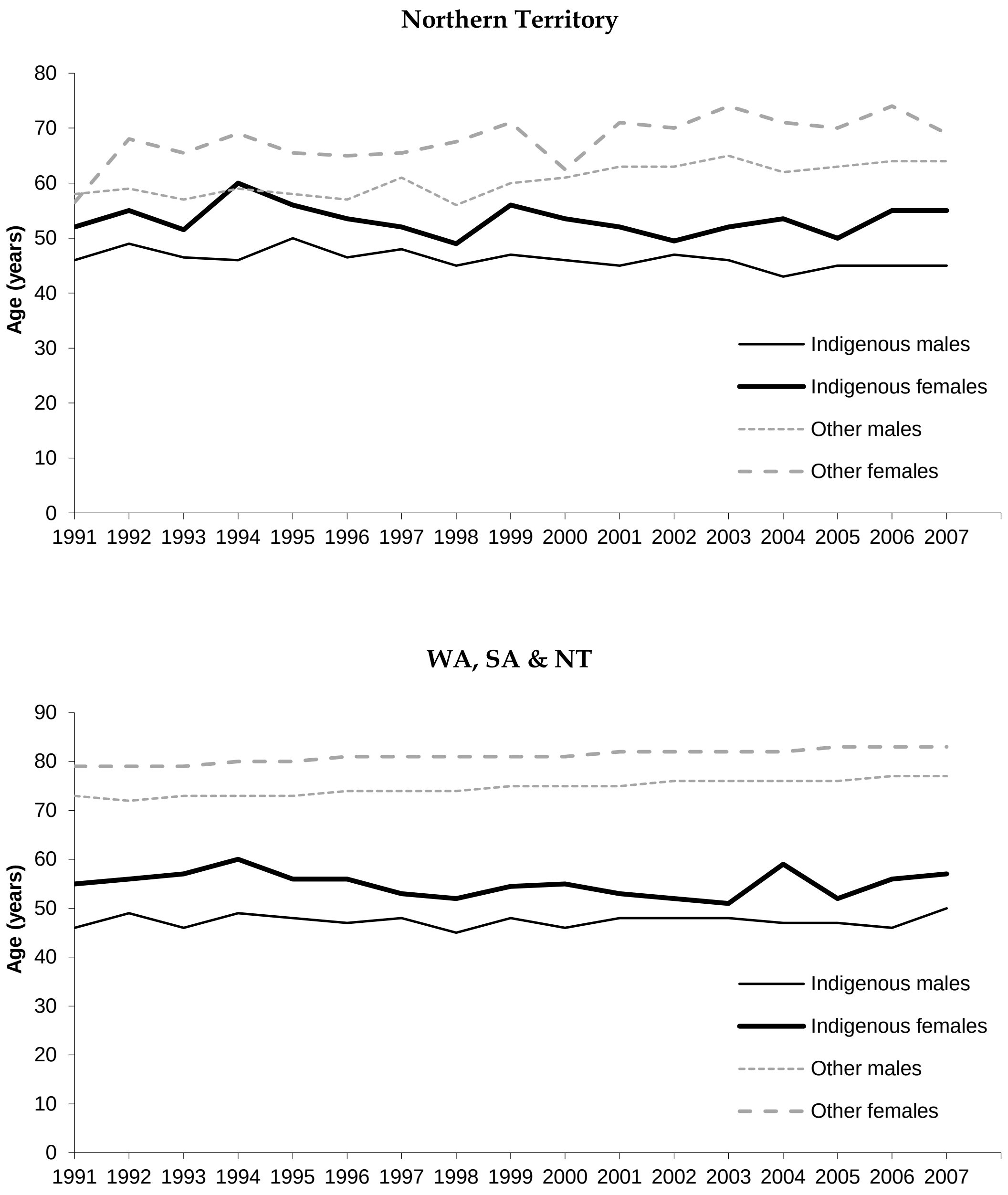
Source: AIHW analysis of National Mortality Database.

Time series

Total deaths can be partitioned into quartiles by age at death (the first quartile is the age below which 25% of all deaths occur, the median is the age below which 50% of all deaths occur, and the third quartile is the age below which 75% of all deaths occur). An analysis of this kind can reveal changes in patterns of mortality over time, such as an increase in the proportion of deaths occurring at older ages and a corresponding decrease in the proportion occurring at younger ages.

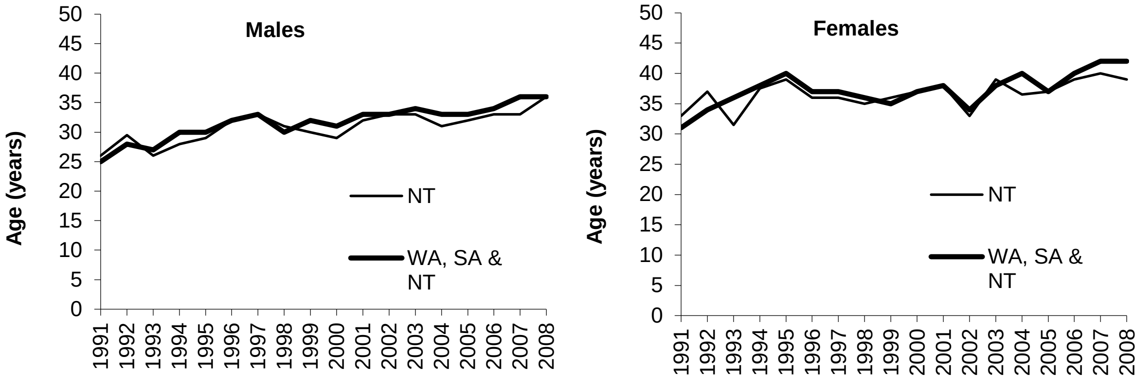
But any such changes must be interpreted with care before any inferences can be drawn regarding an improvement or deterioration in the mortality of Indigenous Australians. Fluctuations in the level of Indigenous mortality over time partly reflect changing levels of identification of Indigenous deaths and population estimates. Quartiles of age at death are also affected by changes in age distribution of the population resulting, for example, from changes in fertility, and therefore they support comparisons only if fertility rates remain consistent over the period being analysed.

- Over the period 1991–2007, the median age at death among Indigenous males significantly decreased by 3.3 years in the Northern Territory. However, there was no significant change in the median age at death among Indigenous females (Figure 1.18.1). Over the same period, there was a significant increase in the median age at death for other females only in the Northern Territory and in Western Australia, South Australia and the Northern Territory combined.
- When analysing age at death by quartiles over the period 1991–2008, there has been a significant increase in the age at death in the first quartile among Indigenous males in the Northern Territory. No significant change was evident for Indigenous females (Figure 1.18.2).



Source: AIHW analysis of National Mortality Database.

Figure 1.18.1: Median age at death, by Indigenous status and sex, Northern Territory and WA, SA & NT combined, 1991 to 2007



Source: ABS and AIHW analysis of ABS Mortality Database.

Figure 1.18.2: First quartile of age at death, Indigenous males and females, Northern Territory and WA, SA & NT combined, 1991 to 2008

1.19 Infant mortality

The number of Aboriginal and Torres Strait Islander people who die in the first year of life, expressed as a rate (per 1,000 live births) for that period

- For the period 1996–1998, there were 92 deaths of Aboriginal and Torres Strait Islander infants in the Northern Territory. The infant mortality rate for Indigenous infants was 24 per 1,000 live births compared to around 6 per 1,000 live births for non-Indigenous infants (Table 1.19.1).
- For the period 1999–2001, there were 89 deaths of Indigenous infants in the Northern Territory. The infant mortality rate for Indigenous infants was 3 times that for non-Indigenous infants over this period (19 compared to 6 per 1,000 live births).
- For the period 2002–2004, there were 72 deaths of Aboriginal and Torres Strait Islander infants in the Northern Territory. The infant mortality rate for this period was 15 per 1,000 live births for Indigenous compared to around 6 per 1,000 live births for non-Indigenous infants.
- For the period 2005–2006, there were 49 deaths of Aboriginal and Torres Strait Islander infants in the Northern Territory. The infant mortality rate for Indigenous infants over this period was almost 4 times that for non-Indigenous infants (16 compared to 4 per 1,000 live births).
- For the period 2007–2008, there were 39 deaths of Aboriginal and Torres Strait Islander infants in the Northern Territory. The infant mortality rate for Indigenous infants over this period was around 3 times that for non-Indigenous infants (12 compared to 4 per 1,000 live births). The infant mortality rate in the Northern Territory was higher than in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined
- The infant mortality rate for Indigenous infants was higher in the Northern Territory than in Queensland, Western Australia, South Australia and the Northern Territory combined during the periods 1999–2001, 2002–2004 and 2005–2006 (Table 1.19.1).

Time series

- Over the period 1991 to 2007, there were significant declines in recorded mortality rates for Indigenous and other infants in the Northern Territory. The fitted trend implies an average yearly decline in the rate of around 0.8 per 1,000 births for Indigenous infants (equivalent to a 49% reduction in the rate over the period) and 0.2 per 1,000 births for other infants (equivalent to a 46% reduction in the rate over the period) (Figure 1.19.1).
- Over the same period, there were also significant declines in the infant mortality rates for Indigenous and other Australians in Western Australia, South Australia and the Northern Territory combined.

Table 1.19.1: Infant mortality rates per 1,000 live births, by Indigenous status, Northern Territory and Qld, WA, SA & NT combined, 1996–1998, 1999–2001, 2002–2004 and 2005–2006, 2007–2008[a][b][c][d][e][f][g]

	Indigenous				Non-Indigenous				
	Deaths	Rate per 1,000[h]	LCL 95%[i]	UCL 95%[j]	Deaths	Rate per 1,000[h]	LCL 95%[i]	UCL 95%[j]	Rate ratio[k]
					1996–98[b]				
NT	92	23.7	18.8	28.5	39	5.6	3.9	7.4	4.2*
					1999–2001				
NT	89	19.2	15.2	23.2	37	5.7	3.9	7.6	3.3*
Qld, WA, SA & NT[a]	**296**	**14.2**	**12.6**	**15.8**	**1,228**	**4.7**	**4.5**	**5.0**	**3.0***
					2002–04				
NT	72	15.4	11.8	18.9	39	6.1	4.2	8.0	2.5*
Qld, WA, SA & NT[a]	**270**	**12.5**	**11.0**	**14.0**	**1,088**	**4.2**	**3.9**	**4.4**	**3.0***
					2005–06				
NT	49	16.1	11.6	20.6	19	4.4	2.4	6.4	3.6*
Qld, WA, SA & NT[a]	**185**	**12.1**	**10.4**	**13.8**	**803**	**4.3**	**4.0**	**4.6**	**2.8***
					2007–08[l]				
NT	39	12.4	8.5	16.3	18	3.9	2.1	5.7	3.2*
NSW, Qld, WA, SA & NT[b]	**219**	**8.4**	**7.3**	**9.5**	**1,545**	**4.0**	**3.8**	**4.2**	**2.1***

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

(a) Data are reported for Queensland, Western Australia, South Australia and the Northern Territory only. These jurisdictions are considered to have adequate levels of Indigenous identification in mortality data for these periods. They do not represent a quasi-Australian figure.

(b) A subtotal for Queensland, Western Australia, South Australia and the Northern Territory has not been provided for the period 1996–1998 as Indigenous mortality data for Queensland are only reliable from 1998 onwards.

(c) Data are presented in 3- and 2-year groupings due to small numbers each year.

(d) Data exclude 90 registered infant deaths where Indigenous status was not stated over the period 1996–2006 in Queensland, Western Australia, South Australia and the Northern Territory combined.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous infant deaths and, depending on the under-identification in births, may either underestimate or overestimate the rates. The ABS calculated the completeness of identification of Indigenous deaths for the period 2002–2006 using population estimates as 51% for Queensland, 72% for Western Australia, 62% for South Australia and 90% for the Northern Territory. The completeness of Indigenous identification for infant mortality may differ from the estimates for 'all-causes'.

(f) Because of changes in the level of accuracy of Indigenous identification in the births and deaths data over time, caution should be used in interpreting changes in Indigenous infant mortality rates. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous infant mortality rates because of these data quality issues.

(g) Deaths are by year of registration and state/territory of usual residence.

(h) Number per 1,000 live births.

(i) LCL = lower confidence limit.

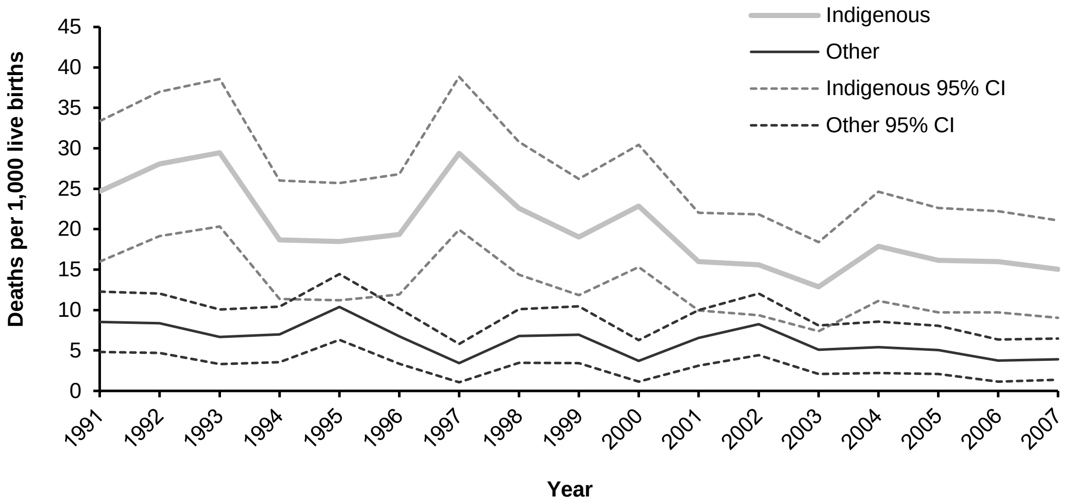
(j) UCL = upper confidence limit.

(k) Rate ratio Indigenous: non-Indigenous.

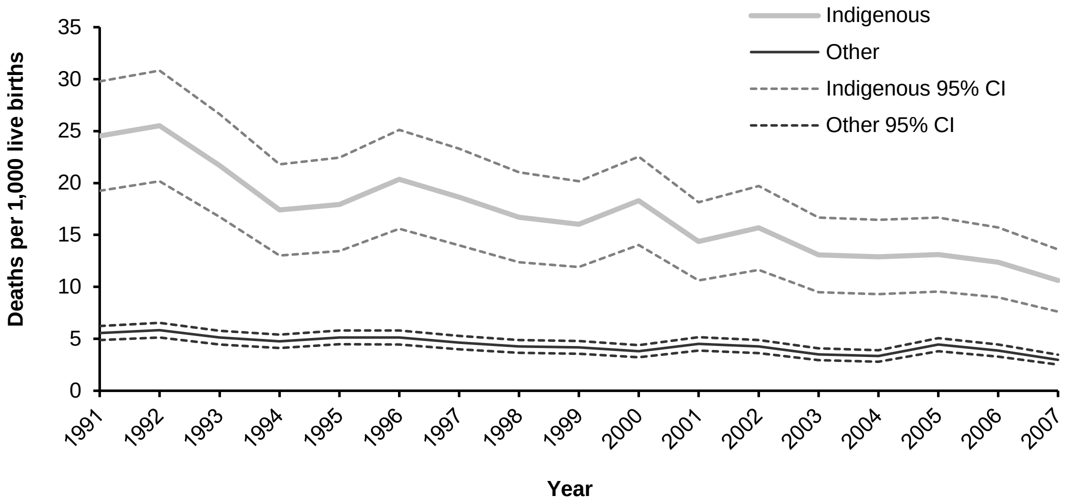
(l) Preliminary data from ABS.

Source: AIHW and ABS analysis of ABS Mortality Database.

Northern Territory



WA, SA & NT



Source: AIHW analyses of National Mortality Database.

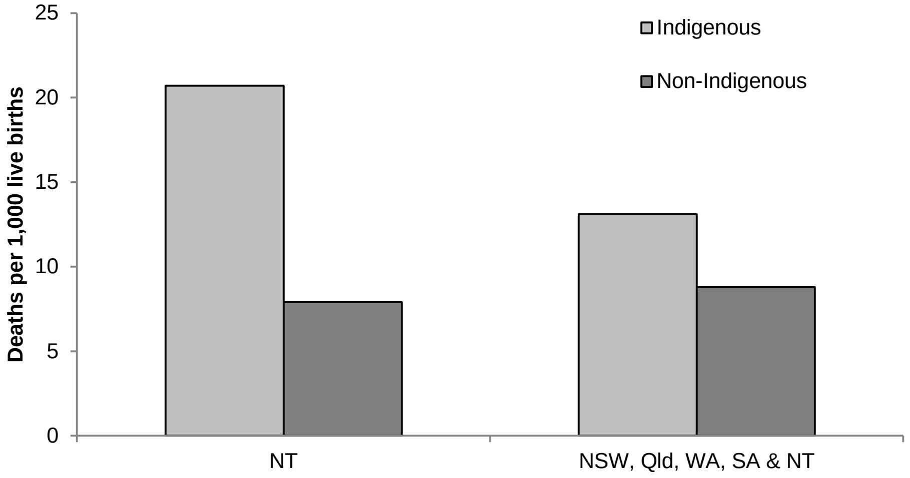
Figure 1.19.1: Infant mortality rates, Aboriginal and Torres Strait islander infants and other Australians, Northern Territory and WA, SA & NT combined, 1991 to 2007

1.20 Perinatal mortality

The number of Aboriginal and Torres Strait Islander babies who die in the perinatal period, expressed as a rate (per 1,000 births)

Perinatal mortality by Indigenous status

- Over the period 2004–2008, the perinatal mortality rate for Indigenous babies in the Northern Territory was 20.7 per 1,000 births compared to 7.9 per 1,000 births for non-Indigenous babies. This was higher than the perinatal mortality rates for Indigenous and non-Indigenous babies in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined (13.1 and 9.0 per 1,000 births) (Figure 1.20.1).



Notes

1. Perinatal deaths are all foetal deaths (at least 20 weeks gestation or at least 400 grams birthweight) plus all neonatal deaths.
2. Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.
3. 2008 data have been subject to process improvements which have increased the quality of these data.
4. Causes of death data for 2007 have been revised and are subject to further revisions.
5. Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. These jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure.

Source: ABS Deaths Registration Database.

Figure 1.20.1: Perinatal mortality rates by Indigenous status, Northern Territory and NSW, Qld, WA, SA & NT combined, 2004–2008

Time series

- In the Northern Territory, there were 180 perinatal deaths of Indigenous babies in 1999–2003 and 162 perinatal deaths of Indigenous babies in 2004–2008.
- Between 1999–2003 and 2004–2008, there was a drop in the Indigenous perinatal mortality rate in the Northern Territory from 22.8 to 20.7 per 1,000 births. For other babies in the Northern Territory this rate dropped from 11.5 per 1,000 births to 7.9 per 1,000 births.
- Over the same period, for NSW, Qld, WA, SA and NT combined, the Indigenous perinatal mortality rate dropped slightly from 16.2 per 1,000 births to 13.1 per 1,000 births.
- Between 1999–2003 and 2004–2008 there was an increase in the Indigenous to other Australians rate ratio of perinatal deaths in the Northern Territory from 2.0 to 2.6. However, for NSW, Qld, WA, SA and NT combined, this rate ratio decreased slightly from 1.7 to 1.5 (Table 1.20.1).

Table 1.20.1: Foetal, neonatal and perinatal mortality rates(a)(b)(c)(d) per 1,000 births, by Indigenous status, Northern Territory and NSW, Qld, WA, SA and NT combined, 1999–2003 to 2004–2008(e)(f)(g)(h)(i)

	1999–2003(e)(i)					2004–2008(e)(f)(g)(h)(i)				
	No.	No. per 1,000(d)	LCL 95%(j)	UCL 95%(k)	Rate ratio(l)	No.	No. per 1,000(d)	LCL 95%(j)	UCL 95%(k)	Rate ratio(l)
Foetal deaths(a)										
Northern Territory										
Indigenous	95	12.0	9.6	14.4	1.6*	97	12.4	9.9	14.9	2.3*
Other(m)	80	7.4	5.8	9.0	. .	60	5.4	4.0	6.8	. .
NSW, Qld, WA, SA & NT(n)										
Indigenous	477	9.3	8.5	10.1	1.5*	448	7.5	6.8	8.2	1.3*
Other(m)	5,223	6.1	5.9	6.3	. .	5,499	6.0	5.8	6.2	. .
Neonatal deaths(b)										
Northern Territory										
Indigenous	85	10.9	8.6	13.2	2.6*	65	8.4	6.4	10.4	3.4*
Other(m)	45	4.2	3.0	5.4	. .	28	2.5	1.6	3.4	. .
NSW, Qld, WA, SA & NT(n)										
Indigenous	355	7.0	6.3	7.7	2.1*	329	5.6	5.0	6.2	1.9*
Other(m)	2,774	3.3	3.2	3.4	. .	2,783	3.0	2.9	3.1	. .
Perinatal deaths(c)										
Northern Territory										
Indigenous	180	22.8	19.5	26.1	2.0*	162	20.7	17.5	23.9	2.6*
Other(m)	125	11.5	9.5	13.5	. .	88	7.9	6.2	9.6	. .
NSW, Qld, WA, SA & NT(n)										
Indigenous	832	16.2	15.1	17.3	1.7*	777	13.1	12.2	14.0	1.5*
Other(m)	7,997	9.4	9.2	9.6	. .	8,282	9.0	8.8	9.2	. .

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

(a) Foetal deaths of at least 20 weeks gestation or with a birthweight of at least 400 grams.

(b) Neonatal death is death of a live-born baby within 28 days of birth.

(c) Perinatal deaths are all foetal deaths (at least 20 weeks gestation or at least 400 grams birthweight) plus all neonatal deaths.

(d) Foetal death rates and perinatal death rates are calculated per 1,000 all births for the calendar year. Neonatal death rates are calculated per 1,000 live births for the calendar year.

(e) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(f) 2008 data have been subject to process improvements which have increased the quality of these data.

(g) Causes of death data for 2007 have been revised and are subject to further revisions.

(h) Causes of death data for 2008 are preliminary and subject to a revisions process.

(i) Data are presented in 5-year groupings due to volatility of the small numbers involved.

(j) LCL = lower confidence limit.

(k) UCL = upper confidence limit.

(l) Rate ratio Indigenous: Other.

(m) Other includes non-Indigenous and Indigenous status not stated.

(n) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. These jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure.

Source: ABS Deaths Registration Database.

1.21 Sudden infant death syndrome

The number of Aboriginal and Torres Strait Islander infants aged less than 12 months who die from sudden infant death syndrome (SIDS), expressed as a rate (per 1,000 live births) for that period

- Over the period 2004–2008, both Indigenous and non-Indigenous people in the Northern Territory suffered a small number of deaths from SIDS. In New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined, the mortality rates for SIDS for Indigenous and non-Indigenous infants were 0.7 and 0.2 per 1,000 live births, respectively (Table 1.21.1).

Table 1.21.1: SIDS mortality rates per 1,000 live births, by Indigenous status, Northern Territory and NSW, Qld, WA, SA & NT combined, 2004–2008(a)(b)(c)(d)(e)(f)(g)(h)(i)(j)

	Indigenous		**Non-Indigenous**		
	Deaths	**Rate(k)(l)**	**Deaths**	**Rate(k)(l)**	**Rate ratio(m)**
Northern Territory	n.p.	n.p.	n.p.	n.p.	1.4
NSW, Qld, WA, SA & NT	**39**	**0.7**	**206**	**0.2**	**2.9***

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

(a) SIDS – Sudden Infant Death Syndrome, ICD-10 code: R95. SIDS data in this table is for deaths under 1 year of age.

(b) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only. These five jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure.

(c) Data exclude 10 registered infant deaths where Indigenous status was not stated over the period 2004–2008 in NSW, Queensland, Western Australia, South Australia and the Northern Territory combined.

(d) Data are presented in 5-year groupings because of small numbers each year.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate.

(f) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

(g) Causes of death data for 2007 have been revised and are subject to further revisions. See *Causes of death, Australia, 2008* (ABS, 2010c, cat. No. 3303.0) Technical Note 2: Revisions Process for further information.

(h) 2008 data have been subject to a process improvement which has increased the quality of these data. See *Causes of death, Australia, 2008* (ABS, 2010c) (cat. No. 3303.0) Technical Note 1: 2008 COD Collection – Process Improvement for further information.

(i) Causes of death data for 2008 are preliminary and subject to a revisions process. See *Causes of death, Australia, 2*008 (ABS, 2010c) (cat. No. 3303.0) Technical Note 2: Revisions Process for further information.

(j) Data cells with small values have been randomly assigned to protect the confidentiality of individuals. As a result, some totals will not equal the sum of their components. It is important to note that cells with a zero value have not been affected by confidentialisation.

(k) Rates have been directly age-standardised using the 2001 Australian standard population.

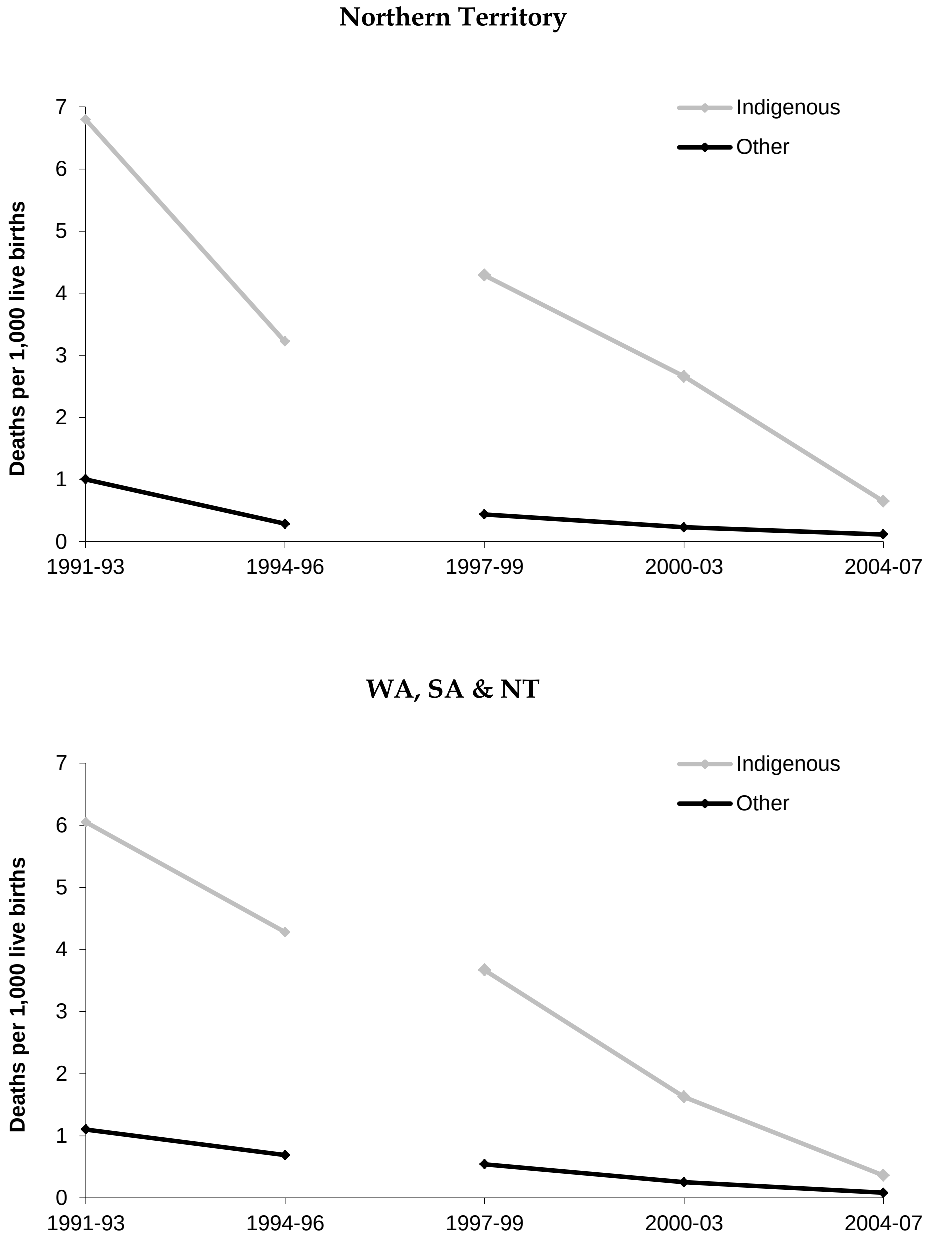
(l) No. per 1,000 live births.

(m) Rate ratio Indigenous: non-Indigenous.

Source: AIHW and ABS analysis of ABS Mortality Database.

Time series

- Over the period 1991–1993 to 1994–1996, the SIDS mortality rate in the Northern Territory declined from 6.8 to 3.2 deaths per 1,000 live births for Indigenous infants and from 1.0 to 0.3 per 1,000 live births for non-Indigenous infants (Figure 1.21.1).
- Over the period 1997–1999 to 2004–2007, there were significant declines in mortality rates from SIDS for both Indigenous and non-Indigenous infants in the Northern Territory. There was an average yearly decline in the rate of around 0.49 per 1,000 births for Indigenous infants and 0.04 per 1,000 births for other infants. Over the same period, this represented an 85% decline in SIDS mortality for Indigenous babies and a 73% decline for non-Indigenous babies. (Figure 1.21.1).
- Over the period 1997–1999 to 2004–2007, there were also significant declines in mortality rates from SIDS for both Indigenous and non-Indigenous infants in WA, SA and NT combined (Figure 1.21.1).



Note: Figures shows a break in series between 1994–96 and 1997–99 due to a change in disease classification coding from ICD9 to ICD10 between 1996 and 1997. Rates prior to 1997 should therefore not be strictly compared to rates from 1997 onwards.

Source: AIHW analyses of National Mortality Database.

Figure 1.21.1: SIDS mortality rates per 1,000 live births, Aboriginal and Torres Strait Islander and other Australian infants, Northern Territory and WA, SA & NT combined, 1991–93 to 2004–2007

1.22 All-causes age-standardised death rate

The number of Aboriginal and Torres Strait Islander Australian deaths, expressed as a rate by age group, age-standardised rate and rate ratio

- For the period 2004–2008, the all-cause mortality rate in the Northern Territory for Indigenous Australians was twice that of non-Indigenous Australians (Table 1.22.1).
- The age-standardised mortality rate for Indigenous Australians in the Northern Territory (1,582 per 100,000) was higher than that for Indigenous Australians in New South Wales Queensland, Western Australia, South Australia and the Northern Territory combined (1,184 per 100,000).
- Indigenous males and females in the Northern Territory had higher mortality rates than non-Indigenous males and females across all age groups (Figure 1.22.1). The greatest difference in rates occurred in the 25–34 and 35–44 year age groups where Indigenous Australians died at around six and 8 times the rate of non-Indigenous Australians in these age groups respectively. In the five jurisdictions combined, the greatest difference in rates occurred in the 35–44 year age group, followed by those aged 25–34 and 45–54 years.

Table 1.22.1: All-causes mortality, by Indigenous status, Northern Territory and NSW, Qld, WA, SA & NT combined, 2004–2008[a][b][c][d][e]

	Number			Rate per 100,000[f]		
State/territory	**Indigenous**	**Non-Indigenous**	**Not stated**	**Indigenous**	**Non-Indigenous**	**Ratio[g]**
Northern Territory	2,283	2,537	32	1,582.3	679.2	2.3
NSW, Qld, WA, SA & NT[a]	**10,840**	**467,252**	**5,030**	**1,184.2**	**609.3**	**1.9**

(a) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only. These five jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure.

(b) Data are presented in 5-year groupings because of small numbers each year.

(c) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate.

(d) Deaths prior to 2007 are by year of registration and state/territory of usual residence. Deaths from 2007 onwards are by reference year and state/territory of usual residence. Registration year prior to 2007 is equivalent to reference year from 2007 onwards.

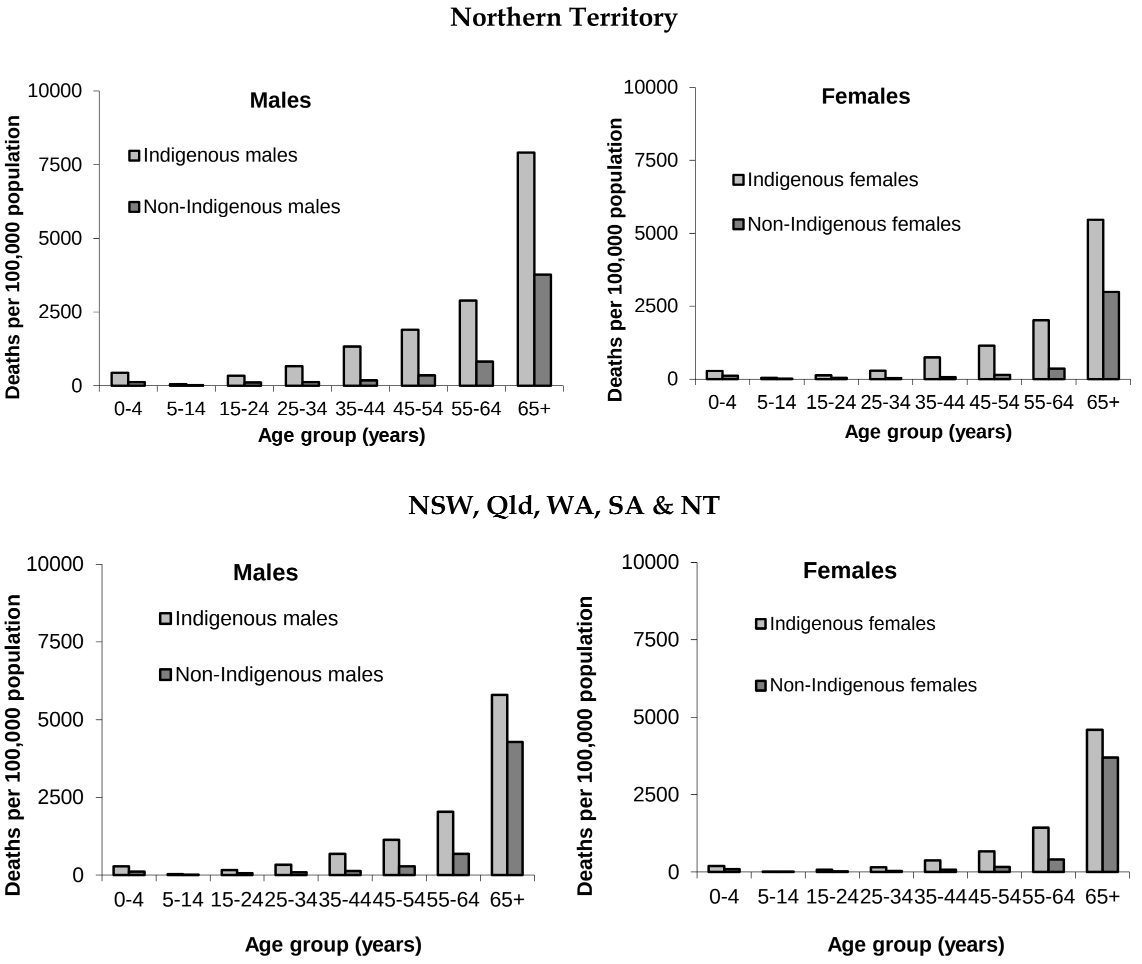
(e) Rates exclude 7,665 registered deaths where the Indigenous status is not stated.

(f) Age-standardised death rates enable the comparison of death rates between populations with different age structures by relating them to a standard population. The current ABS standard population is all people in the Australian population at 30 June 2001. SDRs are expressed per 100,000 people. Age-standardised rates in this table have been calculated using the direct method, age-standardised by 5-year age group to 75+. These rates exclude 7,665 registered deaths where the Indigenous status is not stated.

(g) Rate ratio Indigenous: non-Indigenous.

Note: 2007 and 2008 mortality data preliminary.

Source: Unpublished ABS analysis.

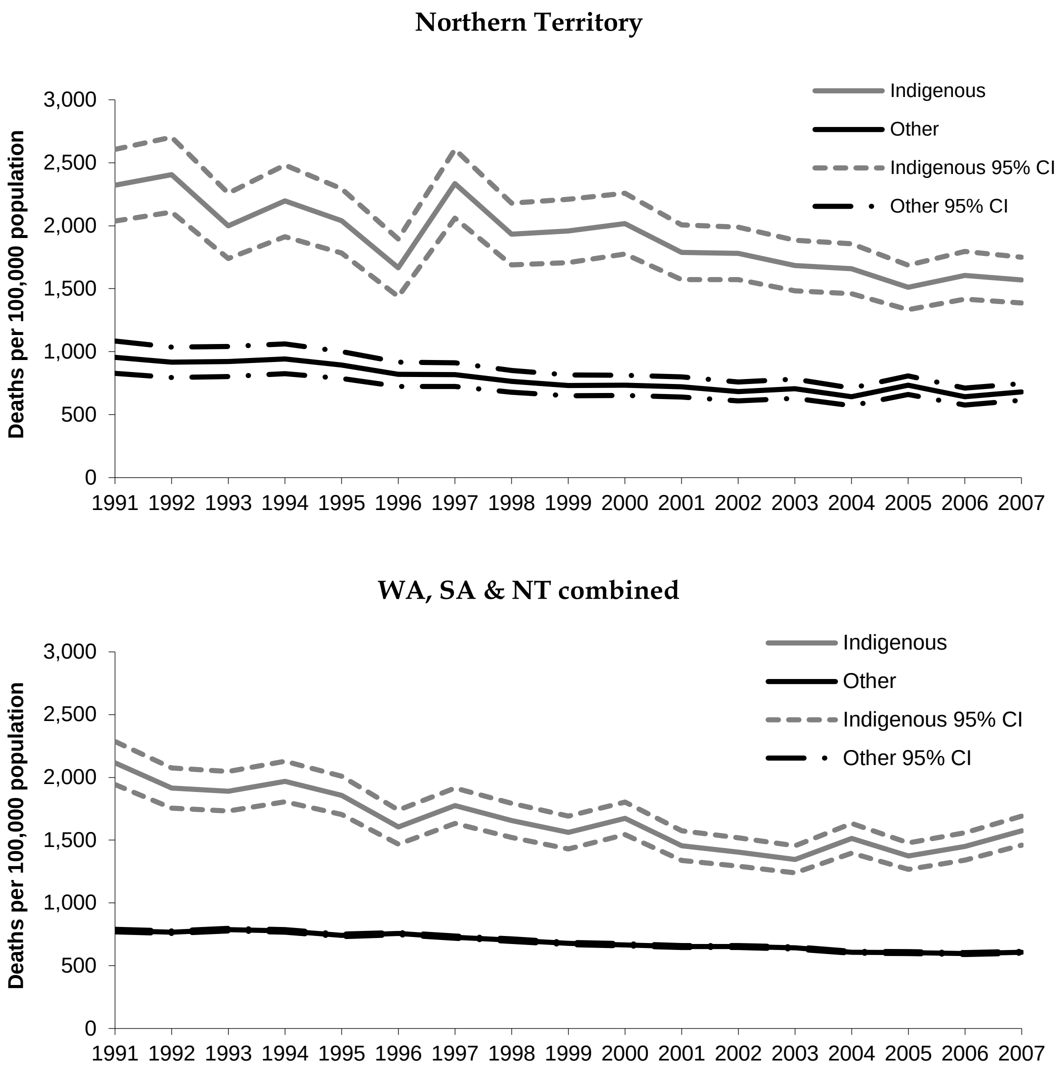


Source: AIHW analyses of National Mortality Database.

Figure 1.22.1: Mortality rates by age group, sex and Indigenous status, Northern Territory and NSW, Qld, WA, SA & NT combined, 2003–2007

Time series

- Over the period 1991–2007, there were significant declines in recorded mortality rates in the Northern Territory for Indigenous Australians. The fitted trend implies an average yearly decline in the rate of around 47 per 100,000 (equivalent to a 33% reduction in the rate over this period) (Figure 1.22.2).
- There were also significant declines in recorded mortality rates for other Australians in the Northern Territory between 1991 and 2007. The fitted trend implies an average yearly decline in the rate of around 20 per 100,000 for other Australians (equivalent to a 33% reduction in the rate over this period).
- There were significant declines in all-cause mortality rates for Indigenous and other Australians in Western Australia, South Australia and the Northern Territory combined between 1991 and 2007.



Northern Territory

WA, SA & NT combined

Source: AIHW analyses of National Mortality Database.

Figure 1.22.2: Age-standardised mortality rates by Indigenous status, Northern Territory and WA, SA & NT combined, 1991 to 2007

1.23 Leading causes of mortality

Causes of death of Aboriginal and Torres Strait Islander Australians, expressed as a rate by age group, age-standardised rate and rate ratio

- Over the period 2003–2007, the most common cause of death among Indigenous Australians in the Northern Territory was circulatory diseases (25%), followed by external causes (injury and poisoning) (18%). Indigenous Australians died from these causes of death at around twice the rate of non-Indigenous Australians respectively (Table 1.23.1).
- Cancer was also a major cause of death among both Indigenous and non-Indigenous Australians in the Northern Territory, responsible for 13% of Indigenous and 31% of non-Indigenous deaths.
- Over the period 2003–2007, Indigenous Australians in the Northern Territory died from diabetes at 6 times the rate, and kidney diseases at 7 times the rate, of non-Indigenous Australians.
- Over the same period, the most common cause of mortality for Indigenous Australians in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined was circulatory diseases (27%), followed by cancer (18%).

Excess deaths

Deaths higher than the expected number are referred to as 'excess deaths'. Excess deaths are calculated by subtracting the number of expected Indigenous deaths based on the age, sex and cause-specific rates of non-Indigenous Australians, from the number of actual cause-specific deaths in the Indigenous population. This is usually expressed as a proportion of excess death from all-causes.

Diseases of the circulatory system accounted for the highest proportion of excess deaths among Indigenous Australians in the Northern Territory over the period 2003–2007 (26% of male excess deaths and 27% of female excess deaths). Other major causes of excess deaths were external causes (injury and poisoning), diseases of the respiratory system, endocrine, metabolic & nutritional diseases (including diabetes), diseases of the digestive system and cancer (Table 1.23.2).

Table 1.23.1: Causes of mortality, by Indigenous status, Northern Territory and NSW, Qld, WA, SA & NT combined, 2003–2007[a][b][c]

	Number		Per cent		Rate per 100,000[d]		
Underlying cause of death	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Ratio[e]**
				Northern Territory			
Circulatory diseases	566	590	25.1	24.6	449.9	198.3	2.3*
External causes	399	372	17.7	15.5	148.6	63.4	2.3*
Cancer	301	736	13.4	30.7	254.1	201.2	1.3*
Endocrine, metabolic & nutritional disorders	167	103	7.4	4.3	157.2	31.6	5.0*
Diabetes[f]	*141*	*73*	*6.3*	*3.0*	*129.5*	*22.2*	*5.8**
Respiratory diseases	210	184	9.3	7.7	184.1	61.5	3.0*
Digestive diseases	164	103	7.3	4.3	97.1	25.4	3.8*
Conditions originating in perinatal period	55	23	2.4	1.0	9.2	3.1	3.0*
Nervous system diseases	50	46	2.2	1.9	27.6	13.9	2.0*
Kidney diseases	87	29	3.9	1.2	84.0	11.6	7.3*
Infectious & parasitic diseases	61	43	2.7	1.8	44.0	11.9	3.7*
Other causes[g]	191	169	8.5	7.0	145.1	52.5	2.8*
All-causes	**2,251**	**2,398**	**100.0**	**100.0**	**1,600.9**	**674.6**	**2.4***
				NSW, Qld, WA, SA & NT[h][i]			
Circulatory diseases	2,865	164,345	27.4	35.9	383.7	217.7	1.8*
External causes	1,543	26,086	14.7	5.7	86.2	36.1	2.4*
Cancer	1,828	135,559	17.5	29.6	231.4	180.8	1.3*
Endocrine, metabolic & nutritional disorders	838	15,554	8.0	3.4	111.6	20.7	5.4*
Diabetes [f]	*720*	*10,826*	*6.9*	*2.4*	*97.7*	*14.4*	*6.8**
Respiratory diseases	863	39,644	8.2	8.6	119.3	52.7	2.3*
Digestive diseases	626	15,372	6.0	3.4	59.1	20.5	2.9*
Conditions originating in perinatal period	263	1,872	2.5	0.4	6.0	2.8	2.1*
Nervous system diseases	262	16,146	2.5	3.5	26.3	21.5	1.2*
Kidney diseases	245	7,898	2.3	1.7	33.9	10.5	3.2*
Infectious & parasitic diseases	222	6,543	2.1	1.4	23.2	8.7	2.7*
Other causes[g]	915	29,333	8.7	6.4	86.1	39.3	2.2*
All-causes	**10,470**	**458,352**	**100.0**	**100.0**	**1,166.8**	**611.3**	**1.9***

(continued)

Table 1.23.1 (continued): Causes of mortality, by Indigenous status, Northern Territory and NSW, Qld, WA, SA & NT combined, 2003–2007[(a)(b)(c)]

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

(a) Deaths are by year of registration of death and state/territory of usual residence.

(b) Data are presented in 5-year groupings because of small numbers each year.

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

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

(e) Rate ratio Indigenous: non-Indigenous.

(f) Data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders in this table.

(g) Includes: diseases of the blood and blood-forming organs and certain disorders involving the immune system, mental & behavioural disorders, diseases of the eye and adnexa, diseases of the ear and mastoid process, diseases of the skin & subcutaneous tissue, diseases of the musculoskeletal system and connective tissue, diseases of the genitourinary system (excluding kidney diseases), pregnancy, childbirth & the puerperium, congenital malformations, deformations and chromosomal abnormalities, symptoms, signs and abnormal clinical findings not elsewhere classified.

(h) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only. These four states and territories are considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure.

(i) Rates exclude 5,756 registered deaths where the Indigenous status is not stated.

Source: AIHW analyses of National Mortality Database.

Table 1.23.2: Main causes of excess Indigenous deaths, by sex, Northern Territory and NSW, Qld, WA, SA & NT combined, 2003–2007[(a)(b)]

	Males			Females		
Underlying cause of death	**Observed**	**Excess**	**% excess**	**Observed**	**Excess**	**% excess**
	No.	**No.**	**%**	**No.**	**No.**	**%**
			Northern Territory			
Circulatory diseases	318	246	25.7	248	185	27.2
External causes	281	186	19.4	118	84	12.4
Respiratory diseases	122	99	10.4	88	69	10.2
Cancer	172	89	9.3	129	53	7.8
Digestive diseases	86	72	7.5	78	68	10.0
Endocrine, metabolic & nutritional disorders	78	65	6.8	89	80	11.7
Kidney diseases	35	32	3.4	52	48	7.0
Infectious & parasitic diseases	38	32	3.4	23	18	2.7
Nervous system diseases	36	30	3.2	14	7	1.0
Conditions originating in perinatal period	37	26	2.7	18	11	1.6
Other causes(c)	104	80	8.3	87	58	8.4
All-causes	**1,307**	**958**	**100.0**	**944**	**682**	**100.0**
			NSW, Qld, WA, SA & NT(d)			
Circulatory diseases	1,614	1,062	28.4	1,251	728	27.2
External causes	1,097	702	18.8	446	299	11.2
Respiratory diseases	481	344	9.2	382	253	9.5
Cancer	969	319	8.5	859	284	10.6
Digestive diseases	342	267	7.2	284	225	8.4
Endocrine, metabolic & nutritional disorders	400	337	9.0	438	380	14.2
Kidney diseases	116	94	2.5	129	104	3.9
Infectious & parasitic diseases	125	88	2.4	97	71	2.7
Nervous system diseases	168	99	2.6	94	20	0.8
Conditions originating in perinatal period	158	90	2.4	105	49	1.8
Other causes(c)	493	333	8.9	422	259	9.7
All-causes	**5,963**	**3,736**	**100.0**	**4,507**	**2,673**	**100.0**

(a) Deaths are by year of registration of death and state/territory of usual residence.

(b) Data are presented in 5-year groupings because of small numbers each year.

(c) Includes: diseases of the blood and blood-forming organs and certain disorders involving the immune system, mental & behavioural disorders, diseases of the eye and adnexa, diseases of the ear and mastoid process, diseases of the skin & subcutaneous tissue, diseases of the musculoskeletal system and connective tissue, diseases of the genitourinary system (excluding kidney diseases), pregnancy, childbirth & the puerperium, congenital malformations, deformations and chromosomal abnormalities, symptoms, signs and abnormal clinical findings not elsewhere classified.

(d) Data are reported for New South Wales, Queensland, Western Australia, South Australia and the Northern Territory only. These jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure.

Note: Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

Source: AIHW analyses of National Mortality Database.

1.25 Avoidable and preventable deaths

The number of deaths of Aboriginal and Torres Strait Islander peoples aged 0–74 years from avoidable and preventable conditions, expressed as a standardised rate and rate ratio

Avoidable and preventable mortality refers to deaths from certain conditions that are considered avoidable given timely and effective health care. This also includes deaths amenable to legal measures such as traffic safety.

- The most common types of avoidable conditions causing death among Aboriginal and Torres Strait Islander people in the Northern Territory were ischaemic heart disease (17%); followed by cancer (12%), in particular lung cancer (5%), diabetes (9%); suicide (8%) and road traffic injuries (8%). Indigenous Australians died from cancer and suicide at twice the rate of non-Indigenous Australians; from road traffic accidents at 3 times the rate; and from ischaemic heart disease and diabetes at 4 and 10 times the rate of non-Indigenous Australians respectively (Table 1.25.1).
- Indigenous Australians in the Northern Territory died from nephritis and nephrosis at 17 times the rate, and from rheumatic heart disease and other valvular heart disease at 62 times the rate of non-Indigenous Australians. These rate ratios were much higher than those observed in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory combined.

Table 1.25.1: Avoidable mortality, by cause of death and Indigenous status, people aged 0–74 years, Northern Territory and NSW, Qld, WA, SA & NT combined, 2003–2007[(a)(b)(c)(d)]

	Number[(e)]		Per cent		Age-standardised rate per 100,000[(f)]		
Cause of death	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Ratio[(g)]**
				Northern Territory			
Ischaemic heart disease	251	191	17.1	16.5	166.0	38.8	4.3*
Cancer	182	333	12.4	28.8	137.0	64.8	2.1*
Lung cancer[(h)]	*75*	*119*	*5.1*	*10.3*	*60.8*	*24.9*	*2.4**
Diabetes	125	49	8.5	4.2	102.6	10.8	9.5*
Suicide	116	111	7.9	9.6	34.1	15.8	2.2*
Road traffic injuries	121	105	8.3	9.1	45.5	14.3	3.2*
Alcohol-related disease	97	37	6.6	3.2	49.0	5.2	9.5*
Selected invasive bacterial and protozoal infections	71	32	4.8	2.8	36.3	7.6	4.8*
Cerebrovascular disease	63	45	4.3	3.9	43.2	9.1	4.8*
Chronic obstructive pulmonary disease	66	72	4.5	6.2	59.4	16.9	3.5*
Nephritis and nephrosis	80	14	5.5	1.2	62.2	3.7	16.6*
Violence	46	12	3.1	1.0	15.5	1.5	10*
Birth defects	31	16	2.1	1.4	7.4	2.4	3.1*
Complications of perinatal period	37	16	2.5	1.4	6.6	2.3	2.9*
Rheumatic and other valvular heart disease	44	2	3.0	0.2	22.1	0.4	62.1*
Other[(i)]	135	123	9.2	10.6	69.4	21.0	3.3*
Total avoidable	**1,465**	**1,158**	**100.0**	**100.0**	**856.4**	**214.5**	**4.0***

(continued)

Table 1.25.1 (continued): Avoidable mortality, by cause of death and Indigenous status, people aged 0–74 years, Northern Territory and NSW, Qld, WA, SA & NT combined, 2003–2007(a)(b)(c)(d)

	Number(e)		Per cent		Age-standardised rate per 100,000(f)		
Cause of death	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Indig.**	**Non-Indig.**	**Ratio(g)**
				NSW, Qld, WA, SA & NT(j)			
Ischaemic heart disease	1,253	21,319	19.8	19.5	123.7	30.9	4.0*
Cancer	1,006	41,029	15.9	37.6	107.6	58.8	1.8*
Lung cancer(h)	*398*	*14,227*	*6.3*	*13.0*	*45.8*	*20.4*	*2.2**
Diabetes	585	3,403	9.2	3.1	65.1	4.9	13.2*
Suicide	469	6,896	7.4	6.3	22.0	10.3	2.1*
Road traffic injuries	397	4,341	6.3	4.0	20.2	6.5	3.1*
Alcohol-related disease	394	2,867	6.2	2.6	29.8	4.1	7.3*
Selected invasive bacterial and protozoal infections	259	2,677	4.1	2.5	20.6	3.9	5.2*
Cerebrovascular disease	321	6,754	5.1	6.2	34.2	9.9	3.5*
Chronic obstructive pulmonary disease	290	5,164	4.6	4.7	36.3	7.5	4.8*
Nephritis and nephrosis	206	1,347	3.2	1.2	21.2	2.0	10.7*
Violence	132	563	2.1	0.5	6.7	0.8	7.9*
Birth defects	143	1,705	2.3	1.6	4.8	2.7	1.8*
Complications of perinatal period	145	959	2.3	0.9	3.5	1.5	2.3*
Rheumatic and other valvular heart disease	100	281	1.6	0.3	7.4	0.4	17.9*
Other(i)	643	9,913	10.1	9.1	47.8	14.6	3.3*
Total avoidable	**6,343**	**109,218**	**100.0**	**100.0**	**550.9**	**159.0**	**3.5***

(continued)

Table 1.25.1 (continued): Avoidable mortality, by cause of death and Indigenous status, people aged 0–74 years, Northern Territory and NSW, Qld, WA, SA & NT combined, 2003–2007(a)(b)(c)(d)

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

(a) Data are reported for Queensland, Western Australia, South Australia and the Northern Territory only. These four jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure.

(b) Data are presented in 5-year groupings because of small numbers each year.

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

(d) Deaths are by year of occurrence except the latest year which is based on year of registration.

(e) It should be noted that different causes of death may have different levels of completeness of identification of Indigenous deaths that differ from the 'all cause' under-identification (coverage) estimates.

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

(g) Rate ratio Indigenous: non-Indigenous.

(h) Data for lung cancer are a subset of data for all cancers presented in this table.

(i) Other includes: tuberculosis, hepatitis, HIV/AIDS, viral pneumonia and influenza, thyroid disorders, illicit drug disorders, epilepsy, hypertensive heart disease, aortic aneurysm, obstructive uropathy & prostatic hyperplasia, deep vein thrombosis with pulmonary embolism, asthma, peptic ulcer disease, acute abdomen/appendicitis/intestinal obstruction/cholecystitis/lithiasis/pancreatitis/hernia, chronic liver disease, falls, fires/burns, accidental poisonings, drownings.

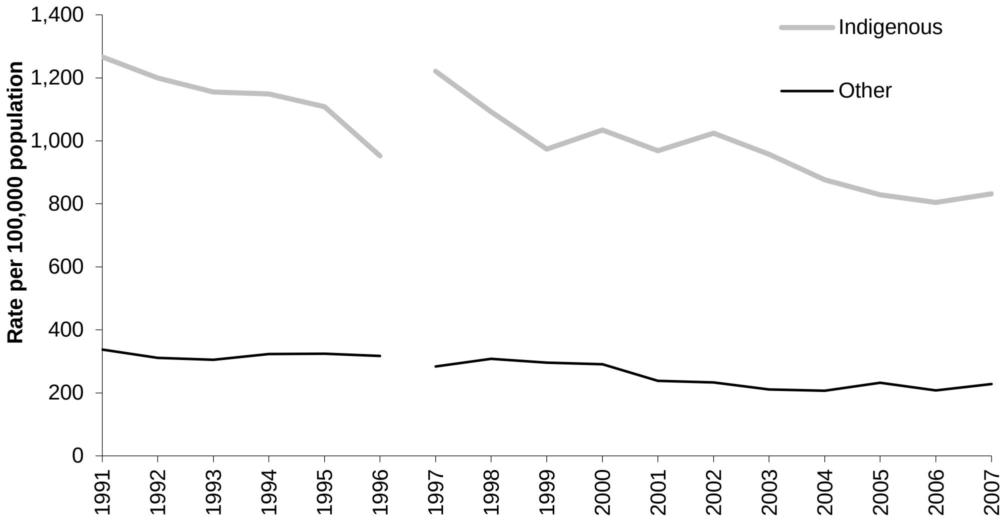
(j) Data are reported for Queensland, Western Australia, South Australia and the Northern Territory only. These four jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure.

Source: AIHW analysis of AIHW National Mortality Database.

Time series

- Over the period 1991–1996, in the Northern Territory, there were significant declines in mortality rates from avoidable causes of death among Indigenous Australians aged 0–74 years. There was an average yearly decline in the rate of around 53 deaths per 100,000 population which is equivalent to a 25% reduction in the rate over this period. Over the same period, there were non-significant declines in mortality rates for avoidable causes for other Australians in the Northern Territory (Figure 1.25.1).
- Over the period 1997–2007, in the Northern Territory, there were significant declines in the mortality rates from avoidable causes among Indigenous Australians aged 0–74 years. There was an average yearly decline in the rate of around 35 per 100,000 which is equivalent to a 20% reduction in the rate over the period. Over the same period, there were significant declines in mortality rates for avoidable causes for other Australians in the Northern Territory (a 20% reduction).
- Over both periods of study there were significant declines in mortality rates from avoidable causes among Indigenous and other Australians aged 0–74 years in Western Australia, South Australia and the Northern Territory combined.
- There were significant declines in the rate ratio between Indigenous and other Australian mortality from avoidable causes in the Northern Territory over the period 1991 to 1996 but no significant change in the rate ratio over the period 1997 to 2006 (Figure 1.25.2).

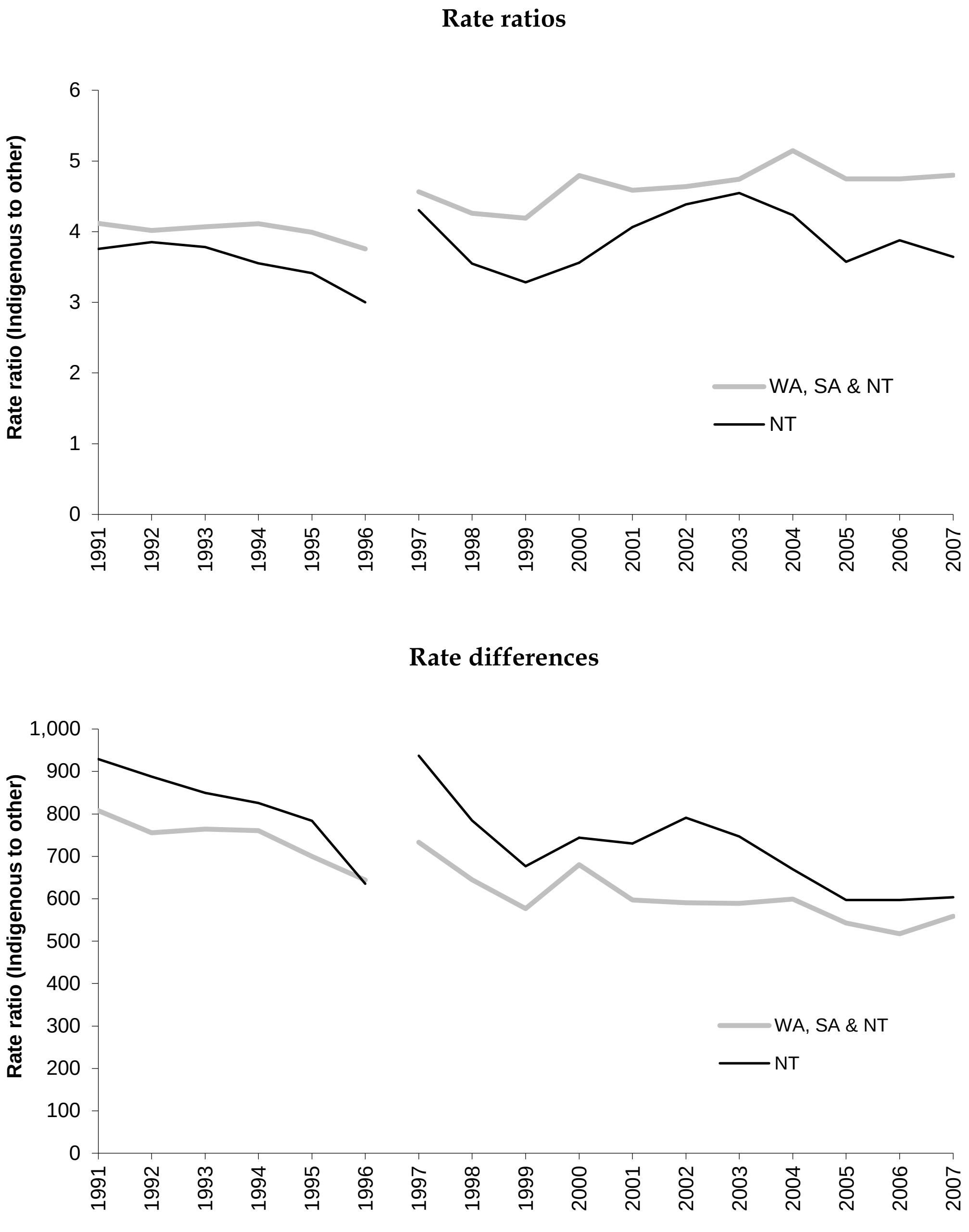
Northern Territory



WA, SA & NT

Source: AIHW analyses of National Mortality Database.

Figure 1.25.1: Mortality rates for avoidable causes of death, Indigenous and other Australians aged 0–74 years, Northern Territory and WA, SA & NT combined, 1991–96 and 1997–2007



Source: AIHW analyses of National Mortality Database.

Figure 1.25.2: Mortality rates ratios and rate differences for avoidable causes of death, Indigenous and other Australians aged 0–74 years, Northern Territory and WA, SA & NT combined, 1991–96 and 1997–2007

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

- In 2006 in the Northern Territory, there were 75 discrete Indigenous communities that were not connected to a town water supply and that sent their drinking water away for testing in the 12 months prior to the 2006 CHINS. Of these 75 communities 21% provided samples that failed testing, 68% provided samples that did not fail testing and for 11% of communities the test result was not known.
- In 2006 in Australia, there was a total of 164 Indigenous communities that were not connected to a town water supply and that sent their drinking water away for testing. Of these communities, 29% provided water samples that failed testing (Table 2.01.1).
- In 2006 in the Northern Territory, 17% of discrete Indigenous communities experienced a sewerage overflow or leakage that lasted longer than 48 hours. Nationally 22% of Indigenous communities experienced a sewerage overflow or leakage lasting longer than 48 hours in 2006 (Figure 2.01.1).

Table 2.01.1: Testing of drinking water in discrete Indigenous communities, Northern Territory and Australia, 2006[(a)(b)(c)]

	Northern Territory		Australia			
	Number of communities	%	Number of communities	%	Reported usual pop'n.	%
Did not fail testing(d)	51	68.0	100	61.0	29,104	58.2
Failed testing(d)	16	21.3	48	29.3	12,059	24.1
Test result not known	8	10.7	16	9.7	8,880	17.7
Total communities water sent away for testing(e)	***75***	***77.3***	***164***	***78.1***	***50,043***	***n.a.***
Not tested(e)	22	22.7	45	21.4	4,796	n.a.
Total communities(b)	**97**	**100.0**	**209**	**100.0**	**54,839**	**100.0**

(a) In the 12 months prior to the survey.

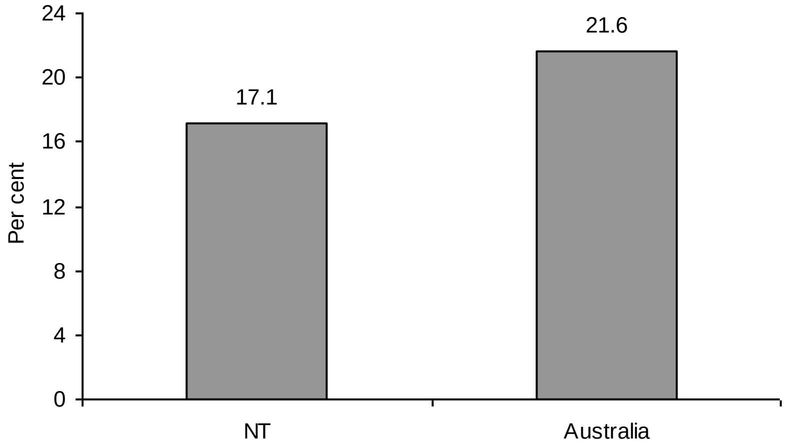
(b) Excludes communities connected to town supply.

(c) All discrete Indigenous communities for which water testing data were collected.

(d) Testing means water was sent away for testing. Proportion calculated in relation to total communities not connected to a town supply where water was sent away for testing.

(e) Testing means water was sent away for testing. Proportion calculated in relation to total communities not connected to a town supply.

Source: ABS 2007a; FaHCSIA and AIHW analyses of CHINS 2006.



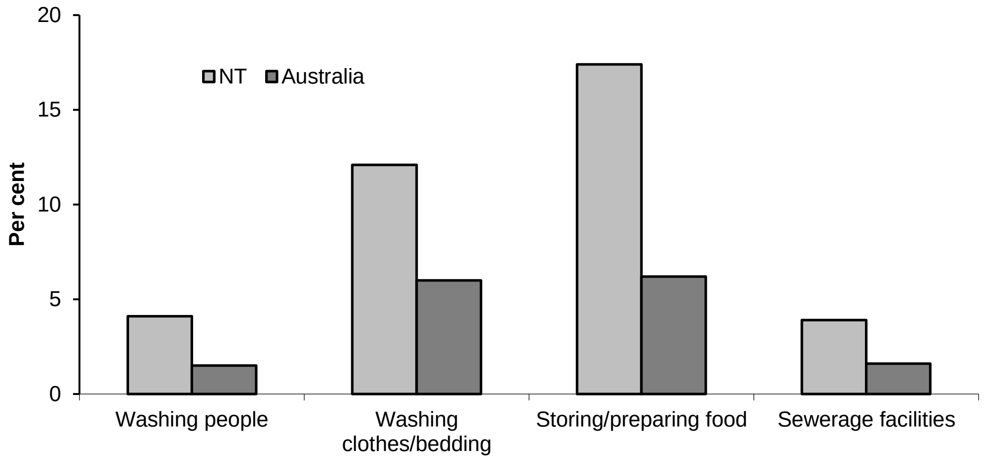
Note: Percentages calculated as a proportion of all discrete Indigenous communities with a reported usual population of 50 people or more, and communities which have a reported usual population of less than 50 people but which are not administered by a larger discrete Indigenous community or Resource Agency.

Source: FaHCSIA and AIHW analyses of CHINS 2006.

Figure 2.01.1: Percentage of discrete Indigenous communities experiencing sewerage overflows or leakages for longer than 48 hours, Northern Territory and Australia, 2006

Healthy living practices

- In 2008, in the Northern Territory, 4% of Indigenous households reported that they did not have working facilities for washing people, 12% did not have facilities for washing clothes/bedding, 17% did not have facilities for storing/preparing food, and 4% did not have working sewerage systems.
- In 2008, in Australia, 2% of Indigenous households reported that they did not have working facilities for washing people, 6% did not have facilities for washing clothes/bedding, 6% did not have facilities for storing/preparing food, and 2% 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 2.01.2: Percentage of Indigenous households reporting lack of working facilities for each of the first four Health Living Practices, Northern Territory and Australia, 2008

2.02 Overcrowding in housing

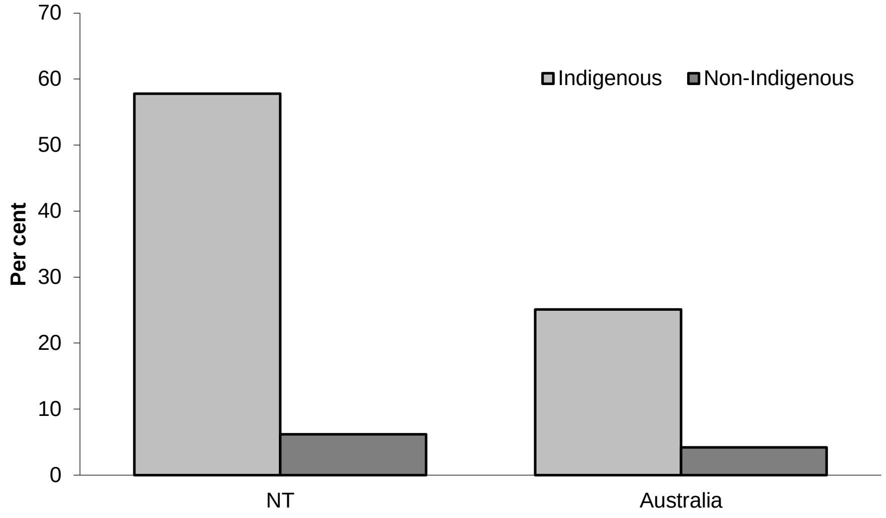
The proportion of Aboriginal and Torres Strait Islander people living in overcrowded households

Data presented for this indicator are based on the Canadian National Occupancy Standard of housing overcrowding. The Canadian National Occupancy Standard is most widely used in Australia as a measure of overcrowding. 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 less than 5 years of age 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 less than 18 years of age and of the same sex may reasonably share a bedroom
- single household members aged 18 years or over should have a separate bedroom (AIHW 2005).

- In 2008, in the Northern Territory, approximately 58% of Indigenous Australians aged 15 years and over were living in overcrowded households (according to the Canadian National Occupancy Standard) compared to 6% of non-Indigenous Australians. The proportion of Indigenous Australians in the Northern Territory living in overcrowded households was much higher than for Indigenous Australians in Australia (58% compared to 25%) (Figure 2.02.1).
- In 2006 in the Northern Territory, overcrowding varied by tenure type with 61% of Indigenous households in housing co-operative, community or church group housing overcrowded according to the Canadian National Occupancy Standard. This compared to 25% of Indigenous households in the housing authority housing being overcrowded, 16% private and other renters and 12% home owners or purchasers (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 years and over living in overcrowded housing[(a)(b)], by Indigenous status, Northern Territory 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, Northern Territory and Australia, 2006

	Indigenous		Non-Indigenous	
Tenure type	**Northern Territory**	**Australia[(a)]**	**Northern Territory**	**Australia[(a)]**
No. of overcrowded Indigenous households				
Home owner/purchaser	218	3,687	858	94,314
Renter				
State or territory housing authority	366	4,970	138	12,692
Housing co-operative/community/church group	2,743	5,567	13	1,188
Private and other(b)	232	5,337	610	81,134
Not stated	26	233	7	1,091
Total rented	*3,367*	*16,107*	*768*	*96,105*
Other tenure types(c)	163	752	106	5,086
Total dwellings(d)	**3,775**	**20,734**	**1,752**	**198,151**
Proportion of overcrowded households(e) (%)				
Home owner/purchaser	11.6	6.9	3.7	2.0
Renter				
State or territory housing authority	24.9	15.9	5.0	4.9
Housing co-operative/community/church group	60.8	39.9	3.7	3.6
Private and other(b)	16.4	11.4	4.7	5.6
Not stated	43.3	19.0	5.9	6.3
Total rented	*45.1*	*17.3*	*4.7*	*5.5*
Other tenure types(c)	39.9	18.1	5.4	3.5
Total dwellings(d)	**38.5**	**13.6**	**4.2**	**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 n.f.d.

(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 bedrooms are 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 daily smokers

Children living in households with smokers

- In 2007–08, around 77% Indigenous children aged 0–14 years in the Northern Territory were living in households with a daily smoker, compared with 36% of non-Indigenous children of the same age (Table 2.03.1).
- In the same period, around 65% of Indigenous children aged 0–14 in Australia lived in households with a daily smoker, compared with 32% of non-Indigenous children of the same age.
- Approximately 25% of Indigenous children aged 0–14 years in the Northern Territory were living in households with a daily smoker who smoked at home indoors. This percentage was slightly higher than that reported for all the Indigenous children aged 0–14 years in across Australia (22%).

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

			Northern Territory	Australia
Proportion of children living with current daily smoker(s)[(a)]	Indigenous	%	76.6	65.1
	Non-Indigenous	%	35.5	32.2
	Rate ratio		2.2*	2.0*
Proportion of children with daily smoker who smokes at home indoors in household[(a)]	Indigenous	%	25.4	21.6
	Non-Indigenous	%	0.0	6.6
	Rate ratio		. .	3.3*
Total number of children aged 0–14 years[(b)]	**Indigenous**	**No.**	**22,104**	**193,249**
	Non-Indigenous	**No.**	**29,226**	**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 the Northern Territory in 2009, approximately 40% of Indigenous students achieved the Year 3 reading benchmark compared to 90% of non-Indigenous students; 31% of Indigenous students achieved the Year 5 reading benchmark compared to 89% of non-Indigenous students; 36% of Indigenous students achieved the Year 7 reading benchmark compared to 92% of all students; and 32% of Indigenous students achieved the Year 9 reading benchmark compared to 91% of non-Indigenous students. These proportions were considerably lower than for Indigenous students nationally.

Writing

- In the Northern Territory in 2009, approximately 45% of Indigenous students achieved the Year 3 writing benchmark compared to 95% of non-Indigenous students; 32% of Indigenous students achieved the Year 5 writing benchmark compared to 90% of non-Indigenous students; 31% of Indigenous students achieved the Year 7 writing benchmark compared to 89% of non-Indigenous students; and 26% of Indigenous students achieved the Year 9 writing benchmark compared to 85% of non-Indigenous students. These proportions were considerably lower than for Indigenous students nationally.

Spelling

- In the Northern Territory in 2009, approximately 29% of Indigenous students achieved the Year 3 spelling benchmark compared to 86% of non-Indigenous students; 34% of Indigenous students achieved the Year 5 spelling benchmark compared to 87% of non-Indigenous students; 37% of Indigenous students achieved the Year 7 spelling benchmark compared to 88% of non-Indigenous students; and 30% of Indigenous students achieved the Year 9 spelling benchmark compared to 85% of non-Indigenous students. These proportions were considerably lower than for Indigenous students nationally.

Grammar and punctuation

- In the Northern Territory in 2009, approximately 32% of Indigenous students achieved the Year 3 grammar and punctuation benchmark compared to 86% of non-Indigenous students; 28% of Indigenous students achieved the Year 5 grammar and punctuation benchmark compared to 88% of non-Indigenous students; 27% of Indigenous students achieved the Year 7 grammar and punctuation benchmark compared to 89% of non-Indigenous students; and 27% of Indigenous students achieved the Year 9 grammar and punctuation benchmark compared to 89% of non-Indigenous students. These proportions were considerably lower than for Indigenous students nationally.

Numeracy

- In the Northern Territory in 2009, approximately 41% of Indigenous students achieved the Year 3 numeracy benchmark compared to 92% of non-Indigenous students; 46% of Indigenous students achieved the Year 5 numeracy benchmark compared to 93% of non-Indigenous students; 44% of Indigenous students achieved the Year 7 numeracy benchmark compared to 94% of non-Indigenous students; and 45% of Indigenous students achieved the Year 9 numeracy benchmark compared to 94% of non-Indigenous students. These proportions were considerably lower 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, Northern Territory and Australia, 2008–2009[(a)]

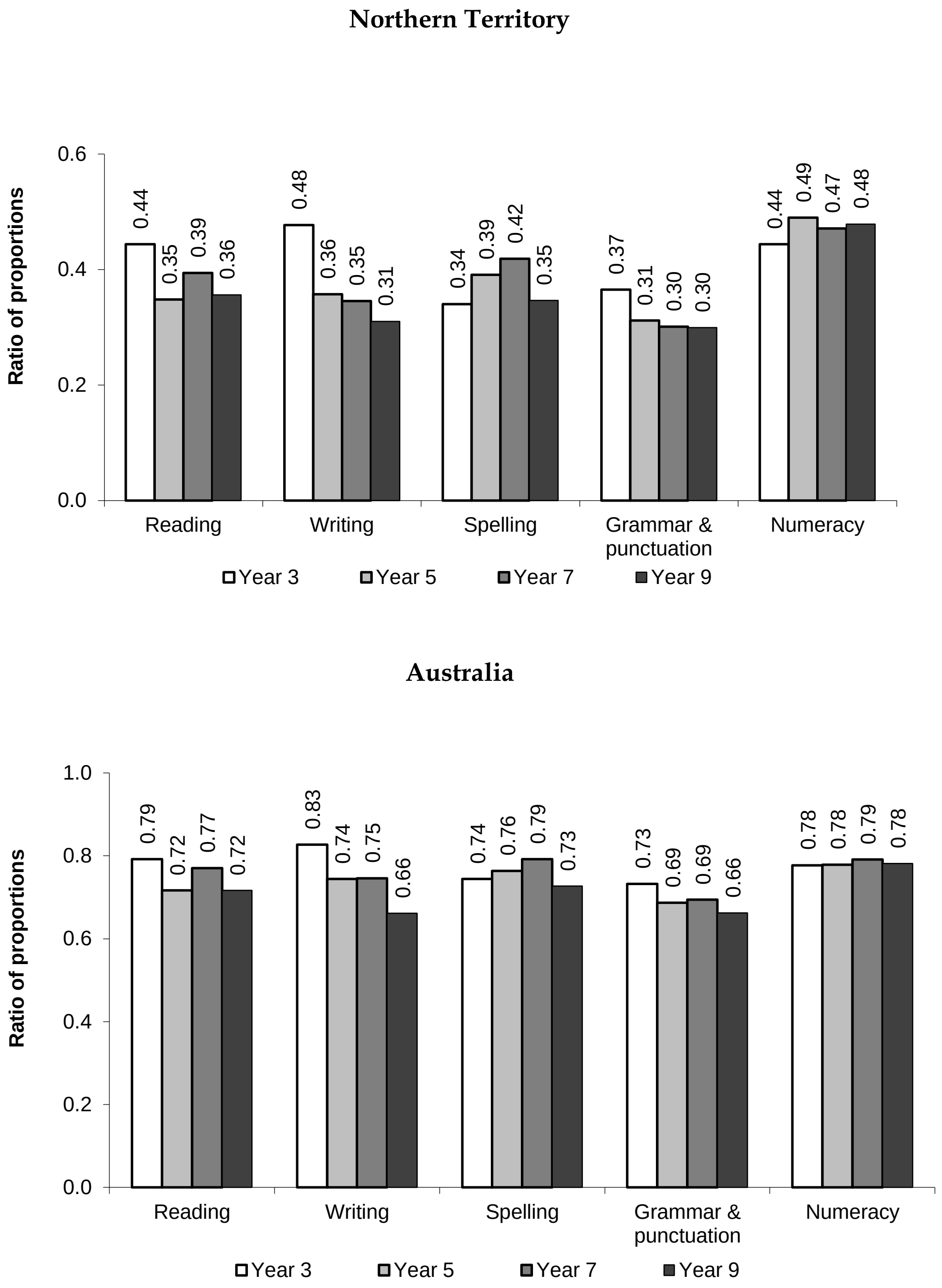
	Northern Territory									
	Indigenous					Non-Indigenous				
	Reading	Writing	Spelling	Grammar & punctuation	Numeracy	Reading	Writing	Spelling	Grammar & punctuation	Numeracy
Year 3										
2008	30.4	46.6	28.8	25.8	52.4	88.2	95.2	87.0	87.1	96.5
2009	39.9	45.4	29.4	31.5	41.0	89.9	95.2	86.4	86.3	92.4
Year 5										
2008	25.8	32.8	28.8	24.5	38.3	88.9	90.2	86.5	88.3	91.6
2009	31.0	32.1	33.9	27.5	45.5	89.1	89.9	86.7	88.3	92.9
Year 7										
2008	32.4	29.9	31.1	23.9	50.2	93.5	89.2	88.4	88.0	95.6
2009	36.4	30.8	36.7	26.9	44.2	92.4	89.2	87.7	89.4	93.8
Year 9										
2008	37.9	32.8	33.3	28.4	46.1	92.2	84.6	86.4	87.4	93.6
2009	32.3	26.3	29.6	26.6	45.2	90.7	84.8	85.4	88.8	94.4
	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 rate of proportions

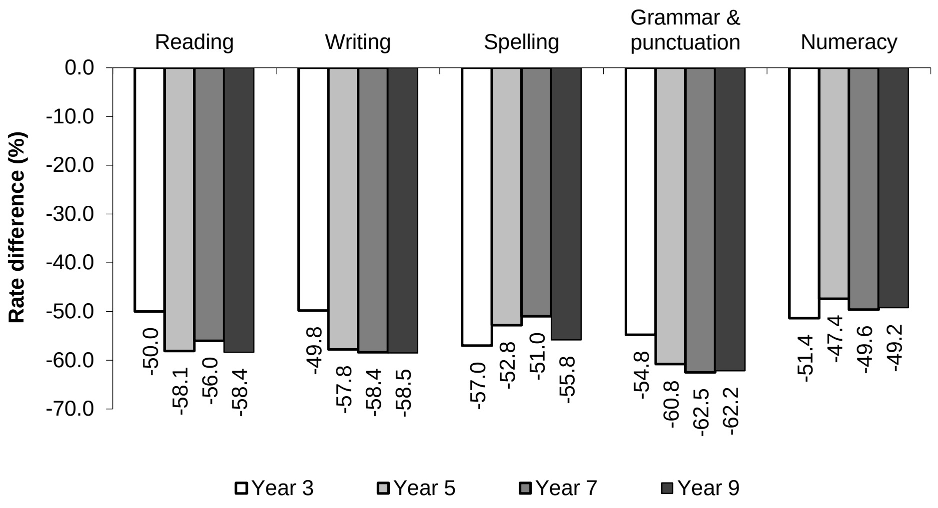
- Compared to the proportion of all students achieving educational benchmarks, the reading, writing, spelling, grammar and punctuation, and numeracy achievements of Indigenous students in the Northern Territory were considerably lower than those of Indigenous students across Australia.
- When compared with non-Indigenous students, achievement levels of Indigenous students in the Northern Territory were lowest for writing in Year 9 and grammar/punctuation in Year 5, Year 7 and Year 9. For these areas the ratio between Indigenous and non-Indigenous students ranged between 0.30 to 0.31 and the rate difference ranged between –63% to –59%). This pattern was slightly different than that in Australia overall where the relative achievement levels of Indigenous students were lowest for writing and grammar/punctuation in Year 9.



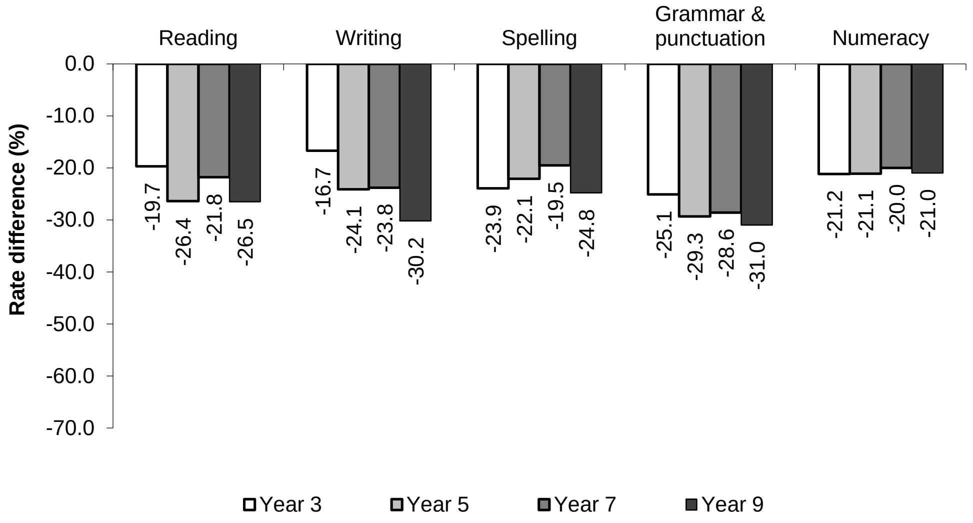
Source: AIHW analyses of MCEECDYA 2009.

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

Northern Territory



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, Northern Territory 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 commencement 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 and attainment rates

- In 2009 in the Northern Territory, the apparent retention rate of full-time Indigenous students from Year 7/8 to Year 10 was 76% for males and 74% for females compared to 97% for both non-Indigenous males and non-Indigenous females. Year 7/8 to Year 10 retention rates were lower for the Northern Territory than for total Australia.
- In the same year the apparent retention rate of full-time Indigenous students in the Northern Territory from Year 7/8 to Year 11 was 52% for males and 53% for females. This was much lower than rates for non-Indigenous males and females (84% and 86% respectively). Year 7/8 to Year 11 retention rates for Indigenous students were lower for the Northern Territory than the national average.
- The apparent retention rate of full-time Indigenous students in the Northern Territory from Year 7/8 to Year 12 was much lower than for non-Indigenous students—30% for Indigenous males and 39% for Indigenous females compared to 63% for non-Indigenous males and 70% for non-Indigenous females. Year 7/8 to Year 12 apparent retention rates were lower for the Northern Territory than nationally.
- Similarly, the apparent retention rate of full-time Indigenous students in the Northern Territory from Year 10 to Year 12 was much lower for Indigenous (37% for males and 48% for females compared to 69% and 76% for non-Indigenous males and females). Year 10 to Year 12 apparent retention rates for Indigenous students were lower for the Northern Territory than nationally.
- In 2009, approximately 45% of Indigenous male Year 11 students and 56% of Indigenous female year 11 students in the Northern Territory went on to achieve a Year 12 certificate. This compared to 78% and 82% of non-Indigenous male and female Year 11 students. The proportion of Indigenous Year 11 students that went on to achieve a Year 12 certificate was lower in the Northern Territory than nationally.

Table 2.05.1: Apparent retention and attainment rates, by Indigenous status and sex, Northern Territory and Australia, 2009[(a)(b)(c)(d)]

	Northern Territory[(e)]		Australia	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	%	%	%	%
Year 7/8 to Year 10[(f)]				
Males	75.9	97.4	89.6	99.2
Females	74.0	96.7	92.3	101.1
Year 7/8 to Year 11[(f)]				
Males	52.3	83.9	67.5	88.9
Females	52.9	86.2	71.6	94.8
Year 7/8 to Year 12[(f)]				
Males	30.1	62.5	41.5	72.1
Females	39.2	70.2	49.5	82.7
Year 10 to Year 12[(g)]				
Males	36.7	68.7	46.1	73.1
Females	48.0	76.4	54.3	82.5
Year 11 to Year 12[(h)]				
Males	44.5	78.0	64.2	83.7
Females	56.0	81.5	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) In small jurisdictions, relatively small changes in student numbers can create apparently large movements in retention rates.

(d) 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.

(e) In 2009, changes to the processing of the Northern Territory enrolment data will affect comparisons with previous years of all numbers drawing on student data for the Northern Territory.

(f) 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).

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

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

Source: ABS 2010a; 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 the Northern Territory, a lower proportion of Indigenous Australians aged 15 years and over was currently studying than non-Indigenous Australians (14% compared to 17%). Throughout Australia 19% of Indigenous Australians and 16% of non-Indigenous Australians aged 15 years and over were currently studying (Table 2.06.1).
- A higher proportion of Indigenous Australians from the Northern Territory and Australia attended secondary school than non-Indigenous Australians; however, a lower proportion of Indigenous Australians attended a university or other higher education than non-Indigenous Australians (Table 2.06.1).
- In the Northern Territory in 2008, non-Indigenous Australians aged 18 years and over were more likely than Indigenous Australians to have completed Year 12 (63% compared to 16%). In contrast a much higher proportion of Indigenous adults reported that the highest year of school completed was Year 9 or below than non-Indigenous adults (44% compared to 11%). The proportion of Indigenous Australians who completed Year 12 was lower in the Northern Territory than for Australia (16% compared to 23%) (Figure 2.06.1).
- In 2008 in the Northern Territory, 27% of Indigenous Australians aged 25–64 years had a non-school qualification compared to 55% of non-Indigenous Australians. The most commonly held qualification was for a certificate course for both Indigenous and non-Indigenous Australians (Table 2.06.2).

Table 2.06.1: Educational institution currently attended, by Indigenous status, people aged 15 years and over, Northern Territory 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
NT	Indigenous	%	5.9	2.9	3.1	13.5	86.5	100.0	41,274
	Non-Indigenous	%	2.7[(c)]	4.9[(c)]	6.7[(b)]	16.6[(b)]	83.4	100.0	111,250
	Rate ratio[(d)]		2.2	0.6	0.5	0.8	1.0		
Aust.	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[(d)]		2.0	1.3	0.5	1.2	1.0		

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

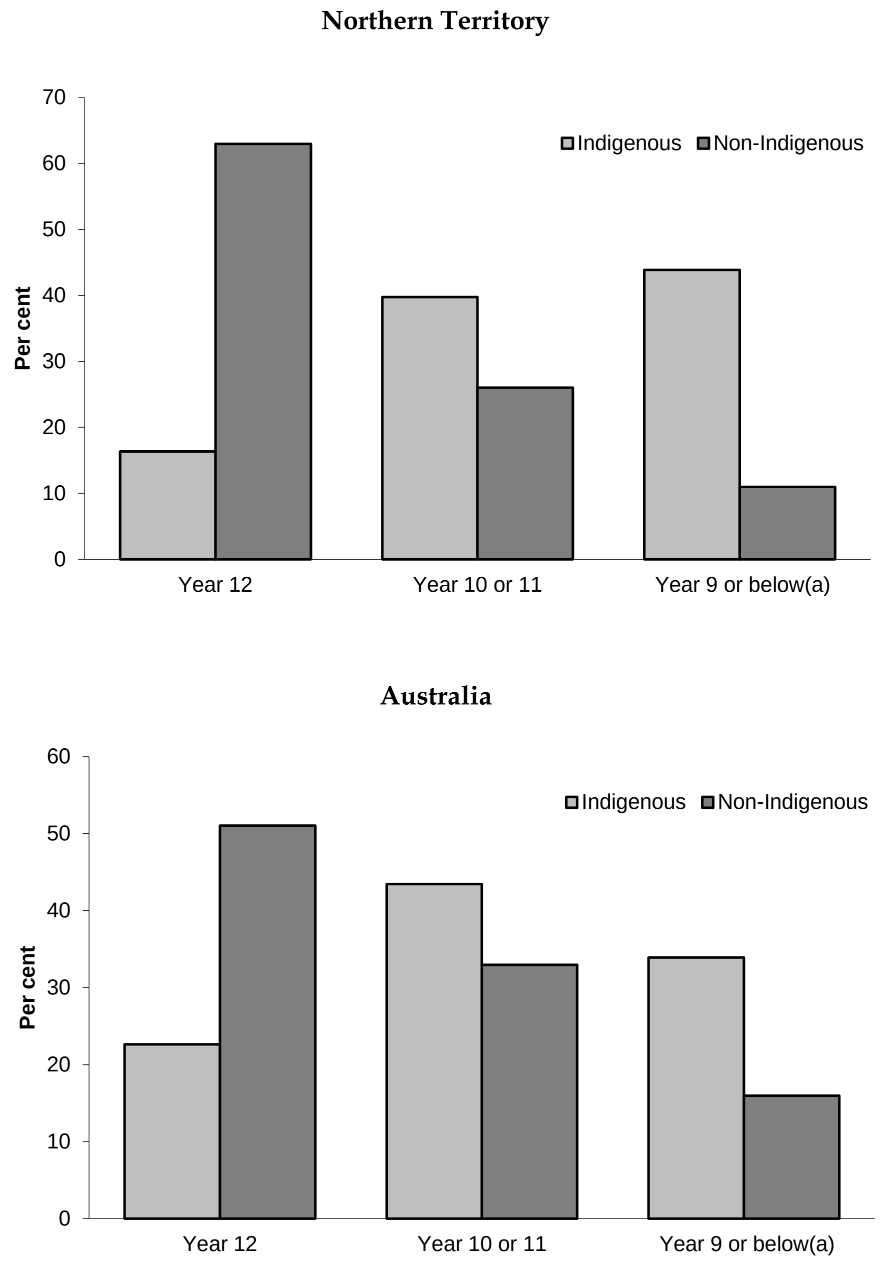
(a) Includes other educational institution, not further defined.

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

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

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

Source: ABS and AIHW analysis of NATSISS 2008.



(a) Includes people who never attended school.

(b) Estimate for non-Indigenous people in the Northern Territory who completed Year 9 and below has a relative standard error between 25% and 50% and should be used with caution.

Source: ABS and AIHW analysis of NATSISS 2008.

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

Table 2.06.2: Whether has a non-school qualification, by Indigenous status, people aged 25–64 years, Northern Territory 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**
NT	Indigenous	%	5.0*	4.3	14.7	27.2*	72.8*	100.0	26,987
	Non-Indigenous	%	22.9*	6.8[(d)]	23.9	54.6*	45.4*	100.0	88,522
	Rate ratio		0.2	0.6	0.6	0.5	1.6	1.0	
Aust.	**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.

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

Source: NATSISS 2008 and NHS 2007–08.

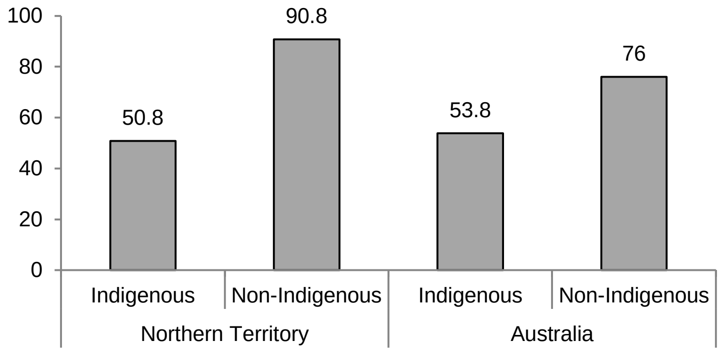
2.07 Employment status including Community Development Employment Projects (CDEP) participation

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

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

In 2008, the labour force participation rate for the Indigenous population of the Northern Territory aged 15–64 years was estimated to be 61%. The remaining 39% of the population were not in the labour force due either to retirement, inability to work or not intending to work in the future (Table 2.07.1; Figure 2.07.1).

- In 2008, the labour force participation rate for the Indigenous population aged 15–64 years in Australia was estimated to be 65%, and 35% were not in the labour force. In comparison the labour force participation rate of the non-Indigenous people in Australia was 79% and only 21% were not in the labour force due to retirement, inability to work or not intending to work in the future.
- Within the Northern Territory in 2008, of Indigenous people aged 15–64 years who were in the labour force, 51% were employed (18% in CDEP and 33% in non-CDEP) and 10% were unemployed but actively seeking work. Of the non-Indigenous population, 91% were employed (Table 2.07.1).
- In Australia, 54% of the Indigenous population aged between 15–64 years in 2008 were employed (6% in CDEP and 48% in non-CDEP) and 11% were unemployed but actively seeking work. Of the non-Indigenous population, 76% were employed and 3% were unemployed but actively seeking work.



Source: NATSISS 2008 and NHS 2007–08.

Figure 2.07.1: Total employed, people aged 15–64 years, by Indigenous status, Northern Territory and Australia, 2008

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

	Northern Territory		**Australia**	
	Indig.	**Non-Indig.**	**Indig.**	**Non-Indig.**
	%	**%**	**%**	**%**
In the labour force				
Employed CDEP	17.5	. .	5.6	. .
Employed non-CDEP	33.3	. .	48.2	. .
Total employed	50.8	90.8	53.8	76.0
Unemployed	10.3	n.p.	10.7	2.9
Not in the labour force	38.9	n.p.	35.5	21.1
Total	**100.0**	**100.0**	**100.0**	**100.0**

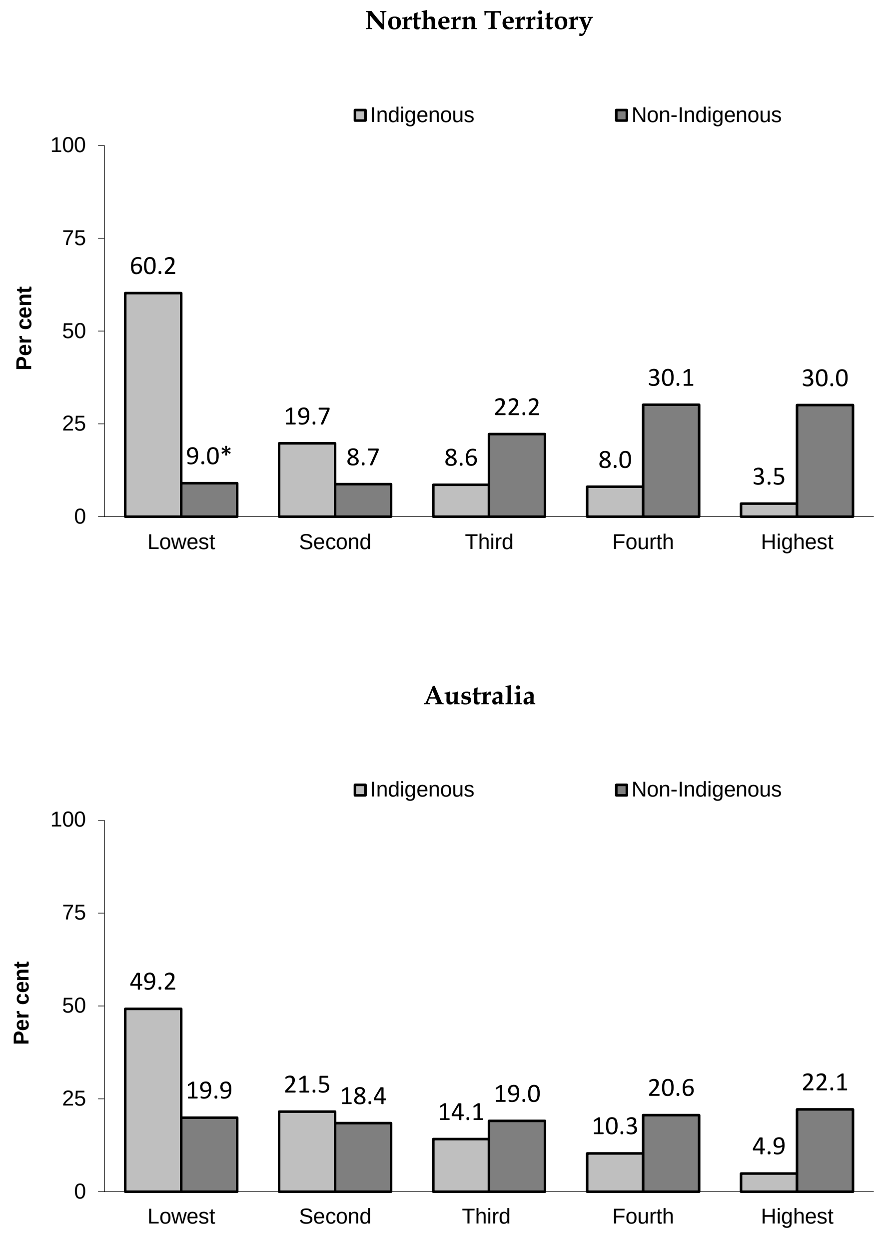
Source: NATSISS 2008 and NHS 2007–08.

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 the Northern Territory, 60% of Indigenous Australians aged 18 years and over were in the lowest quintile of equivalised gross weekly household income and 4% were in the highest quintile. In comparison, approximately 9% of non-Indigenous Australians in the Northern Territory were in the lowest quintile and 30% were in the highest quintile (Figure 2.08.1).
- In Australia, 49% of Indigenous Australians aged 18 years and over were in the lowest quintile of equivalised gross weekly household income and 5% were in the highest quintile. Of non-Indigenous Australians in Australia, 20% were in the lowest quintile and 22% were in the highest quintile (Figure 2.08.1).
- In 2008 in the Northern Territory, the mean equivalised gross weekly household income for Indigenous Australians aged 18 years and over was $489 per week compared to $1,120 per week for non-Indigenous Australians. The mean equivalised gross weekly household income for Indigenous Australians in the Northern Territory was lower than for Indigenous Australians in Australia ($489 compared to $580), whereas the mean equivalised gross weekly household income for non-Indigenous Australians in the Northern Territory was higher than for non-Indigenous Australians in Australia ($1,120 compared to $983) (Figure 2.08.2).



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

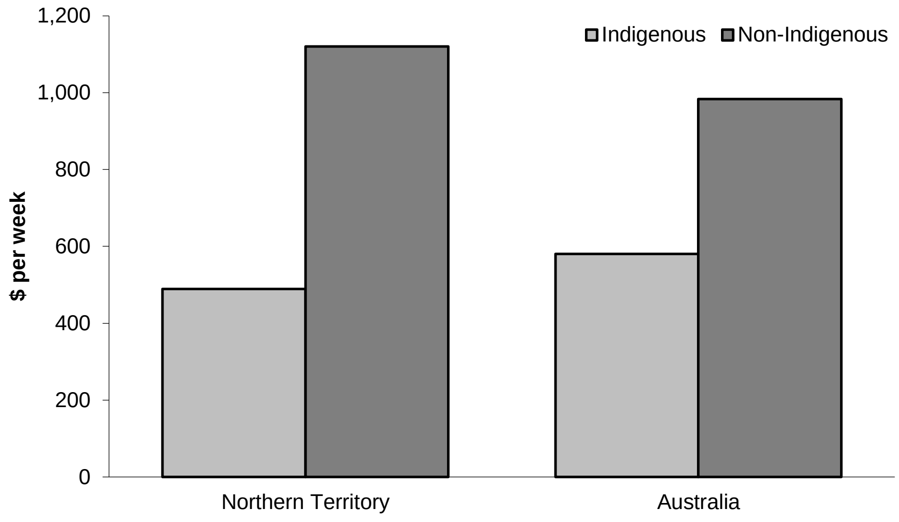
(a) Equivalised gross household income quintile boundaries for Indigenous Australians are: first (0 to $435); second ($436 to $686); third ($687 to $952); fourth ($953 to $1,380); and fifth ($1,381 or more).

(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 years and over in each equivalised gross weekly household income quintile(a)(b)(c), by Indigenous status, Northern Territory 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 years and over, Northern Territory 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 the Northern Territory, approximately 13% of Indigenous Australians aged 18 years and over owned or were purchasing their own home, 21% were private and other renters, and 64% were renters of social housing forms including state or territory housing authority and Indigenous housing organisation or community housing. In the same period in the Northern Territory, 58% of non-Indigenous Australians aged 18 years and over owned or were purchasing their home, and 34% were private and other renters (Table 2.09.1).
- A much lower proportion of Indigenous households in the Northern Territory than Australia were home owners or purchasers (21% compared to 33%), while a much higher proportion of Indigenous households in the Northern Territory than Australia were renters of Indigenous housing organisation or community housing (25% compared to 10%).

Table 2.09.1: Proportion of households and people(a), by tenure type and Indigenous status, Northern Territory and Australia, 2008

	Northern Territory		Australia	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
		People(a)		
Home owners				
Owned without a mortgage	2.0*^	9.0*^	8.7	27.3
Being purchased	11.2	48.9	20.5	37.9
Total home owners	*13.2*	*57.9*	*29.2*	*65.2*
Renters				
Private and other renter(b)	20.9^	34.1^	29.3	25.3
State/territory housing authority	24.9	n.p.	23.2	2.9
Housing co-operative or church group	n.p.	0.0	0.6^	0.3^
Indigenous Housing Organisation/ Community housing	38.6		15.9	
Total renters(c)	*84.6*	*36.9*	*69.2*	*28.5*
Other tenure types(d)	n.p.	5.2*	1.6	6.3
Total(e)	**100.0**	**100.0**	**100.0**	**100.0**
Total number(e)	**37,536**	**108,248**	**289,327**	**15,553,828**
		Households		
Home owners				
Owned without a mortgage	3.6^	7.8*^	9.9	29.3
Being purchased	17.8	48.9	22.6	36.5
Total home owners	*21.4*	*56.8*	*32.5*	*65.8*
Renters				
Private and other renter(b)	25.2^	35.2^	33.4	25.0
State/territory housing authority	24.7	n.p.	21.7	3.9
Housing co-operative or church group	n.p.	–	0.6^	0.4^
Indigenous Housing Organisation/ Community housing	25.1		9.6	
Total renters(c)	*75.3*	*39.1*	*65.5*	*29.4*
Other tenure types(d)	n.p.	4.1**	2.0	4.8
Total(e)	**100.0**	**100.0**	**100.0**	**100.0**
Total number(e)	**58,707**	**2,602,138**	**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 years 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 n.f.d.
(e) Excludes tenure type not stated.

Source: NATSISS 2008 and NHS 2007–08.

2.10 Index of disadvantage

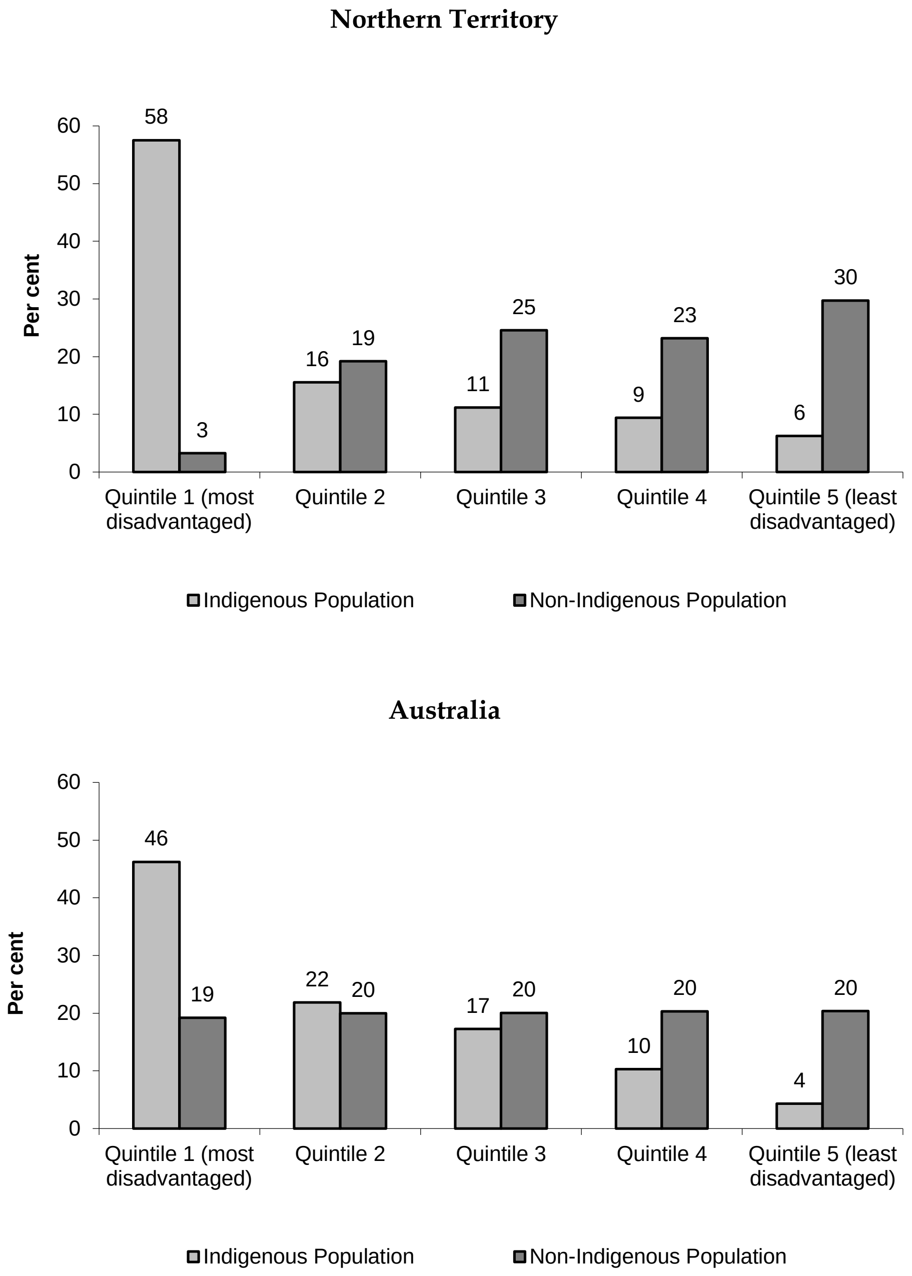
An analysis of the relative disadvantage within the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population.

The ABS has developed indexes to allow measurement of relative socioeconomic status at a small area level. These indexes are known as Socio-Economic Indexes for Areas (SEIFA). SEIFA summarise 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 SEIFA indexes are designed to areas, not to individuals. That means not all members of the population in a relatively disadvantaged area are of equal disadvantage.

SEIFA analysis can be done based on a geographic view (which mean the collection districts or CDs are split into the five quintiles based on the SEIFA of the CDs) or a population view (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 a geographic view are presented in this report.

- In 2006, in the Northern Territory, there was a greater proportion of the Indigenous population that were in the most disadvantaged quintile of socioeconomic status than the non-Indigenous population (58% compared to 3%) (Figure 2.10.1). Only 6% of the Indigenous population were in the least disadvantaged quintile compared to 30% of the non-Indigenous population.
- Compared to the total Indigenous population in Australia, the Northern Territory had a higher proportion of Indigenous Australians in the most disadvantaged quintile of socioeconomic status (58% compared to 46%) and a higher proportion of Indigenous Australians in the least disadvantaged quintile (6% compared to 4%).



Note: The population of the Northern Territory 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 of 2006 Census data.

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

2.11 Dependency ratio

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

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

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

$$\frac{\text{Percentage of population aged under 15 years}}{\text{Percentage of population aged 15–64 years}}$$

Aged dependency ratio

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

- The Indigenous population has a younger age structure than the non-Indigenous population. In 2010 in the Northern Territory, 33% of Indigenous Australians were aged less than 15 years compared with 19% of non-Indigenous people. People aged 65 years and over comprised 3% of the Indigenous population and 7% of the non-Indigenous population.
- Nationally in 2010, 35% of the Indigenous population and 19% of the non-Indigenous population were aged less than 15 years. People aged 65 years and over comprised 3% of the Indigenous population and 14% of the non-Indigenous population.
- In 2010 in the Northern Territory, the dependency ratio for Indigenous Australians was 0.58 compared to 0.35 for non-Indigenous Australians. The youth dependency ratio for Indigenous Australians in the Northern Territory was higher than for non-Indigenous Australians (0.53 compared to 0.26), whereas the aged dependency ratio was lower (0.05 for Indigenous Australians compared to 0.09 for non-Indigenous Australians) (Table 2.11.1).
- This same pattern was evident throughout Australia where the dependency ratio was 0.63 for Indigenous Australians compared to 0.48 for non-Indigenous Australians, the youth dependency ratio was 0.57 for Indigenous Australians compared to 0.27 for non-Indigenous Australians, and the aged dependency ratio was 0.05 for Indigenous Australians compared to 0.21 for non-Indigenous Australians.

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

	Northern Territory	Australia[(a)]
Indigenous		
Dependency ratio	0.58	0.63
Youth dependency ratio	0.53	0.57
Aged dependency ratio	0.05	0.05
Non-Indigenous		
Dependency ratio	0.35	0.48
Youth dependency ratio	0.26	0.27
Aged dependency ratio	0.09	0.21

(a) Includes other territories.

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

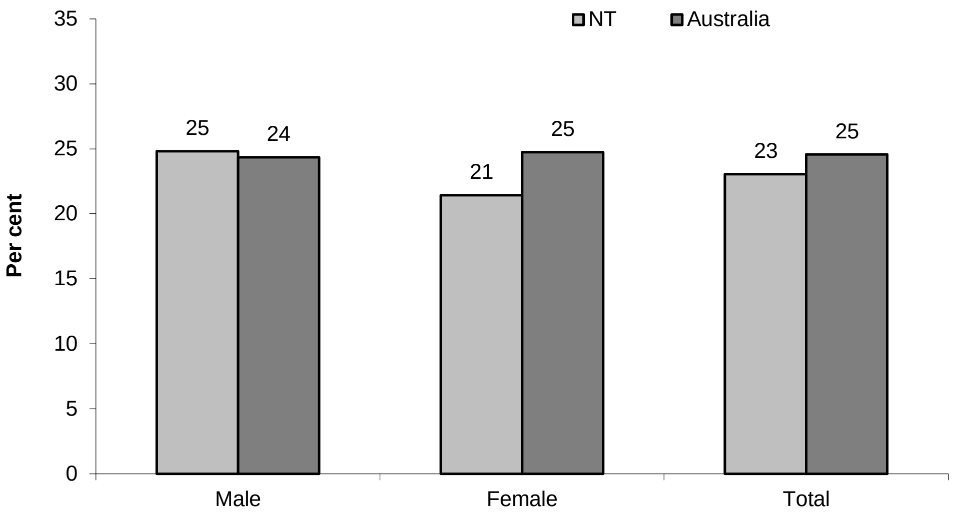
2.13 Community safety

Three parameters of community safety are considered for this measure:

1. *experience of personal injury or death as a result of violence*
2. *experience of threatened violence or a social setting in which violence is common*
3. *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, 25% of Indigenous males and 21% of Indigenous females aged 15 years and over in the Northern Territory reported being a victim of physical or threatened violence in the last 12 months (Figure 2.13.1).
- The proportion of Indigenous Australians aged 15 years and over that reported being a victim of physical or threatened violence in the last 12 months was lower in the Northern Territory than in Australia (23% compared to 25%).
- A similar proportion of Indigenous and non-Indigenous Australians aged 18 years and over in the Northern Territory reported being victims of physical or threatened violence in the last 12 months (18% and 17%). This is different to the pattern observed for total Australia, where Indigenous Australians were almost twice as likely to report being victims of physical or threatened violence in the last 12 months as non-Indigenous Australians (21% compared to 11%).



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 Australians aged 15 years and over reporting they were a victim of physical or threatened violence in last 12 months, by sex, Northern Territory and Australia, 2008

Stressors

- In 2008 in the Northern Territory, approximately 72% of Indigenous Australians aged 18 years and over or their family members and close friends experienced at least one stressor in the last 12 months. This rate compared to 79% in Australia. For Indigenous Australians aged 18 years and over in the Northern Territory, or their family members and close friends, the most common stressors experienced were death of a family member or close friend (40% in both the Northern Territory and across Australia) and alcohol/drug-related problems (22% in the Northern Territory and 24% in Australia)
- In the Northern Territory, a slightly higher percentage (18%) of Indigenous Australians aged 18 years and over felt themselves or their family members and close friends experienced overcrowding at home as a stressor than across Australia (13%).

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

	Northern Territory		Australia	
	Indig.	Non-Indig.	Indig.	Non-Indig.
	%	%	%	%
Victim of physical or threatened violence in last 12 months[a]	18.3	16.9	20.5^	10.8^
Stressors experienced by individual, family members and/or close friends in last 12 months[b]				
Mental illness	10.1^	4.4**^	17.1^	8.8^
Death of family member or close friend	40.2^	12.3*^	40.4^	19.4^
Alcohol or drug-related problems	22.1^	9.3*^	24.2^	5.7^
Abuse or violent crime	6.7	4.5**	7.6^	2.4^
Witness to violence	9.4	9.1*	9.0^	2.2^
Trouble with the police	14.0^	4.1**^	14.7^	2.6^
One or more of the above stressors	*53.1^*	*31.9^*	*59.1^*	*30.2^*
You, a family member or friend spent time in gaol	12.0	. .	12.8	. .
Overcrowding at home	17.5	. .	12.7	. .
Treated badly/discrimination	7.6	. .	10.2	. .
Total experienced stressors[c][d]	71.7^	48.7^	79.0^	49.1^
No stressors reported	28.3^	51.3^	21.0^	50.9^
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.

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

^ 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 Australians aged 15 years and over in the Northern Territory, 73% reported neighbourhood/community problems present compared to 74% across Australia.
- Alcohol and dangerous/noisy driving were most commonly reported as a neighbourhood/community problem in the Northern Territory (45% and 40%, respectively), compared to dangerous/noisy driving and theft across Australia (46% and 43%, respectively).

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

	Northern Territory	**Australia**
	%	%
Neighbourhood/community problem present		
Theft[(a)]	34.1	42.5
Problems involving youth	36.1	34.4
Prowlers/loiterers	16.9	19.1
Vandalism/graffiti/damage to property	33.2	35.3
Dangerous or noisy driving	39.7	46.1
Alcohol	44.6	41.3
Illegal drugs	31.7	36.4
Family violence	32.2	24.8
Assault	30.9	22.7
Sexual assault	12.6	11.7
Problems with your neighbours	13.6	15.4
Levels of neighbourhood conflict	16.4	14.1
Level of personal safety day or night	13.6	13.8
Total with neighbourhood/community problems	*72.7*	*74.2*
No neighbourhood/community problems reported	27.3	25.8
Total	**100.0**	**100.0**
Total number	41,459	327,101

(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 864 Indigenous and 192 non-Indigenous Australians in prison custody in the Northern Territory. Nationally there were 7,386 Indigenous and 21,554 non-Indigenous Australians in prison custody (Table 2.14.1).
- The age-standardised rate of imprisonment for Indigenous Australians in the Northern Territory was 1,700 per 100,000 which was 11 times the rate of non-Indigenous Australians in the Northern Territory (153 per 100,000).
- The age-standardised rate of imprisonments for Indigenous and non-Indigenous Australians was lower in the Northern Territory than nationally (1,700 per 100,000 and 153 per 100,000 compared to 1,891 and 136 per 100,000).
- A higher proportion of Indigenous prisoners were males than females (96% males in the Northern Territory and 92% males in Australia). This trend was also present for total prisoners.
- For the period 2000–2009 in the Northern Territory there was a significant increase in the crude imprisonment rate of Indigenous Australians, with an average yearly increase in the rate of around 98 per 100,000. The national crude imprisonment rate for Indigenous Australians also increased significantly, with an average yearly increase of around 73 per 100,000.

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

	Indigenous					
	Number					
	Males	**Females**	**People[a]**	**Crude rate[b]**	**Age- standardised rate[c]**	
NT	827	37	864	2,104.2	1,699.6	
Aust	**6,783**	**603**	**7,386**	**2,309.8**	**1,890.7**	
	Non-Indigenous					
	Number					
	Males	**Females**	**People**	**Crude rate[b]**	**Age-standardised rate[c]**	**Age-standardised rate ratio[d]**
NT	184	10	192	160.6	152.5	11.1
Aust	**20,063**	**1,493**	**21,554**	**130.9**	**135.6**	**13.9**

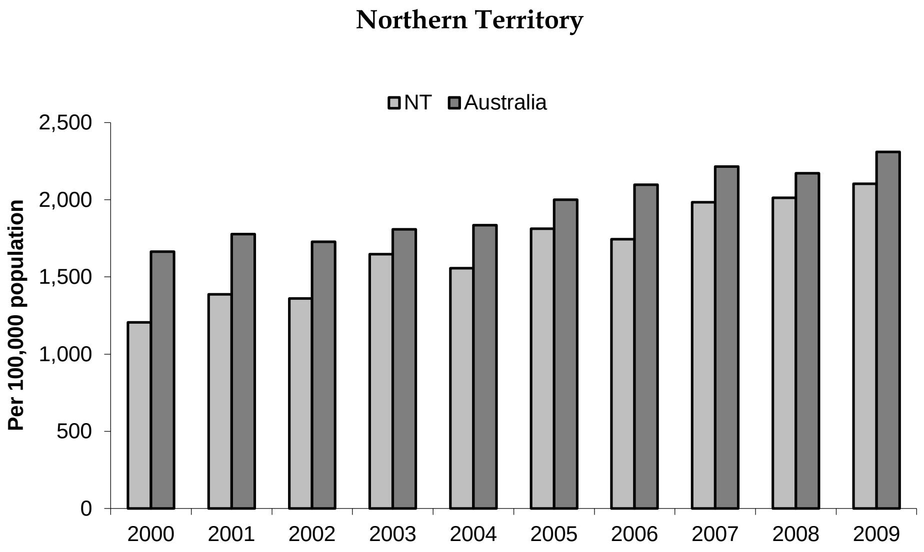
(a) Includes sex not stated.

(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.

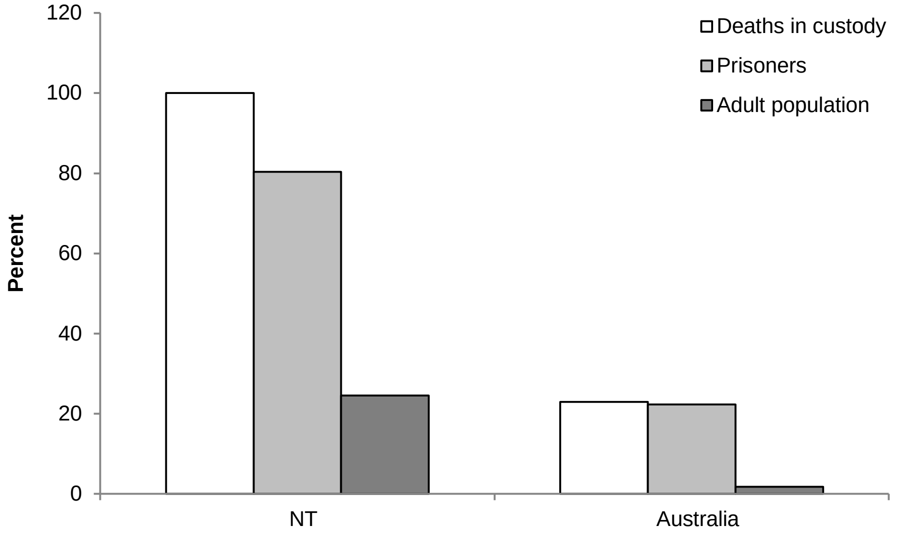


Source: Australian Bureau of Statistics Prisoners in Australia (cat. No. 4517.0).

Figure 2.14.1: Crude imprisonment rates of Indigenous Australians, Northern Territory and Australia, 2000–2009

Deaths in prison custody

- In 2004–06 in the Northern Territory, Indigenous Australians represented 100% of deaths in custody (police and prison), 80% of the prisoner population and 24% of the adult population. This compares to 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).

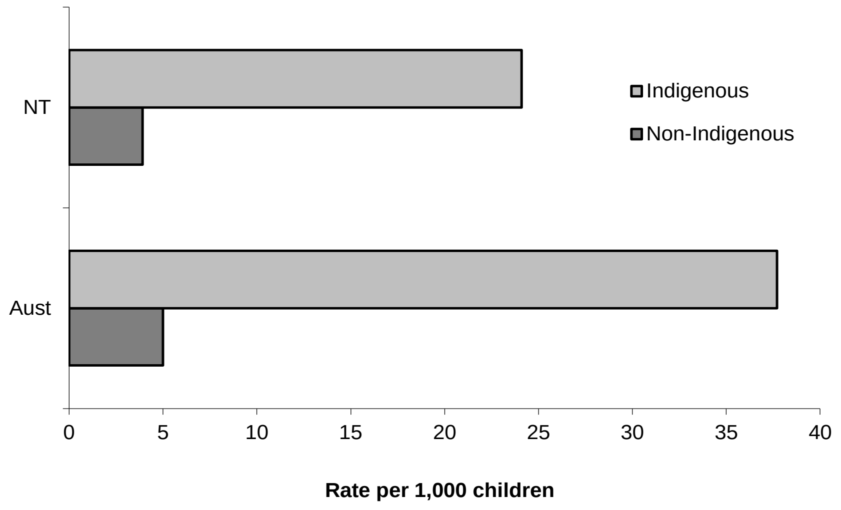
Figure 2.14.2: Aboriginal and Torres Strait Islander peoples as a proportion of deaths in custody (police and prison), prisoner population and total adult population (18 years and over), Northern Territory and Australia, 2004–06

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 the Northern Territory, Indigenous children aged 0–16 years were more likely to be the subject of substantiations than other children aged 0–16 years (24 per 1,000 compared to 4 per 1,000 children) (Figure 2.15.1).
- Substantiation rates for Indigenous and non-Indigenous children in the Northern Territory were lower than for Indigenous and non-Indigenous children in Australia.
- From 2004–05 to 2008–09, the rate of Aboriginal and Torres Strait Islander children in the Northern Territory who were subjects of substantiations increased from 14 to 24 per 1,000 (Table 2.15.1).
- In recent years the rate of other children in the Northern Territory who were subjects of substantiations was relatively steady (Table 2.15.1).
- As at 30 June 2007, 48% of Aboriginal and Torres Strait Islander children in out-of-home care in the Northern Territory were placed with relative/kin or other Indigenous caregivers (Table 2.15.2).



Source: AIHW 2010d.

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

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

	Northern Territory		Australia[(a)]	
Year	Indigenous	Other	Indigenous	Other
		Number of children		
1998–99[(b)]	n.a.	n.a.	n.a.	n.a.
1999–00	172	179	n.a.	n.a.
2000–01	153	177	n.a.	n.a.
2001–02	222	109	n.a.	n.a.
2002–03	198	113	n.a.	n.a.
2003–04	375	116	n.a.	n.a.
2004–05	319	128	n.a.	n.a.
2005–06	354	108	6,033	28,322
2006–07	395	145	7,076	26,784
2007–08	558	142	7,313	24,602
2008–09	617	145	8,135	24,343
		Rate per 1,000 children		
1998–99	n.a.	n.a.	n.a.	n.a.
1999–00	7.6	5.3	n.a.	n.a.
2000–01	6.7	5.2	n.a.	n.a.
2001–02	9.7	3.2	n.a.	n.a.
2002–03	8.7	1.6	n.a.	n.a.
2003–04	16.2	3.5	n.a.	n.a.
2004–05	13.7	3.9	n.a.	n.a.
2005–06	15.2	3.2	29.4	6.5
2006–07	16.8	4.2	34.3	6.1
2007–08	23.7	4.0	35.3	5.5
2008–09	24.1	3.9[(c)]	37.7	5.0[(c)]

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

(b) Data for 1998–99 were not available from the Northern Territory.

(c) 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, Northern Territory, at 30 June 2009

Relationship	Northern Territory[(a)]
	Per cent
Indigenous relative/kin	32.8
Other Indigenous caregiver	14.7
Other relative/kin	—
Indigenous residential care	—
Total placed with relative/kin, other Indigenous caregivers or Indigenous residential care	***47.5***
Other caregiver	52.5
Other residential care	—
Total not placed with relative/kin, other Indigenous caregivers or Indigenous residential care	*52.5*
Total	**100.0**

(a) In the Northern Territory, children placed with family members have all been included in the ‘Indigenous relative/kin’ 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 2010d.

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 the Northern Territory, 50% of Indigenous households and 89% of other households reported having at least one vehicle. Nationally 72% of Indigenous households and 87% of other households reported having at least one registered vehicle.
- The ratio of people to vehicles was higher for Indigenous households, with 3.5 people per vehicle in the Northern Territory, compared to 1.1 people per vehicle for other households. Nationally the ratio was 1.59 for Indigenous Australians and 1.19 for other people.

Table 2.16.1: Households with at least one registered vehicle, by Indigenous status, Northern Territory 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						
Northern Territory	3.50	1.10	1.37	49.8	89.1	81.2
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.

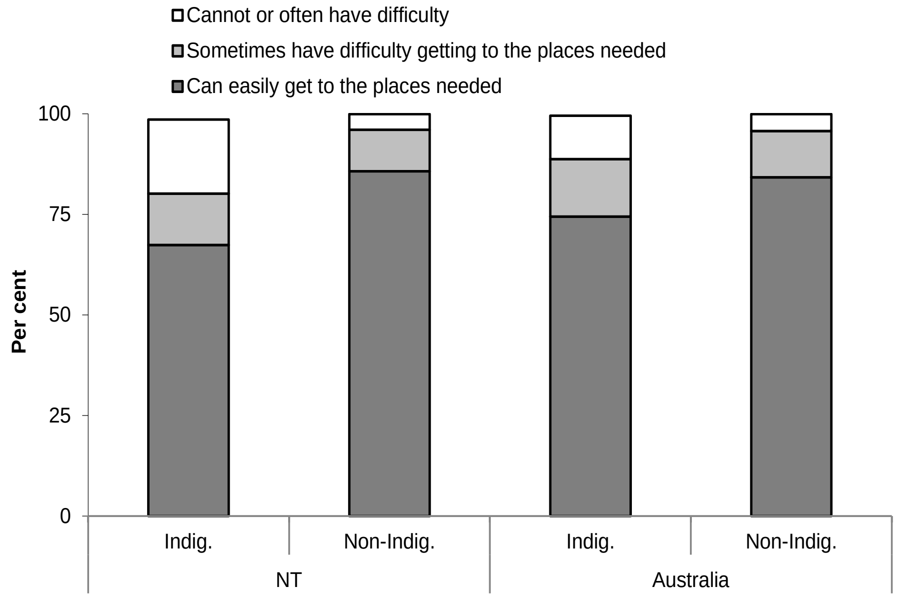
(d) Includes households where Indigenous status was 'not stated'.

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

Source: ABS and AIHW analysis of 2006 Census data.

Transport access, difficulty and use

- Indigenous Australians in the Northern Territory and Australia were more likely to report having difficulty getting to places when needed than non-Indigenous Australians. In 2008, 31% of Indigenous Australians living in the Northern Territory reported that they sometimes or often have difficulty, or cannot get to places when needed compared to 14% of non-Indigenous Australians. In Australia, 25% of Indigenous Australians reported that they sometimes or often have difficulty, or cannot get to places when needed compared to 16% of non-Indigenous Australians (Figure 2.16.1).



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

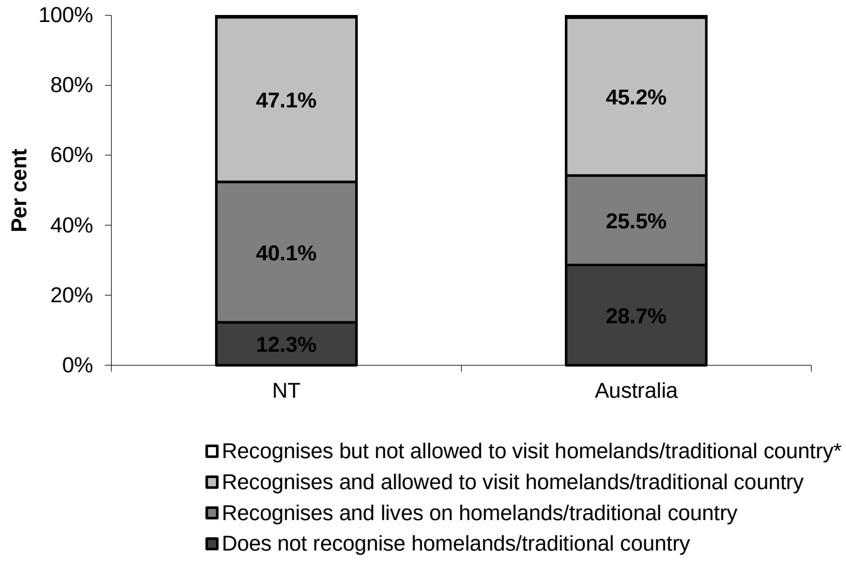
Figure 2.16.1: Difficulty with transport, by Indigenous status, Northern Territory and Australia, people aged 18 years and over, 2008

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, nearly half (47%) of Indigenous Australians in the Northern Territory recognised and were allowed to visit their homelands/traditional country. Throughout Australia 45% of Indigenous Australians recognised and were allowed to visit their homelands (Figure 2.17.1).
- The proportion of Indigenous Australians who lived on their homeland was 40% in the Northern Territory and 26% in Australia.
- Approximately 12% of Indigenous Australians in the Northern Territory reported they did not recognise their homelands and 0.6% reported they were not allowed to visit their homelands. This compared to 29% and 0.6% for Indigenous Australians in Australia.
- In the Northern Territory in 2008, the proportion of Indigenous Australians who reported excellent/very good/good health was slightly higher for those who recognised their homelands/traditional country than those that did not (83% and 79%) (Figure 2.17.2).
- Indigenous Australians in the Northern Territory who recognised their homelands/traditional country were similarly likely to report presence of neighbourhood/community problems than Indigenous Australians who did not recognise their homelands/traditional country (71% and 72%, respectively).

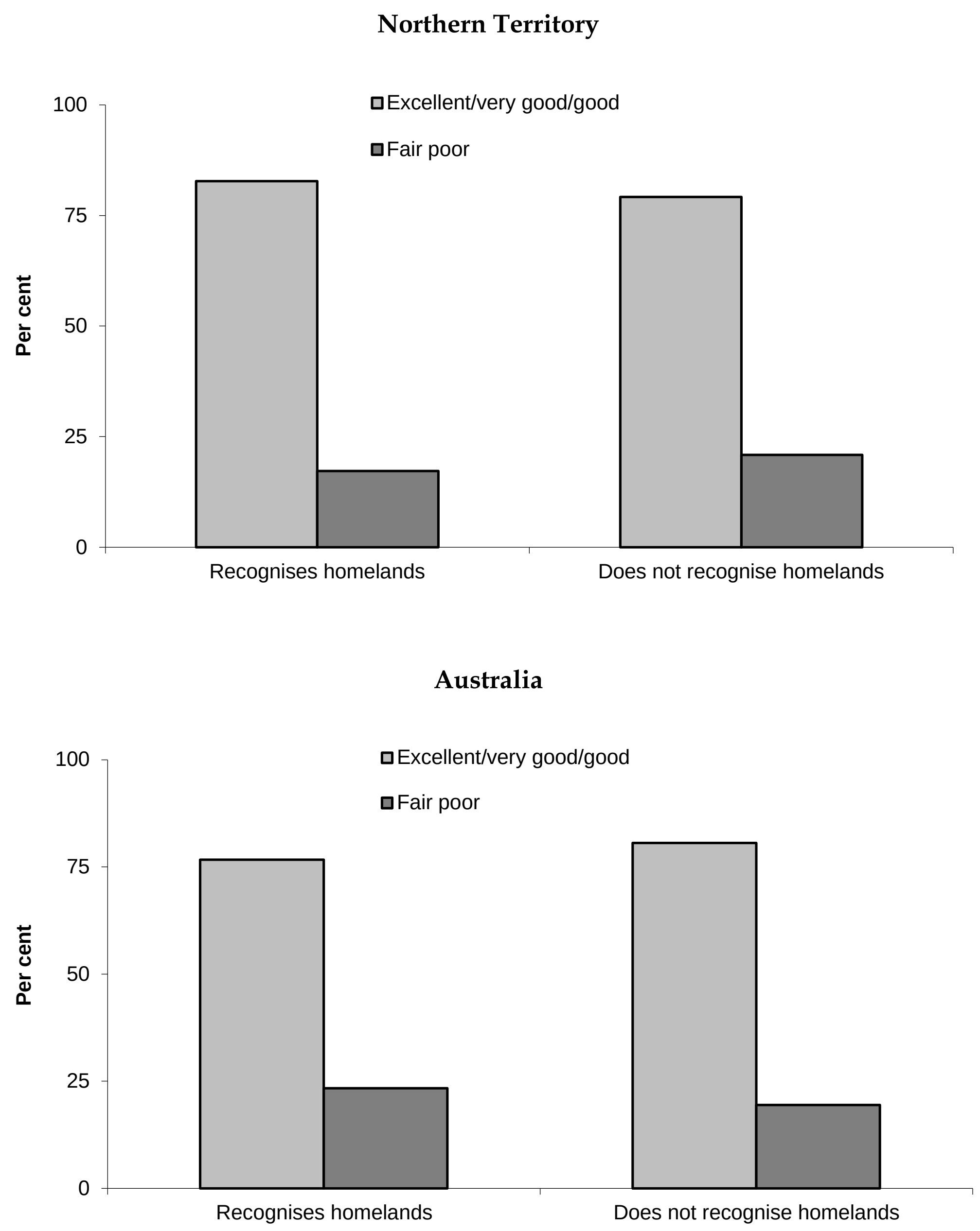


* The proportion of Indigenous Australians aged 15 years and over who recognise but are not allowed to visit their homeland/traditional country was 0.6% for both NT and Australia.

Note: Proportions exclude not stated responses.

Source: AIHW analyses of NATSISS 2008.

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



Northern Territory

Australia

Source: AIHW analyses of NATSISS 2008.

Figure 2.17.2: Self-assessed health status by whether Indigenous people recognised/did not recognise homelands/traditional country, Northern Territory and Australia, 2008

2.18 Tobacco use

The proportion of Indigenous Australians who are current regular smokers

Smoking status by age group and sex

- In 2008 in the Northern Territory, approximately 60% of Indigenous males and 50% of Indigenous females aged 18 years and over were current smokers. These proportions were apparently higher than in the total population of Northern Territory, where 26% of males and 28% of females aged 18 and over were current smokers (Table 2.18.1).
- A higher proportion of Indigenous adults in the Northern Territory (55%) were current smokers than in Australia (50%).
- In the Northern Territory, Indigenous adults aged 25–34 were most likely to be current smokers (62%), followed by those aged 18–24 and 35–44 (60% and 57% respectively). Among the total population in the Northern Territory, those aged 25–34 years were also the most likely to be current smoker (44%), followed by those aged 45–54 years (38%). (Table 2.18.2).

Table 2.18.1: Proportion of people aged 18 years and over reporting they are a current smoker, by sex and Indigenous status, Northern Territory and Australia, 2008

			Northern Territory	Australia
Males	Indigenous	%	60.0	52.6
	All	%	25.7*	22.9
Females	Indigenous	%	50.2	47.4
	All	%	28.4*	18.7
People	Indigenous	%	54.9	49.8
	All	%	27.0	20.8

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

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

Table 2.18.2: Proportion of people aged 18 years and over reporting they are a current smoker, by sex and Indigenous status, Northern Territory and Australia, 2008

			Northern Territory	Australia
Indigenous Australians	18–24	%	60.3	53.0
	25–34	%	62.0	55.8
	35–44	%	57.0	53.1
	45–54	%	47.7	48.0
	55+	%	34.1	32.2
All Australians	18–24	%	35.3*	23.1
	25–34	%	43.7	27.6
	35–44	%	20.9*	25.1
	45–54	%	38.0	23.0
	55+	%	2.4**	11.9

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

** Estimate has a relative standard error above 50% and is considered to unreliable for general use.

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

2.19 Tobacco smoking during pregnancy

The proportion of Indigenous mothers who smoked during pregnancy

- In the Northern Territory in 2007, Aboriginal and Torres Strait Islander mothers smoked during pregnancy at 2.8 times the rate of non-Indigenous mothers. This was less than the national ratio (excluding Victoria) of 3.4 (Table 2.19.1).
- In the Northern Territory in 2007, 44% of Indigenous mothers reported smoking during pregnancy compared to 16% of non-Indigenous mothers. Nationally (excluding Victoria) 51% of Indigenous mothers and 15% of non-Indigenous mothers smoked during pregnancy (Table 2.19.1).

Table 2.19.1: Tobacco smoking status of mothers during pregnancy, by Indigenous status, Northern Territory and NSW, Qld, WA, SA, Tas, ACT & NT combined, 2007[(a)(b)]

Smoking status	NT[(c)]	Total
	Number	
Indigenous		
Smoked	667	5,273
Did not smoke	620	4,682
Not stated	197	234
Total	**1,484**	**10,189**
Non-Indigenous		
Smoked	358	30,821
Did not smoke	1,809	176,004
Not stated	102	1,044
Total	**2,269**	**207,869**
	Proportion[(d)]	
Indigenous		
Smoked	43.9	50.5
Did not smoke	43.3	47.4
Total[(e)]	**100.0**	**100.0**
Non-Indigenous		
Smoked	15.5	14.8
Did not smoke	80.0	84.7
Total[(e)]	**100.0**	**100.0**
	Ratio[(f)]	
Smoked	2.8	3.4
Did not smoke	0.5	0.6

(a) Excludes births where the mother's Indigenous status was not stated.

(b) State-level data are based on place where birth occurred, not place of usual residence. Cross-border issues need to be considered here, for example, a high proportion of births in ACT hospitals are for mothers resident in NSW.

(c) For NT, smoking status was recorded at the first antenatal visit.

(d) Proportions are directly age-standardised using the Australian female population aged 15–44 years who gave birth in 2007.

(e) Includes mothers for whom smoking status was not stated.

(f) Rate ratio is equal to the rate for Indigenous mothers divided by the rate for non-Indigenous mothers.

Notes

1. Data not available for Victoria.
2. Because of differences in definitions and methods used for data collection, care must be taken when comparing across jurisdictions. Mother's tobacco smoking status during pregnancy is self-reported.

Source: AIHW analyses of NPSU National Perinatal Data Collection.

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

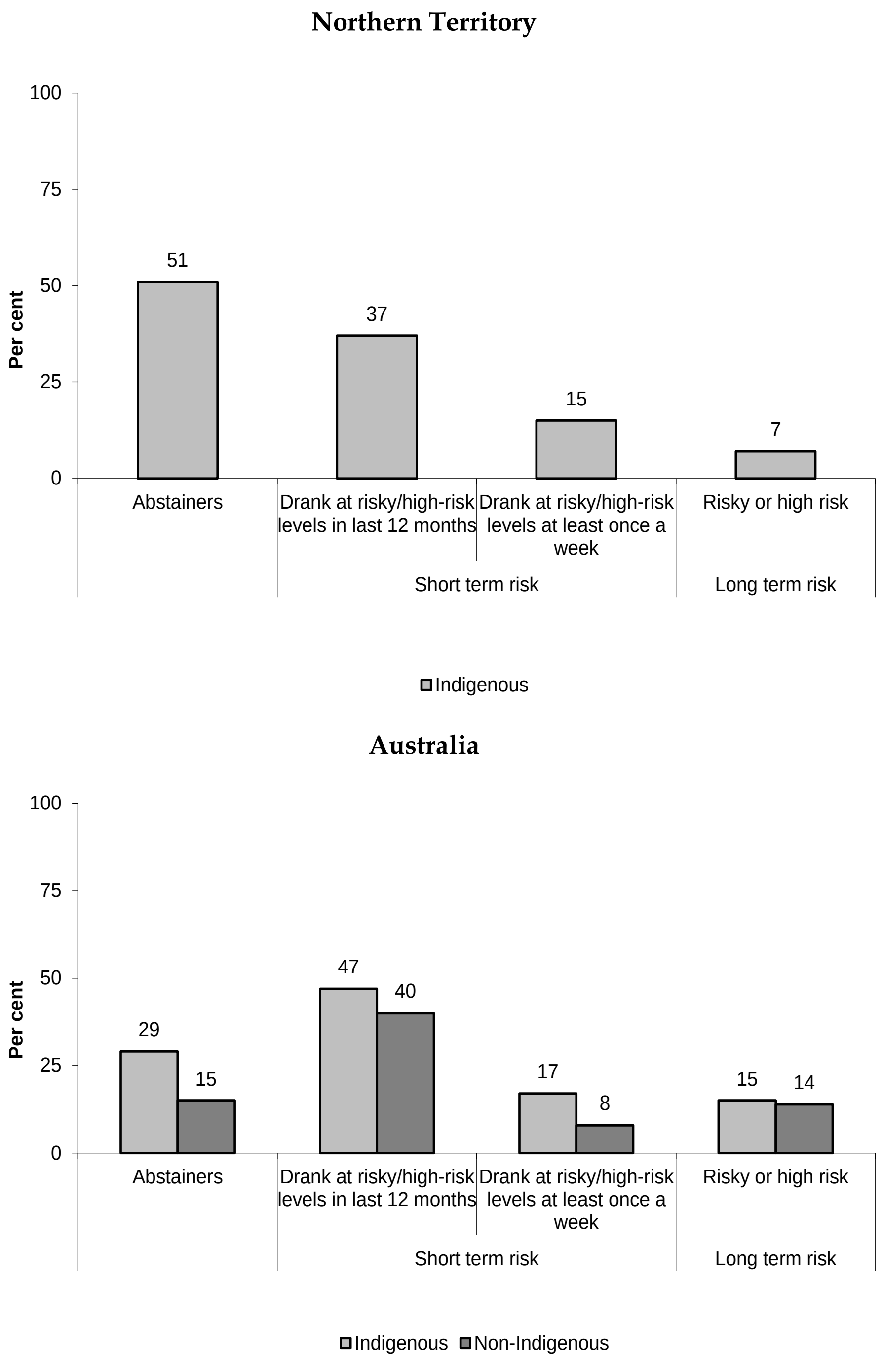
The consumption of alcohol at risky and high-risk levels was defined as alcohol consumption which exceeds the National Health and Medical Research Council (NHMRC) guidelines for low-risk drinking in the short or long term. These guidelines are outlined below:

Risky/high-risk drinking

- Short-term risky drinking is consumption in excess of six but less than 11 standard drinks on any 1 day for males, and in excess of four but less than seven standard drinks for females.
- Short-term high-risk drinking is consumption of 11 or more standard drinks on any 1 day for males, and in excess of seven standard drinks for females.
- Long-term risky drinking is average consumption in excess of four but less than six standard drinks per day (amounting to 29 but less than 42 per week) for males, and in excess of two but less than five standard drinks per day (amounting to 15 but less 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, over half (51%) of Indigenous adults in the Northern Territory reported having abstained from alcohol consumption in the previous 12 months. This compared to 29% of Indigenous adults nationally (Figure 2.20.1).
- In the Northern Territory, approximately 37% of Indigenous adults drank at short-term risky/high-risk levels in the previous 12 months, and 15% reported drinking at short-term risky/high-risk levels at least once a week.
- Approximately 7% of Indigenous adults in the Northern Territory reported drinking at long-term risky/high risk levels in the previous 12 months compared to 15% of Indigenous adults nationally.
- The proportion of Indigenous Australians who drank at short-term risky/high-risk levels at least once a week was lower in the Northern Territory (16%) than in Australia (19%) (Figure 2.20.2).

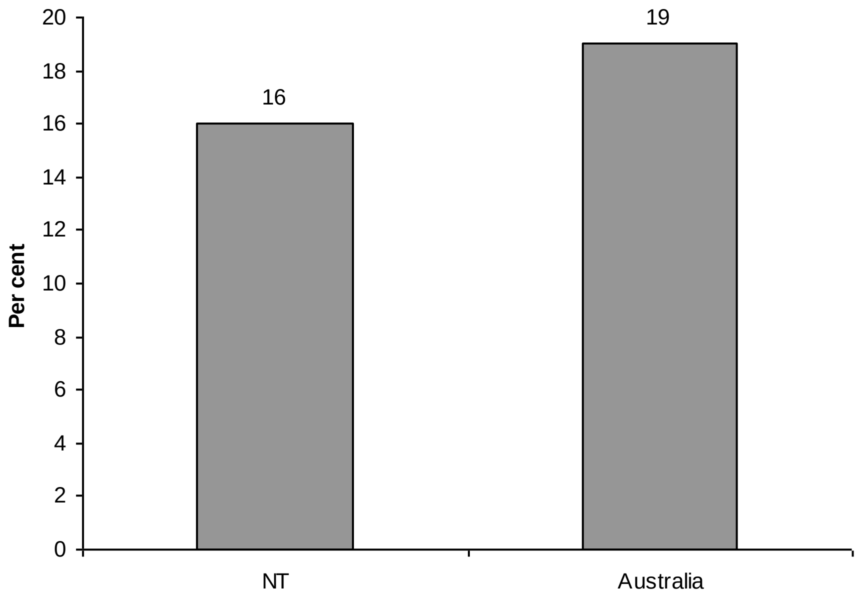


Notes

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.
4. Non-Indigenous data not available for the Northern Territory.

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 years and over, age-standardised, Northern Territory 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, Northern Territory 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 the Northern Territory, a higher proportion of Indigenous males aged 18 years and over reported illicit substance use in the last 12 months (26%) than Indigenous females (11%) of the same age. Across Australia, Indigenous males (30%) were also more likely to report substance use in the last 12 months than Indigenous females (18%).
- In the Northern Territory, approximately 43% of Indigenous males and 22% of Indigenous females aged 18 years and over reported that they had ever used substances. These proportions were lower than those reported for Indigenous males and females in Australia (54% and 38% respectively).
- Marijuana, hashish and cannabis resin were the most commonly reported type of substance used by Indigenous adults. In 2008, 13% of Indigenous adults in the Northern Territory used marijuana, hashish or cannabis resin, lower than the rate reported for Australia (18%) (Table 2.21.1).

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

	Northern Territory			Australia		
	Males	**Females**	**People**	**Males**	**Females**	**People**
	%	%	%	%	%	%
Used substances in last 12 months						
Marijuana, hashish or cannabis resin	21.0	6.0	13.2	24.3	11.6	17.6
Amphetamines or speed	1.4	0.4	0.9	6.1	2.8	4.3
Ecstasy or designer drugs	1.7	0.9	1.3	4.8	2.1	3.4
LSD or synthetic hallucinogens	0.2	—	0.1	1.5	0.5	0.9
Pain killers or analgesics for non-medical purposes	2.7	2.9	2.8	5.3	4.5	4.8
Naturally occurring hallucinogens	0.1	0.1	0.1	1.1	0.2	0.6
Cocaine	—	0.1	0.0	1.2	0.5	0.8
Other analgesics	—	0.1	0.0	0.6	0.2	0.4
Volatile solvents	0.6	—	0.3	0.6	0.2	0.4
Tranquillisers or sleeping pills for non-medical purposes	0.7	0.7	0.7	1.8	1.2	1.5
Kava	3.8	0.8	2.2	1.8	0.7	1.2
Total used substance in last 12 months	**26.3**	**10.5**	**18.1**	**29.8**	**17.6**	**23.3**
Used substance but not in last 12 months	16.4	11.2	13.7	24.4	19.8	22.0
Total used substance(a)	**42.7**	**22.3**	**32.1**	**54.3**	**37.5**	**45.3**
Never used substance	57.2	77.2	67.6	45.4	61.7	54.1
Not stated(b)	0.1	0.5	0.3	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'.

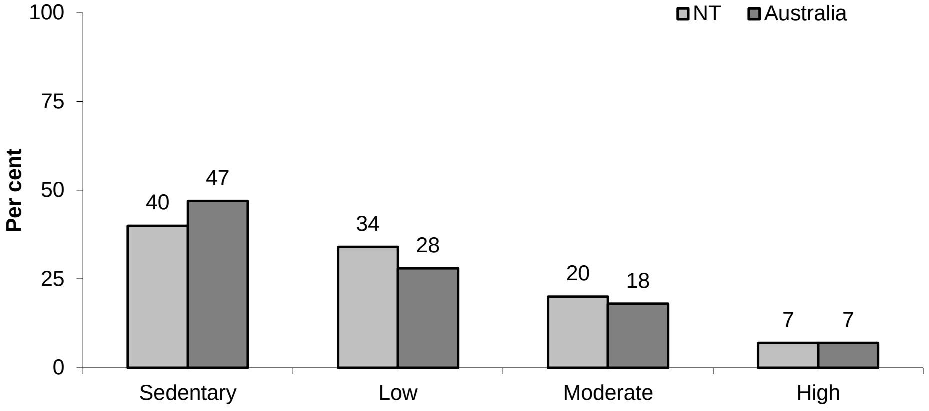
Source: AIHW analyses of NATSISS 2008.

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 the Northern Territory, approximately 40% of Indigenous Australians aged 15 years and over in *Non-remote* areas reported their exercise level as sedentary in the two weeks prior to survey, 34% as low, 20% as moderate, and 7% as high. This compared to 47%, 28%, 18% and 7% for these activity levels respectively for Indigenous Australians in Australia.



Note: The National Health Survey sample does not support a non-Indigenous Northern Territory estimate due to small sample size.

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

Figure 2.22.1: Indigenous Australians aged 15 years and over, level of physical activity, *Non-remote* areas, Northern Territory 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

- In 2004–05 in the Northern Territory, 83% of Indigenous and 98% of non-Indigenous Australians aged 12 years and over reported eating vegetables daily, compared to 95% of Indigenous and 99% of non-Indigenous Australians aged 12 years and over in Australia.
- Over the same period in the Northern Territory, 81% of Indigenous and 97% of non-Indigenous Australians aged 12 years and over reported eating fruit daily. Across Australia, 86% of Indigenous and 93% of non-Indigenous children aged 12 years and over reported eating fruit daily.
- Approximately 94% of Indigenous Australians aged 12 years and over in the Northern Territory and 96% of Indigenous Australians of the same age in Australia reported drinking milk. The most common type of milk usually consumed was whole milk. In comparison, a lower proportion of non-Indigenous Australians reported drinking milk (90% in the Northern Territory and 95% in Australia).
- The proportion of Indigenous Australians reporting usually adding salt after cooking was 48% in the Northern Territory and 46% in Australia (Table 2.23.1).

Additional information on anaemia among Indigenous children

The Northern Territory Government's Healthy Under Five Kids (HU5K) program, previously named as Growth Assessment and Action (GAA), aims to improve the growth and nutritional status of children 0–5 years living in *Remote* areas. This involves routinely collected measurements of weight, height/length and haemoglobin from which the indicators height for age, weight for age, and weight for height are calculated according to the World Health Organization growth standards (WHO 2006).

Anaemia by age and sex

- Among Indigenous children aged 0–4 years who were tested for anaemia during the period 2008–2010, those aged 0 and 1 year were most likely to be diagnosed with anaemia.
- The rates of anaemia decreased with age for boys from ages 0 to 4 and for girls from ages 1 to 4 years (Figure 2.23.1).

Time trend of anaemia

- Over the period 2004 to 2010 in the Northern Territory, the age-standardised rate of anaemia among Indigenous children aged 0–4 years decreased significantly. The fitted trend implies an average yearly decrease of 1.2 cases per 100 children, equivalent to a 25% decline over the whole period (Table 2.23.2).

Table 2.23.1: Selected dietary habits, by sex and Indigenous status, people aged 12 years and over, Northern Territory and Australia, 2004–05

Dietary behaviours	Northern Territory		Australia	
	Indig.	Non-Indig.	Indig.	Non-Indig.
	%	%	%	%
Vegetable intake				
Eats vegetables daily	83	98	95	99
Does not eat vegetables daily	17	2	5	1
Total[(a)]	*100*	*100*	*100*	*100*
Fruit intake				
Eats fruit daily	81	97	86	93
Does not eat fruit daily	19	3	14	7
Total[(a)]	*100*	*100*	*100*	*100*
Usual type of milk consumed				
Whole	86	54	79	45
Low/reduced fat	4	23	11	31
Skim	3	10	5	13
Total drinks milk[(b)]	*94*	*90*	*96*	95
Does not drink milk	6	10	4	5
Total[(c)]	*100*	*100*	*100*	*100*
Salt added after cooking				
Never/rarely	19	. .	30	. .
Sometimes	32	. .	25	. .
Usually	48	. .	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.

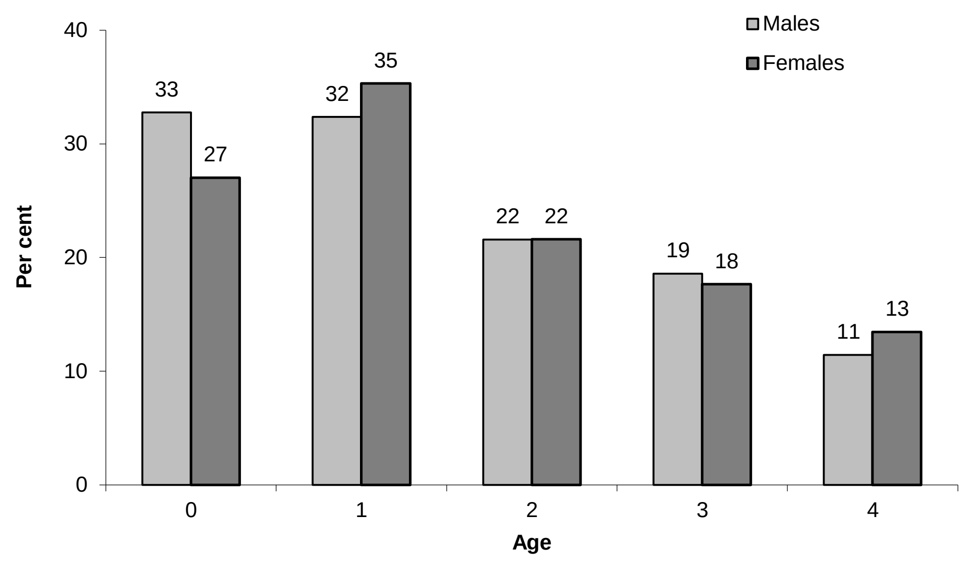
(d) Includes ‘frequency salt is added after cooking’ not known.

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

Hospitalisation for nutrition-related conditions among Indigenous children in the Northern Territory

Over the period 2000–01 to 2009–10, among Indigenous children aged 0–15 years in the Northern Territory:

- there was a significant decrease in the hospitalisation rate for nutritional anaemia. The fitted trend implies an average yearly decrease of 2.2 hospitalisations per 1,000 population. This is equivalent to a 61% change over the period.
- there was also a significant decrease in the hospitalisation rate for malnutrition. The fitted trend implies an average yearly decrease of 0.7 hospitalisations per 1,000 population, which is equivalent to a 40% change over the period (Table 2.23.3).



Source: AIHW analysis of HU5K/GAA data collection.

Figure 2.23.1: Percentage of Indigenous children aged 0–4 years diagnosed with anaemia, by age and sex, Northern Territory, 2008–2010

Table 2.23.2: Number and age-standardised rate of Indigenous children aged 0–4 years diagnosed with anaemia, by sex, Northern Territory, 2004–2010

	2004	2005	2006	2007	2008	2009	2010	Annual change[(a)]	% change over period[(b)]
Total number of children who were diagnosed with anaemia									
Males	433	374	288	312	315	308	278	n.a.	n.a.
Females	377	330	294	268	322	278	274	n.a.	n.a.
People	810	704	582	580	637	586	552	n.a.	n.a.
Total number of children tested for anaemia									
Males	1,550	1,313	1,226	1,240	1,334	1,371	1,301	n.a.	n.a.
Females	1,428	1,236	1,161	1,182	1,313	1,276	1,244	n.a.	n.a.
People	2,978	2,549	2,387	2,422	2,647	2,647	2,545	n.a.	n.a.
Age-standardised rate per 100 population[(c)]									
Males	29.8	30.7	25.8	27.7	25.3	24.1	22.2	–1.3*	–26%
Females	27.7	28.5	27.2	24.1	25.3	22.1	22.5	–1.1*	–24%
People	28.8	29.6	26.5	25.9	25.3	23.2	22.3	–1.2*	–25%

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 2004–2010.

(a) Average annual change in rates determined using linear regression analysis.

(b) Per cent change between 2004 and 2010 based on the average annual change over the period.

(c) Directly-age-standardised by 1 year age groups using the 2001 Indigenous children population in the Northern Territory.

Source: AIHW analysis of HU5K/GAA data collection.

Table 2.23.3: Select nutrition related age-standardised hospitalisation rates[(a)] of Indigenous children aged 0–15 years, any diagnosis, Northern Territory, 2000–01 to 2009–2010

	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08	2008–09	2009–10	Annual change(b)	% change over period(c)
Nutritional anaemia	32.1	33.2	32.8	34.1	27.3	23.7	21.6	16.6	15.8	19.1	–2.2*	–61.3
Malnutrition	16.5	15.4	17.2	16.8	11.8	10.0	10.9	10.5	12.6	11.1	–0.7*	–40.0

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 2000–01 to 2009–10.

(a) Directly-age-standardised by 1 year age groups using the 2006 Indigenous children population in the Northern Territory.

(b) Average annual change in rates determined using linear regression analysis.

(c) Per cent change between 2000–01 and 2009–10 based on the average annual change over the period.

Source: AIHW analysis of NHMD.

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 the Northern Territory, approximately 88% of Indigenous infants aged 0–3 years had ever been breastfed compared to 77% of Indigenous infants of the same age in Australia; approximately 51% of Indigenous infants aged 0–3 years in the Northern Territory were currently being breastfed compared to 21% of Indigenous infants of the same age in Australia; and the median age at which Indigenous children stopped being completely breastfed was 39 weeks in the Northern Territory, compared to 17 weeks in Australia (Table 2.24.1).

Table 2.24.1: Breastfeeding status, Indigenous infants aged 0–3 years, Northern Territory and Australia, 2008

Breastfeeding measure	Northern Territory	Australia[(a)]
	Proportion (%)	
Child breastfed		
Currently breastfeeding	51.0	20.7
Not currently breastfeeding		
Age child stopped being completely breastfed		
Less than 6 months	13.1	33.7
Between 6 and 12 months	5.6*	10.4
12 months or older	15.8	11.6
Total[(a)]	36.9	56.6
Ever breastfed[(b)]	88.2	77.3
Never breastfed	11.8*	22.7
Total[(c)]	**100.0**	**100.0**
Total people	**5,608**	**52,648**
Median age at which child stopped being completely breastfed (weeks)[(d)]	39	17
Mean age at which child stopped being completely breastfed (weeks)	45	27

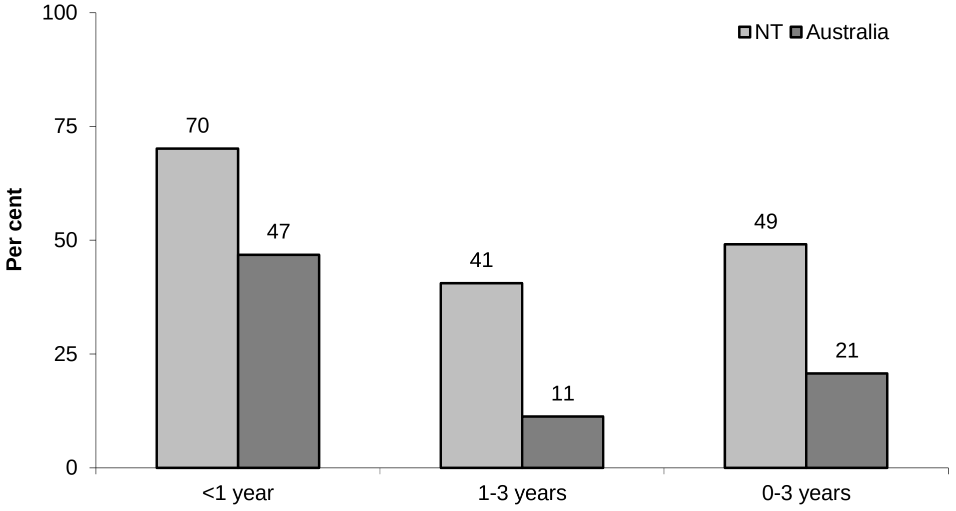
* Estimate has a relative standard error between 25% and 50% and should be used with caution.

(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

- Indigenous infants in the Northern Territory were more likely than Indigenous infants nationally to be currently breastfeeding when aged less than 1 year or 1–3 years. (Figure 2.24.1).



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 years currently breastfeeding, by age, Northern Territory and Australia, 2008

Age at which first given solid food

- In 2008, among Indigenous infants aged 0–3 years in the Northern Territory, 23% were first regularly given solid food when they were between 3 and 6 months old, and 40% were first regularly given solid food when they were between 6 and 9 months old. The pattern was different among Indigenous infants of the same age across Australia (43% and 30%, respectively).
- A similar proportion of Indigenous infants aged 0–3 years in the Northern Territory and across Australia were given solid food regularly (88% and 91%, respectively) (Table 2.24.2).

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

	Northern Territory	Australia
Less than 3 months	3.2*	4.7
3 to <6 months	23.2	43.1
6 to <9 months	39.8	30.1
9 months or more	17.8	8.1
Age not known	6.7	4.9
Total given solid food[(a)]	87.5	90.9
Solid food not given	9.3*	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.

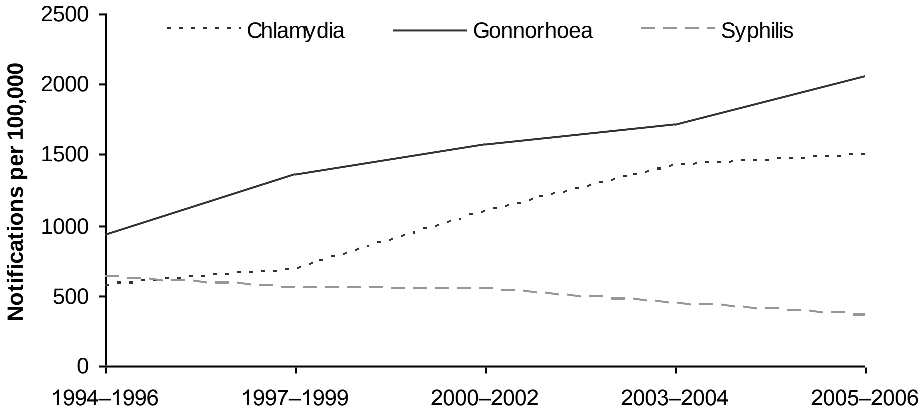
2.25 Unsafe sexual practices

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

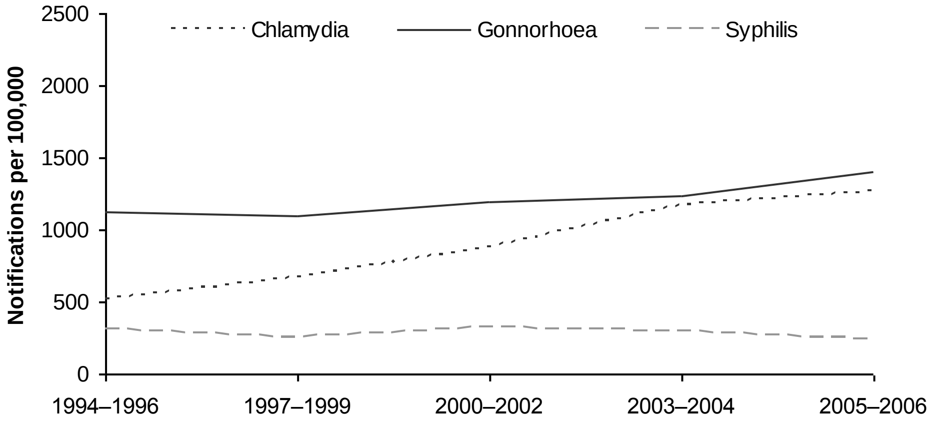
Sexually transmitted infection (STI) notifications

- In 2005–06 in the Northern Territory, there were 452 notifications of syphilis, 2,277 notifications of chlamydia and 3,077 notifications of gonorrhoea among Indigenous Australians.
- During the period 1994–96 to 2005–06 in the Northern Territory, there were significant increases in notification rates for Indigenous Australians for chlamydia and gonorrhoea, while notification rates for syphilis decreased significantly. Notification rates increased by an average yearly amount of around 98 per 100,000 for both chlamydia and gonorrhoea, and declined by around 23 per 100,000 for syphilis (Figure 2.25.1).
- During the period 1994–96 to 2005–06 in Western Australia, South Australia and the Northern Territory combined, there were also significant increases in the notification rates for Indigenous Australians for chlamydia and gonorrhoea.

Northern Territory



WA, SA & NT



Source: AIHW analyses of NNDSS.

Figure 2.25.1: Notification rates per 100,000 for chlamydia, syphilis and gonorrhoea for Indigenous Australians, Northern Territory and WA, SA & NT combined, 1994–96 to 2005–06

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 year 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 1,045 women in the Northern Territory who gave birth aged less than 20 years who identified as Aboriginal or Torres Strait Islander. This represented 25% of all Indigenous mothers at a rate of 65 per 1,000 women aged 12 to 20 years. In comparison, only 5% of all non-Indigenous mothers were aged less than 20 years at a rate of 15 per 1,000 women.
- The rate of Indigenous women aged less than 20 years who gave birth was much higher in the Northern Territory than the national rate (65 compared to 47 per 1,000 women).

Table 2.25.1: Women aged less than 20 years who gave birth, by Indigenous status, Northern Territory 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
NT	1,045	319	25.1	4.8	65.4	15.2	4.3
Aust[(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 years. 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 NPSU National Perinatal Data Collection.

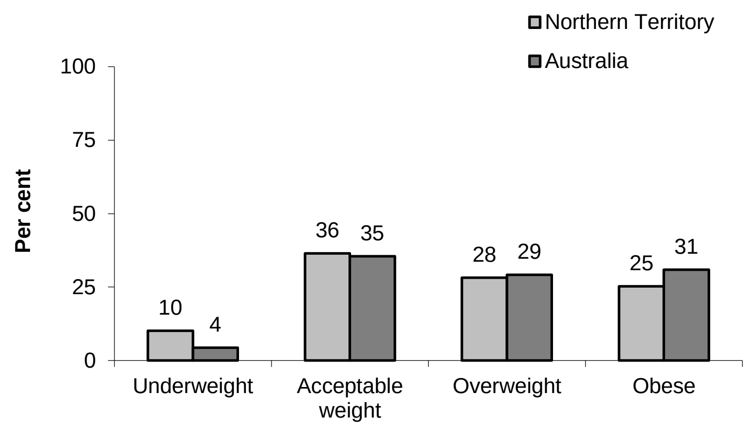
2.26 Prevalence of overweight and obesity

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 in assessing overweight and obesity. 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

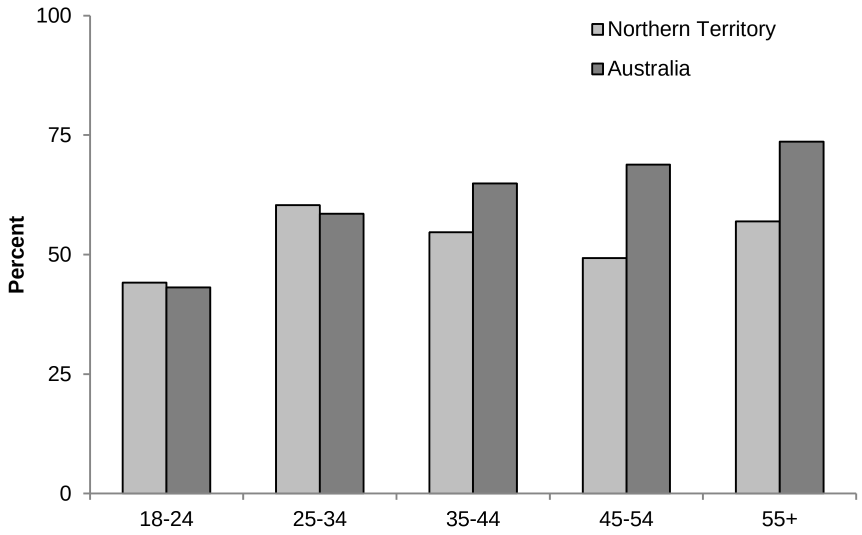
- In 2004–05 in the Northern Territory, approximately 10% of Indigenous adults with a known body mass index were underweight, 36% were of acceptable weight, 28% were overweight and 25% were obese. In comparison, 4% of Indigenous adults with known body mass index across Australia were underweight, 35% were of acceptable weight, 29% were overweight and 31% were classified as obese (Figure 2.26.1).
- Indigenous adults in the Northern Territory aged 25–34 years were most likely to be overweight or obese (60%) while Indigenous adults in Australia aged 55 years and over were most likely to be overweight or obese (74%) (Figure 2.26.2).



Note: Data for non-Indigenous Australians is not presented due to the small sample size of non-Indigenous Australians in the Northern Territory in the 2004–05 National Health Survey.

Source: AIHW analyses of NATSIHS 2004–05.

Figure 2.26.1: Proportion of Indigenous adults who are underweight, normal weight, overweight and obese, by Indigenous status, Northern Territory and Australia, 2004–05



Source: AIHW analyses of NATSIHS 2004–05.

Figure 2.26.2: Proportion of Indigenous adults who were overweight and obese, by age group, Northern Territory and Australia, 2004–05

Additional information on growth measures

The HU5K/GAA program measures underweight, wasting and stunting among children based on WHO 2006 standards. The three measures are defined as:

Underweight

A child is deemed as underweight if their weight for age is two standard deviations below the mean.

Wasting

A child is deemed as wasted if their weight for height is two standard deviations below the mean.

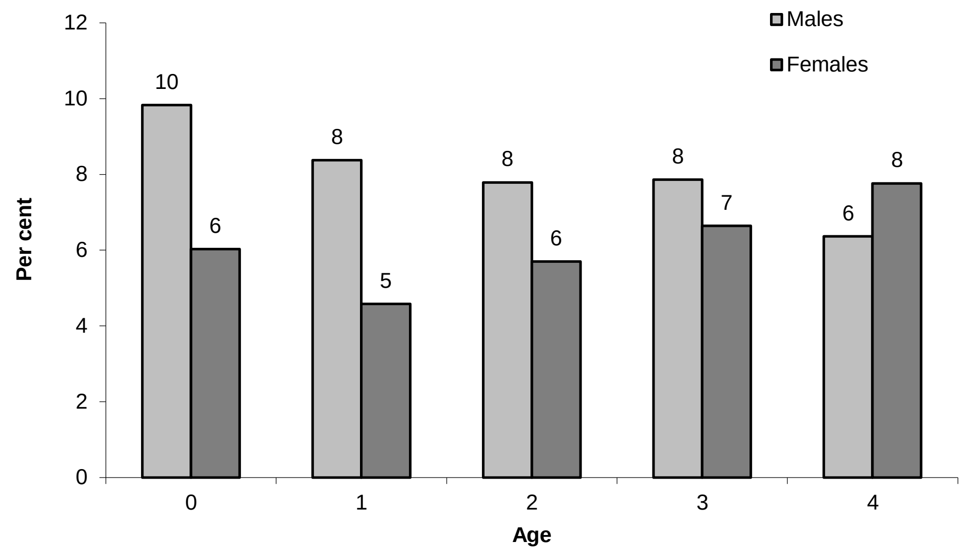
Stunting

A child is deemed as stunted if their length/height ratio for age is two standard deviations below the mean.

Underweight among Indigenous children

Underweight by age and sex

- In the period 2008–2010, data from the Indigenous children who were measured for weight for age show that boys aged 0–3 years were more likely to be underweight than girls of the same age. However, 4-year old boys were less likely to be underweight than girls of the same age (Figure 2.26.3).



Source: AIHW analysis of HU5K/GAA data collection.

Figure 2.26.3: Percentage of Indigenous children aged 0–4 years diagnosed as underweight, by age and sex, Northern Territory, 2008–2010

Time trend of underweight

- Over the period 2004 to 2010 in the Northern Territory, the age-standardised proportion of Indigenous children aged 0–4 years who were underweight decreased significantly. The fitted trend implies an average yearly decrease of 0.4 cases per 100 children, equivalent to a 26% decline over the whole period (Table 2.26.1).
- Over the same period, the age-standardised proportion of Indigenous boys who were underweight also decreased significantly. Although there was a decline in the proportion of Indigenous girls who were underweight, this was not statistically significant (Table 2.26.1).

Table 2.26.1: Number and age-standardised rate of Indigenous children aged 0–4 years diagnosed as underweight, by sex, Northern Territory, 2004–2010

	2004	2005	2006	2007	2008	2009	2010	Annual change[(a)]	% change over period[(b)]
Total number of children diagnosed as underweight									
Males	212	160	135	130	109	140	158	n.a.	n.a.
Females	132	121	83	84	86	92	118	n.a.	n.a.
People	344	281	218	214	195	232	276	n.a.	n.a.
Total number of children measured for whether being underweight									
Males	1,800	1,557	1,432	1,551	1,590	1,743	1,736	n.a.	n.a.
Females	1,642	1,449	1,354	1,465	1,563	1,617	1,659	n.a.	n.a.
People	3,442	3,006	2,786	3,016	3,153	3,360	3,395	n.a.	n.a.
Age-standardised rate per 100 population[(c)]									
Males	11.7	10.4	9.2	8.4	6.9	8.0	9.2	–0.5*	–27%
Females	8.2	8.2	6.1	5.7	5.5	5.7	7.1	–0.3	–23%
People	10.1	9.4	7.7	7.1	6.2	6.9	8.2	–0.4*	–26%

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 2004–2010.

(a) Average annual change in rates determined using linear regression analysis.

(b) Per cent change between 2004 and 2010 based on the average annual change over the period.

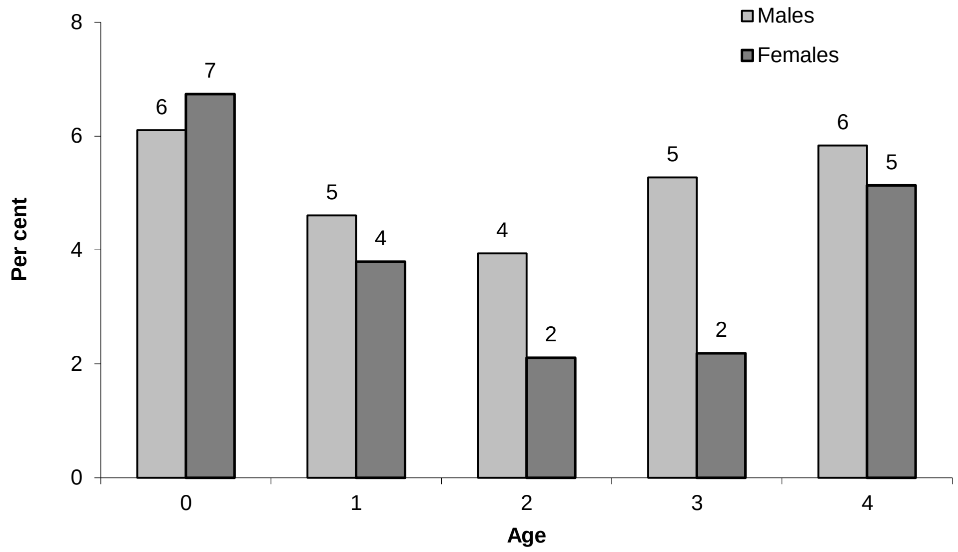
(c) Directly-age-standardised by 1-year age groups using the 2001 Indigenous children population in the Northern Territory.

Source: AIHW analysis of HU5K/GAA data collection.

Wasting among Indigenous children

Wasting by age and sex

- In 2008–2010, measured data on weight for height of Indigenous children aged 0–4 years show boys aged 1–4 years were more likely than girls of the same age to be wasted. However, the boys aged under 1 year was slightly less likely than girls of the same age to be wasted (Figure 2.26.4).



Source: AIHW analysis of HU5K/GAA data collection.

Figure 2.26.4: Percentage of Indigenous children aged 0–4 years diagnosed as wasted, by age and sex, Northern Territory, 2008–2010

Time trend of wasting

- Over the period 2004 to 2010 in the Northern Territory, the age-standardised proportion of Indigenous children aged 0–4 years who were wasted according their growth measures decreased significantly. The fitted trend implies an average yearly decrease of 0.3 cases per 100 children, equivalent to a 26% decline over the whole period (Table 2.26.2).
- During the same period, the age-standardised rate of wasting among Indigenous girls also decreased significantly. However, there were no significant changes in the rate of wasting among Indigenous boys (Table 2.26.2).

Table 2.26.2: Number and age-standardised rate of Indigenous children aged 0–4 years diagnosed as wasted, by sex, Northern Territory, 2004–2010

	2004	2005	2006	2007	2008	2009	2010	Annual change[a]	% change over period[b]
Total number of children diagnosed as wasted									
Males	119	78	68	65	69	82	69	n.a.	n.a.
Females	78	82	56	53	56	52	58	n.a.	n.a.
People	197	160	124	118	125	134	127	n.a.	n.a.
Total number of children measured for whether being wasted									
Males	1,649	1,413	1,333	1,407	1,470	1,479	1,334	n.a.	n.a.
Females	1,497	1,331	1,265	1,320	1,439	1,398	1,323	n.a.	n.a.
People	3,146	2,744	2,598	2,727	2,909	2,877	2,657	n.a.	n.a.
Age-standardised rate per 100 population[c]									
Males	7.3	5.6	5.3	4.6	4.6	5.6	5.2	–0.3	–21%
Females	5.4	6.2	4.6	4.1	4.1	3.9	4.4	–0.3*	–32%
People	6.5	5.9	5.0	4.4	4.4	4.8	4.8	–0.3*	–26%

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 2004–2010.

(a) Average annual change in rates determined using linear regression analysis.

(b) Per cent change between 2004 and 2010 based on the average annual change over the period.

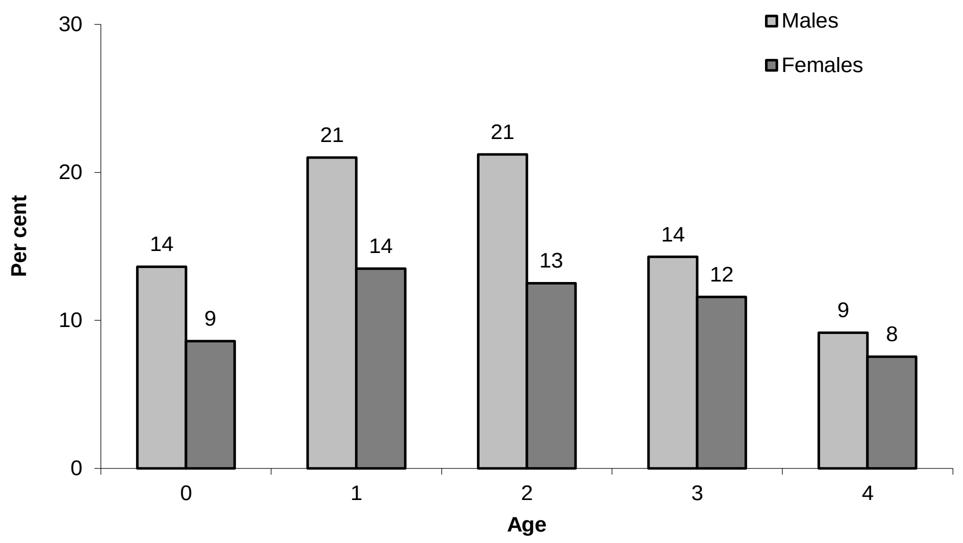
(c) Directly age-standardised by 1-year age groups using the 2001 Indigenous children population in the Northern Territory.

Source: AIHW analysis of HU5K/GAA data collection.

Stunting among Indigenous children

Stunting by age and sex

- Indigenous children aged 1 and 2 years were most likely to be stunted, based on measured growth data for Indigenous children aged 0–4 years in the Northern Territory during 2008–2010 (Figure 2.26.5).
- Indigenous boys were more likely than girls of the same age to be stunted in 2008–2010.



Source: AIHW analysis of HU5K/GAA data collection.

Figure 2.26.5: Percentage of Indigenous children aged 0–4 years diagnosed as stunted, by age and sex, Northern Territory, 2008–2010

Time trend of stunting

- Over the period 2004 to 2010 in the Northern Territory, the age-standardised rate of stunting among Indigenous children aged 0–4 years decreased significantly. The fitted trend implies an average yearly decrease of 0.6 cases per 100 children, equivalent to a 22% decline over the whole period (Table 2.26.3).

Table 2.26.3: Number and age-standardised rate of Indigenous children aged 0–4 years diagnosed as stunted, by sex, Northern Territory, 2004–2010

	2004	2005	2006	2007	2008	2009	2010	Annual change[(a)]	% change over period[(b)]
Total number of children diagnosed as stunted									
Males	322	274	262	251	245	231	221	n.a.	n.a.
Females	205	175	146	164	160	141	155	n.a.	n.a.
People	527	449	408	415	405	372	376	n.a.	n.a.
Total number of children measured for whether being stunted									
Males	1,648	1,410	1,328	1,407	1,476	1,484	1,393	n.a.	n.a.
Females	1,488	1,319	1,254	1,323	1,435	1,406	1,378	n.a.	n.a.
People	3,136	2,729	2,582	2,730	2,911	2,890	2,771	n.a.	n.a.
Age-standardised rate per 100 population[(c)]									
Males	18.9	18.6	19.2	17.5	16.4	15.3	15.9	–0.7*	–21%
Females	13.5	13.0	11.6	12.2	10.9	9.9	11.3	–0.5*	–22%
People	16.3	16.0	15.5	14.9	13.6	12.7	13.6	–0.6*	–22%

* Represents results with statistically significant increases or declines at the $p < 0.05$ level over the period 2004–2010.

(a) Average annual change in rates determined using linear regression analysis.

(b) Per cent change between 2004 and 2010 based on the average annual change over the period.

(c) Directly age-standardised by 1-year age groups using the 2001 Indigenous children population in the Northern Territory.

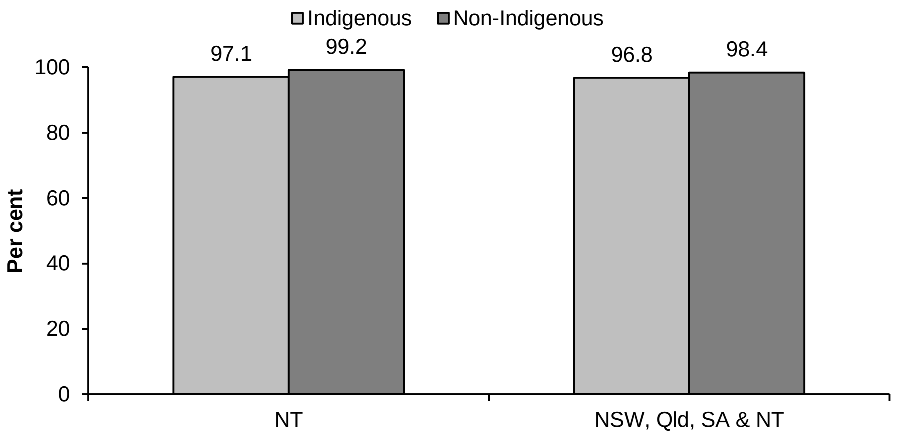
Source: AIHW analysis of HU5K/GAA data collection.

Health system performance (Tier 3)

3.01 Antenatal care

Number, rate and percentage of Indigenous women who utilised antenatal care provided by skilled birth attendants for reasons related to pregnancy at least once during pregnancy among all women who gave birth whether resulting in a live or still birth, if the birthweight is at least 400 grams or the gestational age is 20 weeks or more

- In 2007 in the Northern Territory, 97% of Indigenous mothers and 99% of non-Indigenous mothers attended at least one antenatal care session during pregnancy. These proportions were similar to those reported for New South Wales, Queensland, South Australia and the Northern Territory combined (Figure 3.01.1).
- The proportion of Indigenous mothers attending their first antenatal care session in the first trimester was much lower than for non-Indigenous mothers (43% compared to 73%) (Figure 3.01.2).
- Indigenous mothers in the Northern Territory were less likely to have attended five or more antenatal care sessions during pregnancy than non-Indigenous mothers (75% compared to 93%). This same pattern was evident in Queensland, South Australia and the Northern Territory combined (Figure 3.01.3).
- Between 2000 and 2007 in the Northern Territory there were no significant changes in the rate at which Indigenous attended at least one antenatal care session during pregnancy, while for non-Indigenous mother it increased by 1.8% (Figure 3.01.4).
- Between 1998 and 2007 in New South Wales, Queensland and South Australia combined, the rates of Indigenous mothers and of non-Indigenous mothers who attended at least one antenatal care session during pregnancy increased by 3.1% and 1.6% respectively.

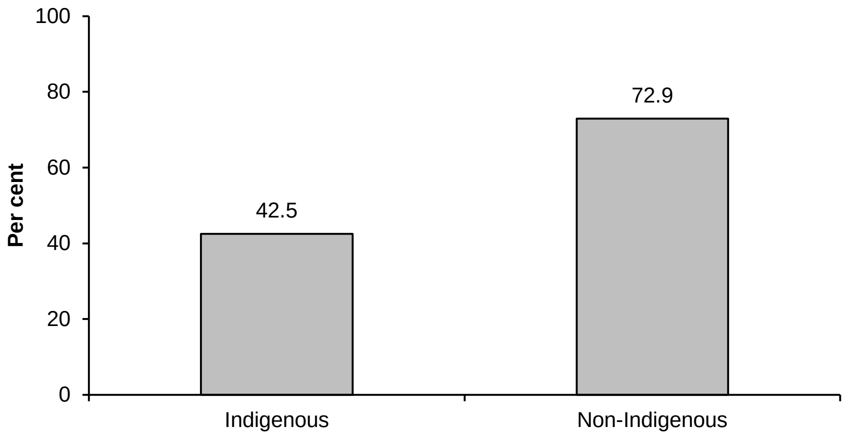


Notes

1. Indigenous and non-Indigenous data exclude births where the mother’s Indigenous status is not stated.
2. Jurisdiction-level data are based on place where birth occurred, not place of usual residence.
3. Data not available from the Australian Capital Territory, Victoria, Western Australia and Tasmania.

Source: AIHW analyses of States and Territories Perinatal Collections.

Figure 3.01.1: Per cent of mothers who attended at least one antenatal care session, by Indigenous status, Northern Territory and NSW, Qld, SA & NT combined, 2007

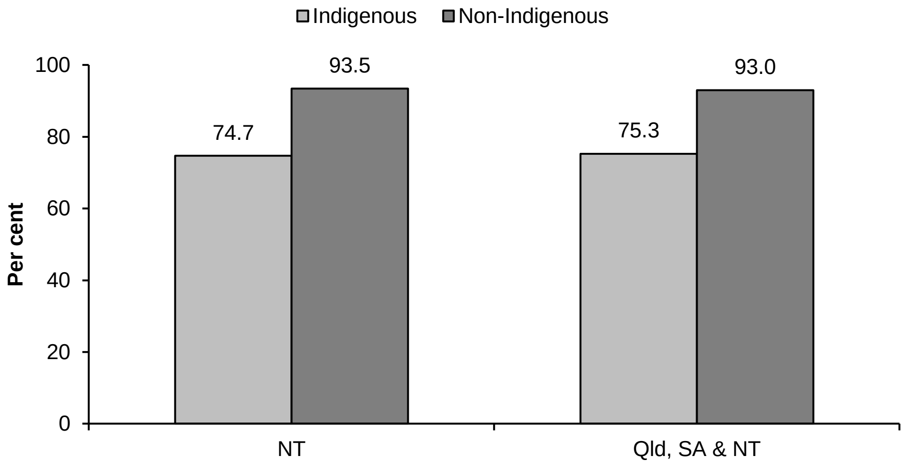


Notes

1. Indigenous and non-Indigenous data exclude births where the mother's Indigenous status is not stated.
2. Jurisdiction-level data are based on place where birth occurred, not place of usual residence.
3. Data not available from the Australian Capital Territory, Victoria, Western Australia and Tasmania. Data on timing of first antenatal care session attended not collected in Queensland or South Australia.

Source: AIHW analyses of States and Territories Perinatal Collections.

Figure 3.01.2: Per cent of mothers whose first antenatal care session occurred in the first trimester (<13 weeks), by Indigenous status, Northern Territory, 2007

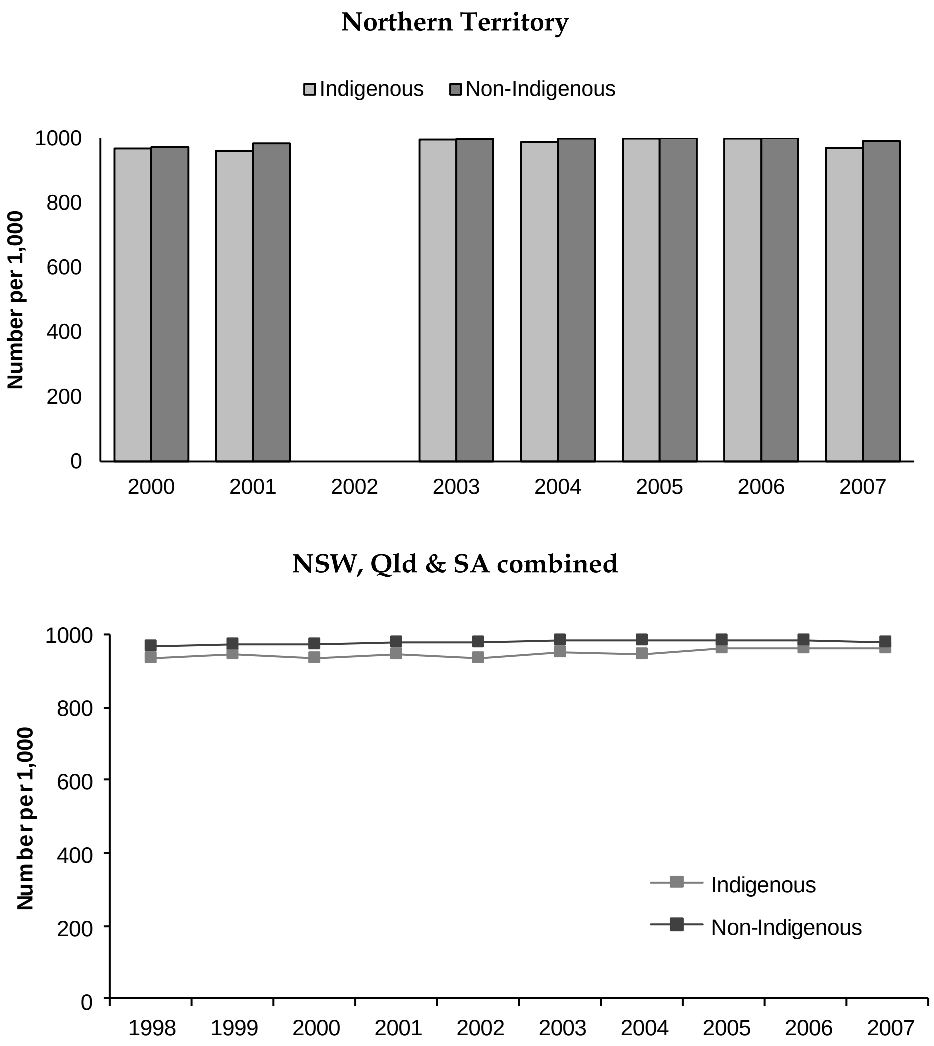


Notes

1. Indigenous and non-Indigenous data exclude births where the mother's Indigenous status is not stated.
2. Jurisdiction-level data are based on place where birth occurred, not place of usual residence.
3. Data not available from the Australian Capital Territory, Victoria, Western Australia and Tasmania. Data on number of antenatal care sessions attended not collected in NSW.

Source: AIHW analyses of States and Territories Perinatal Collections.

Figure 3.01.3: Per cent of mothers who attended five or more antenatal care sessions, by Indigenous status, Northern Territory and Qld, SA & NT combined, 2007


Northern Territory

NSW, Qld & SA combined

Notes

1. Indigenous and non-Indigenous data exclude births where the mother's Indigenous status is not stated.
2. Jurisdiction-level data are based on place where birth occurred, not place of usual residence. Data not available from the Australian Capital Territory, Victoria, Western Australia and Tasmania.
3. Rate per 1,000 women who gave birth in the period, whether resulting in a live or still birth, if the birthweight is at least 400grams or the gestational age is 20 weeks or more.
4. In the NT in 1998, 1999 & 2002 a system error occurred where a large number of women had birthing records created with no antenatal data attached.

Source: AIHW analyses of States and Territories Perinatal Collections.

Figure 3.01.4: Rate of mothers who attended at least one antenatal care session, by Indigenous status, Northern Territory and NSW, Qld & SA combined, 1998–2007

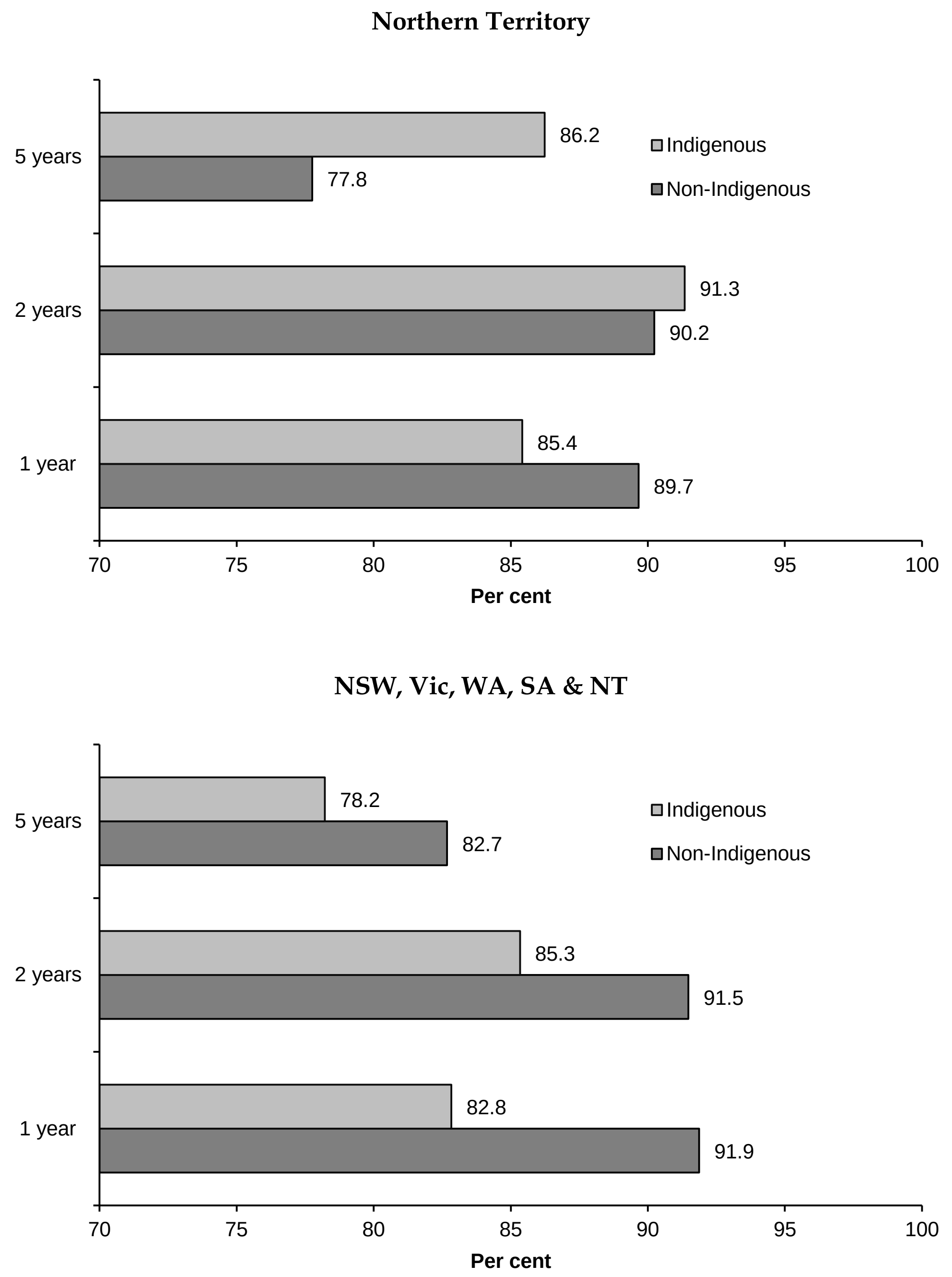
3.02 Immunisation (child and adult)

Vaccination coverage rates among Indigenous Australian children and adults

Childhood immunisation

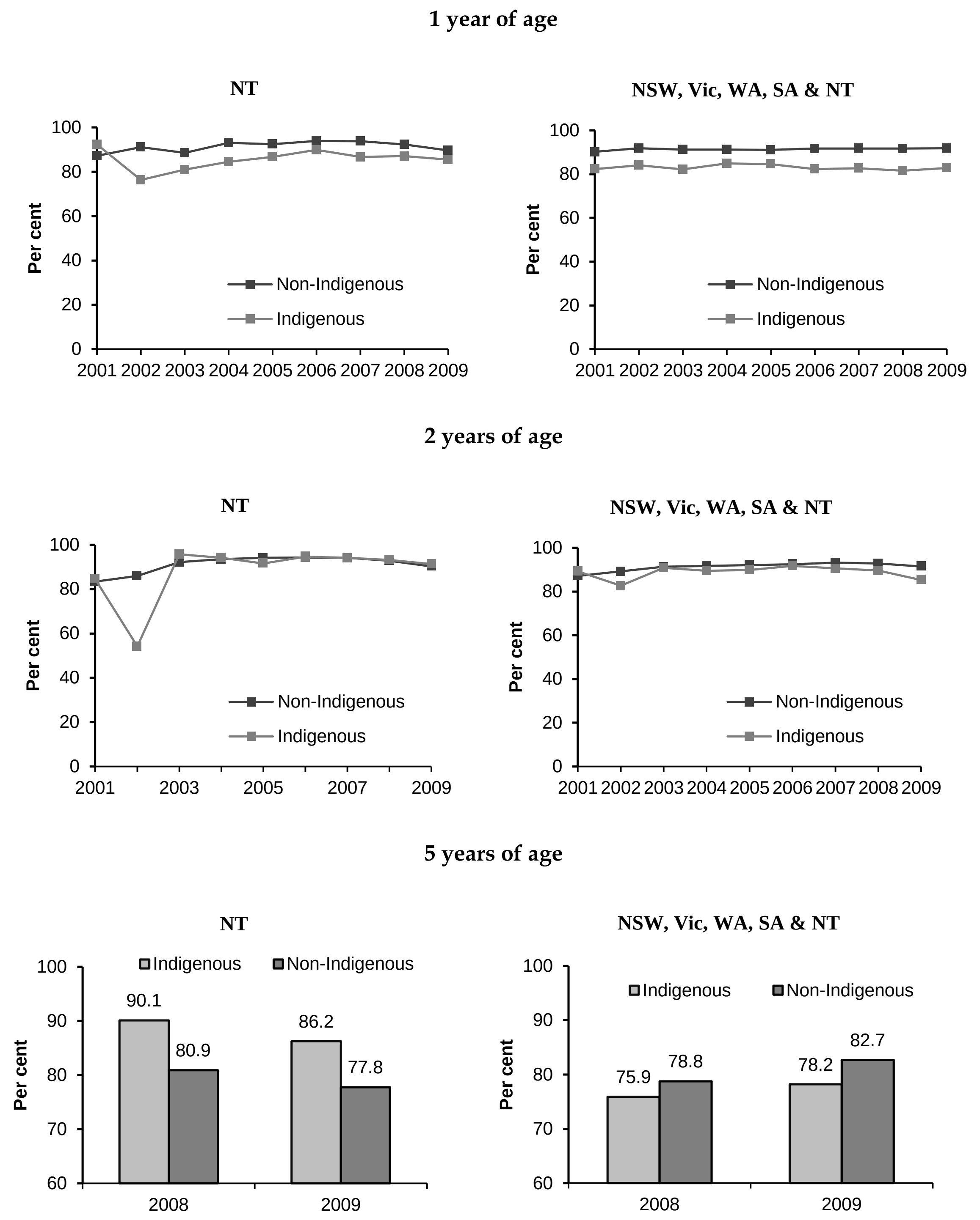
The vaccination schedule for children in 2010 can be found in the Aboriginal and Torres Strait Islander Health Performance Framework report (AIHW 2011).

- As at 31 December 2009, the proportion of Aboriginal and Torres Strait Islander children in the Northern Territory who were fully immunised was lower than other children at age 1 (85% compared to 90%), but higher than the proportion of other children at ages 2 and 5 years (91% compared to 90%, and 86% compared to 78% respectively) (Figure 3.02.1).
- For New South Wales, Victoria, Western Australia, South Australia, and the Northern Territory combined, the proportion of Indigenous children who were fully immunised was lower than other children in these three age groups (83% compared to 92% at 1 year, 85%to 92% at 2 years, and 78% to 83% at 5 years).
- In the Northern Territory, the proportion of Aboriginal and Torres Strait Islander children who were fully immunised at 1 year of age fluctuated between 92% and 76% during 2001 and 2002 and had no significant changes since 2003. Similarly, the proportion fully immunised at 2 years of age ranged from 54% in 2001 to 96% in 2003 and then remained fairly steady from 2003 to 2009. The proportion of Aboriginal and Torres Strait Islander children who were fully immunised at 5 years of age decreased from 90% in 2008 to 86% in 2009.
- Over the same period the proportion of other children in the Northern Territory who were fully vaccinated at age 1 did not change significantly. The proportion of other children fully immunised at 2 years of age increased from 83% in 2001 to 92% in 2003 and then remained stable from 2003 to 2009 (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 steady from 2001 to 2009 at around 90%, while the proportion of Indigenous children aged 2 years varied with an 11% difference between the minimum and the maximum over the 9-year period. The proportion of fully vaccinated Indigenous children aged 5 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 1 year, 2 years and 5 years, Northern Territory and NSW, Vic, WA, SA & NT combined, 2009

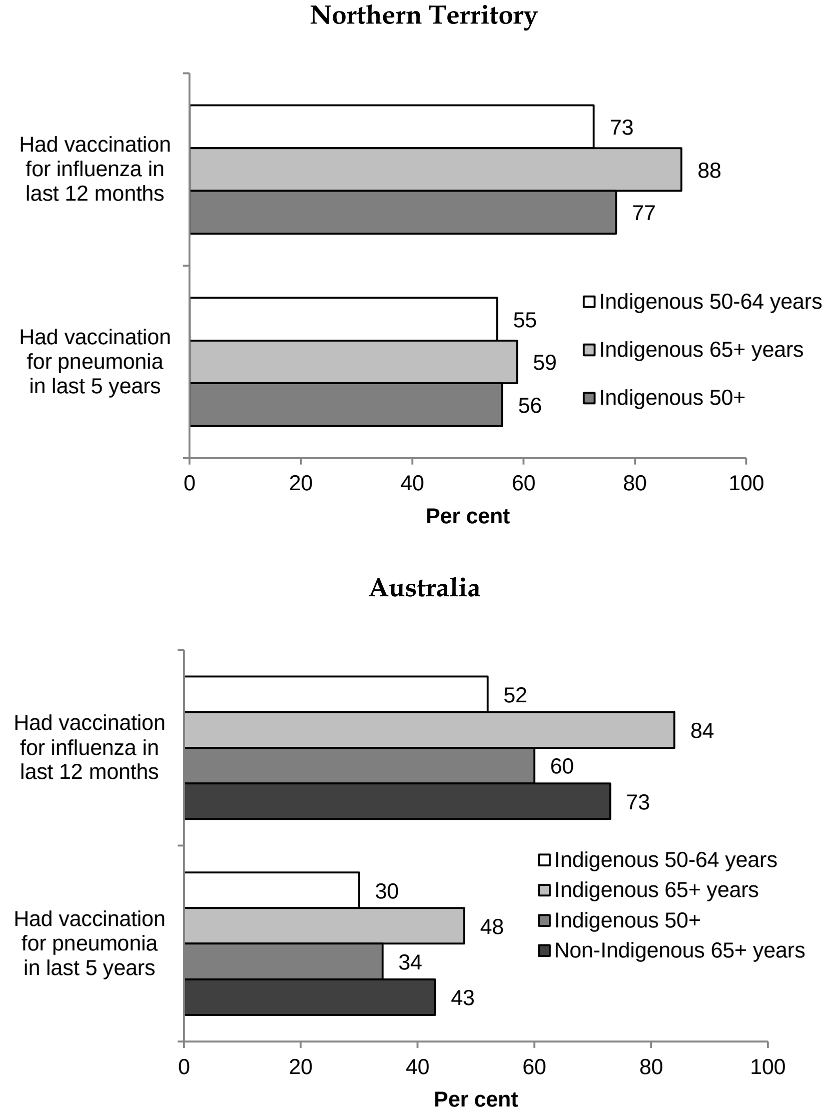


Source: AIHW analyses of ACIR, Medicare Australia.

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

Adult immunisation

- In 2004–05, approximately 77% of Indigenous people aged 50 years and over in the Northern Territory had been vaccinated against influenza in the last 12 months and 56% had been vaccinated against pneumonia in the last 5 years. These proportions were higher than those reported for Australia (60% and 34% respectively) (Figure 3.02.3).
- In Northern Territory, a higher proportion (88%) of Indigenous people aged 65 years and over had been vaccinated against influenza in the last 12 months than in Australia (84%) and a higher proportion of Indigenous people aged 65 years and over had been vaccinated against pneumonia in the last 5 years than in Australia (56% compared to 34%).



Note: Data for non-Indigenous Australians in the Northern Territory not publishable due to the small sample size of this population group in the National Health Survey 2004–05.

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

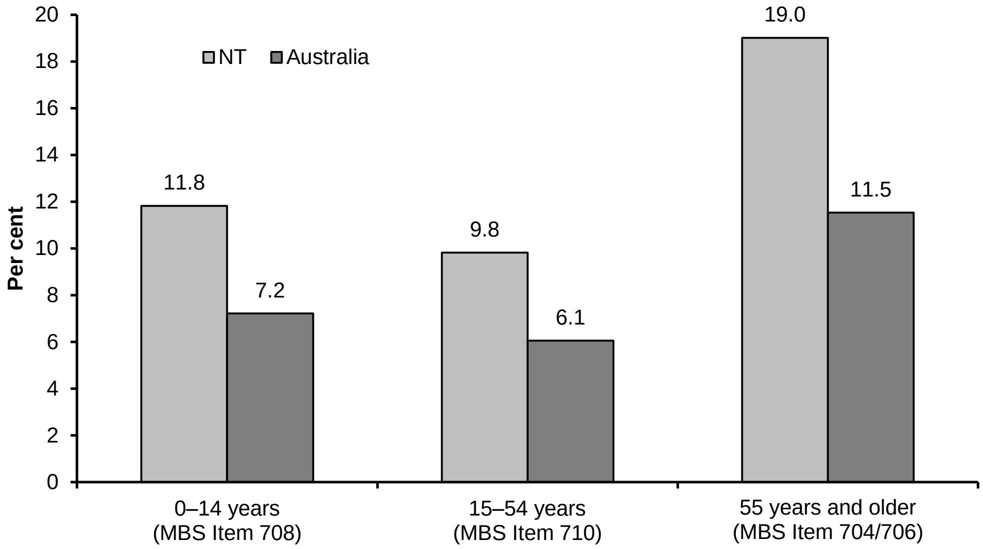
Figure 3.02.3: Per cent of Indigenous peoples aged 50 years and over: immunization status, Northern Territory and Australia, 2004–05

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

- During the period July 2008 to June 2009 in the Northern Territory:
  - 12% of Indigenous children aged 0–14 years had an annual child health check
  - 10% of Indigenous people aged 15–54 years had a 2-yearly health check
  - 19% of Indigenous people aged 55 years and older had an annual health assessment
  - 8% of total people aged 75 years and over had an annual health assessment.
- The proportion of Indigenous people in the Northern Territory undertaking health checks and assessments at age 0–14, 15–54 and 55 years was higher than for Indigenous people in Australia (Figure 3.03.1).

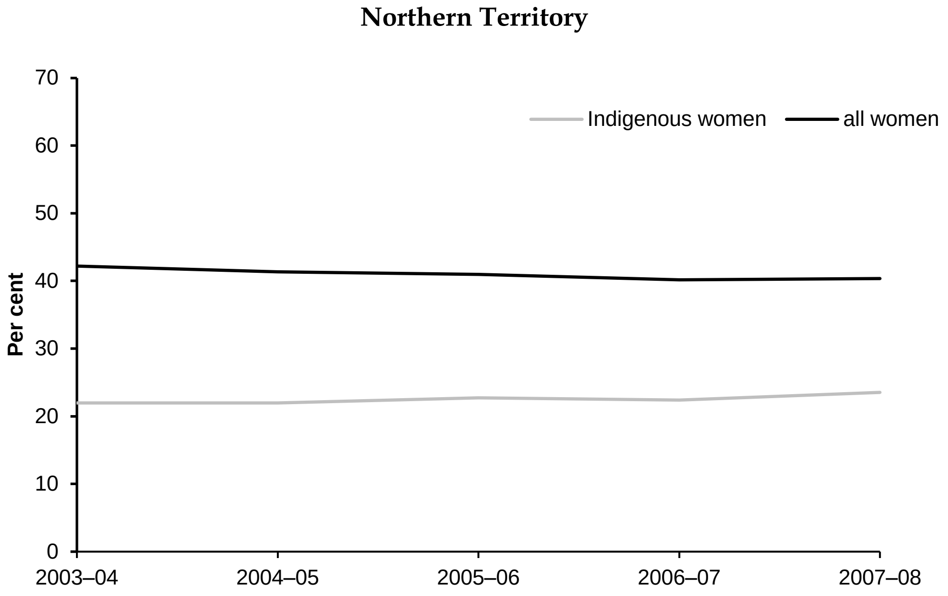


Source: AIHW analyses of Medicare data.

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

Breast screening

- In 2007–08 in the Northern Territory, 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 (24% compared to 40%). In Australia, 36% of Indigenous women and 55% of total women aged 50–69 years participated in the BreastScreen Australia program.
- Over the period 2003–04 to 2007–08, in the Northern Territory, the proportion of Indigenous women aged 50–69 who participated in the BreastScreen Australia program increased from 22% to 24% with a total increment of 7%, while the proportion of all women decreased from 42% to 40% with a total decline of 5%(Figure 3.03.2).
- Over the same period in Australia, the proportion of Indigenous women aged 50–69 years participating in the BreastScreen Australia program increased by 2.3%, while for all women there was no significant change.


Northern Territory


Australia

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 years, Aboriginal and Torres Strait Islander women and all women, Northern Territory and Australia, 2003–04 to 2007–08

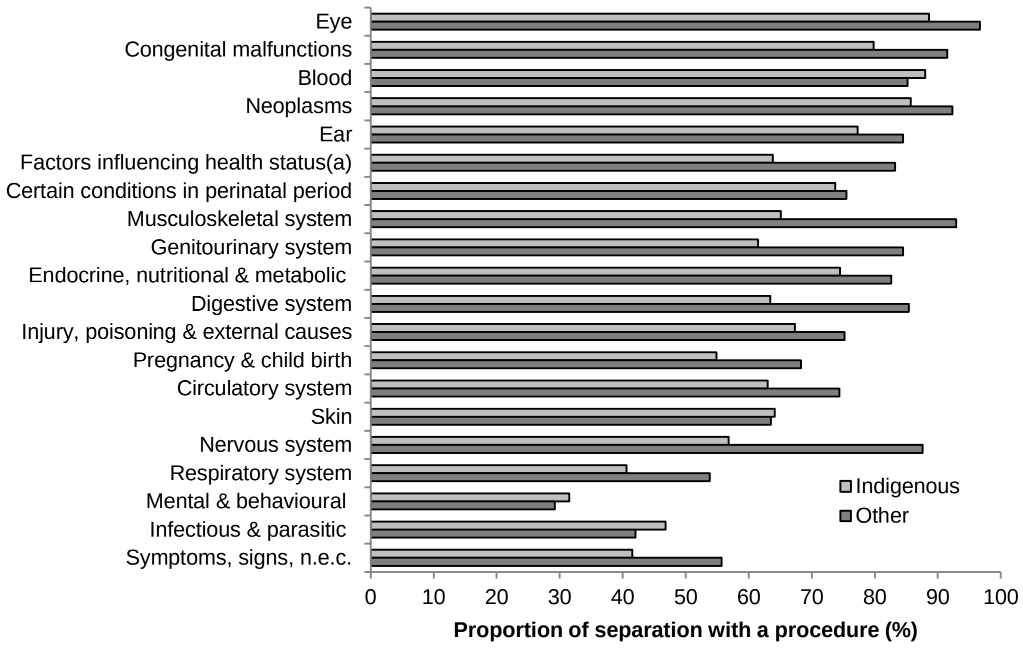
3.05 Differential access to key hospital procedures

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

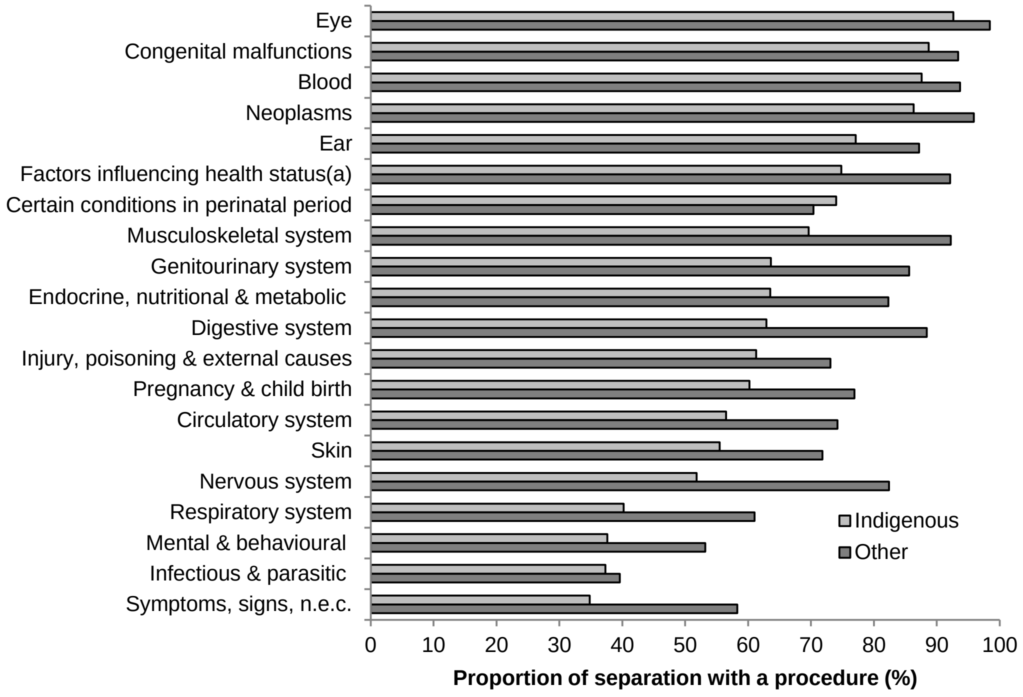
Studies have shown that while Aboriginal and Torres Strait Islander people are more likely to be hospitalised than other people they are less likely to receive a medical or surgical procedure while in hospital (ABS & AIHW 2008).

- Between July 2006 and June 2008 in the Northern Territory, overall approximately 61% of hospitalisations for Indigenous Australians had a procedure reported compared to 78% for other Australians. Nationally, these proportions were 59% and 81% respectively.
- In the Northern Territory, the proportion of separations with a procedure reported by principal diagnosis for Indigenous patients was lower than those for other patients for most (16 out of 20) of the diagnosis chapters. For diseases of the nervous system, 57% of separations for Indigenous patients had a procedure reported, compared with 88% of separations for other patients (Figure 3.05.1).
- For infectious and parasitic diseases, the proportion of separations with a procedure for Indigenous patients was 11% higher than that for other patients (47% compared to 42%); while for mental and behavioural disorders, diseases of the blood and diseases of the skin the proportions for Indigenous patients were slightly higher (1% to 8%) than those for other patients.
- In Australia, 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 with an exception of certain conditions in perinatal period.

Northern Territory



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, Northern Territory 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.

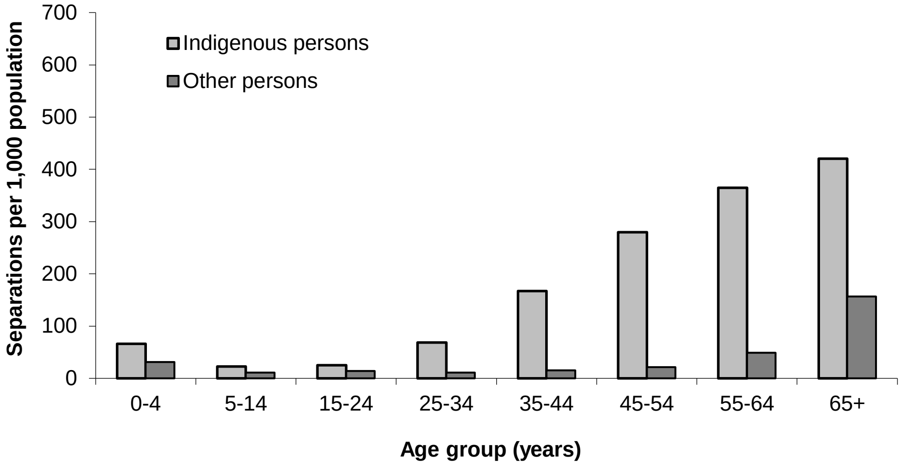
Hospitalisations by age

- In the 2-year period July 2006 to June 2008 in the Northern Territory, Indigenous people were hospitalised for ambulatory care sensitive conditions at over 4 times the rate of other people (170 compared to 40 per 1,000). This was lower than the rate ratio which was 5 in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined.
- Indigenous people in the Northern Territory had higher hospitalisation rates for ambulatory care sensitive conditions than other people across all age groups. Differences in hospitalisation rates between Indigenous and other people were particularly marked in the 35–44 and 45–54 year age groups where Indigenous people were hospitalised between 11 and 13 times the rate of other people (Figure 3.06.1).
- Hospitalisation rates for ambulatory care sensitive hospital admissions for Indigenous people in the Northern Territory were highest in the 55–64 and 65 years and over age groups (365 and 420 per 1,000), while for other people rates were highest for those aged 65 years and over (157 per 1,000).
- In the Northern Territory, the hospitalisation rate for ambulatory care sensitive conditions among Indigenous people was higher than or similar to that in the six jurisdictions combined for the younger age groups. It was lower than that in the six jurisdictions combined for those aged 45 years and over.

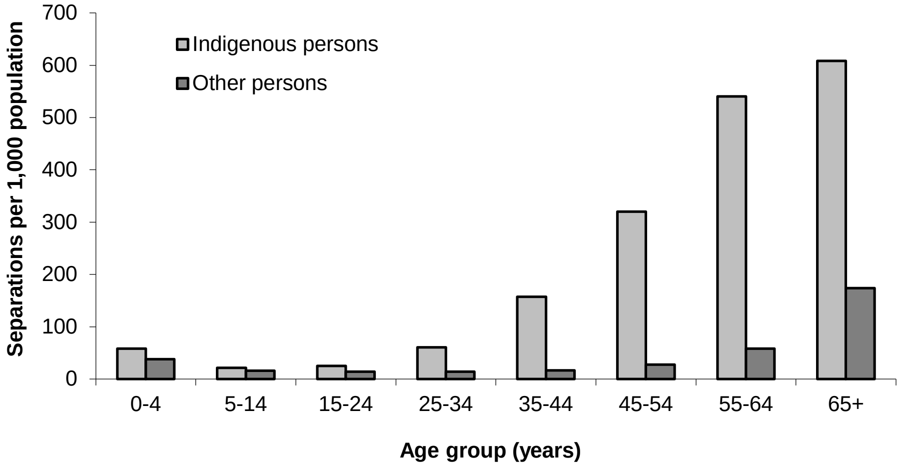
Hospitalisations by diagnosis

- In the 2-year period July 2006 to June 2008, diabetes complications (116 per 1,000 population) were the most common type of ambulatory sensitive condition among Indigenous Australians in the Northern Territory; followed by chronic obstructive pulmonary disease (COPD) (15 per 1,000) and convulsions and epilepsy (10 per 1,000). Indigenous Australians were hospitalised at nearly six (5.6) times of the rate of other Australians for diabetes complications, at about four (4.2) times the rate of other Australians for COPD and at more than eight (8.3) times the rate of other Australians for convulsions and epilepsy. Diabetes complications were also the most common types of ambulatory care sensitive conditions for which Indigenous Australians in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined were hospitalised during this period (165 per 1,000) (Table 3.06.1).

- In the Northern Territory, Indigenous Australians were hospitalised for vaccine-preventable conditions at 10 times the rate, for potentially preventable chronic conditions at more than five (5.4) times the rate, and for potentially preventable acute conditions at about four (3.7) times the rate, of other Australians (Figure 3.06.2).
- The hospitalisation rate among Indigenous Australians for potentially preventable chronic conditions was lower in the Northern Territory than in the six jurisdictions combined (137 compared to 185 per 1,000), while hospitalisation rates for vaccine preventable conditions and potentially preventable acute conditions among Indigenous Australians were higher in the Northern Territory than in the six jurisdictions combined.



Northern Territory



NSW, Vic, Qld, WA, SA & NT

Source: AIHW analyses of NHMD.

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

Table 3.06.1: Top 10 ambulatory care sensitive hospital admissions, by Indigenous status, Northern Territory 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)]**
			Northern Territory		
Diabetes complications	7,700	3,664	116.0	20.6	5.6*
Convulsions and epilepsy	1,019	316	9.7	1.2	8.3*
Chronic obstructive pulmonary disease	1,078	607	15.1	3.6	4.2*
Ear, nose and throat infections	569	461	3.2	1.6	2.0*
Dental problems	580	345	3.4	1.2	2.9*
Cellulitis	711	731	5.9	2.9	2.1*
Asthma	310	360	2.6	1.2	2.1*
Pyelonephritis	668	418	7.9	2.1	3.8*
Angina	269	369	4.1	1.8	2.2*
Congestive cardiac failure	447	209	5.9	1.3	4.4*
Subtotal	*13,351*	*7,480*	*173.7*	*37.4*	*4.6**
Total[(h)]	**13,585**	**8,274**	**169.5**	**39.6**	**4.3***
			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.

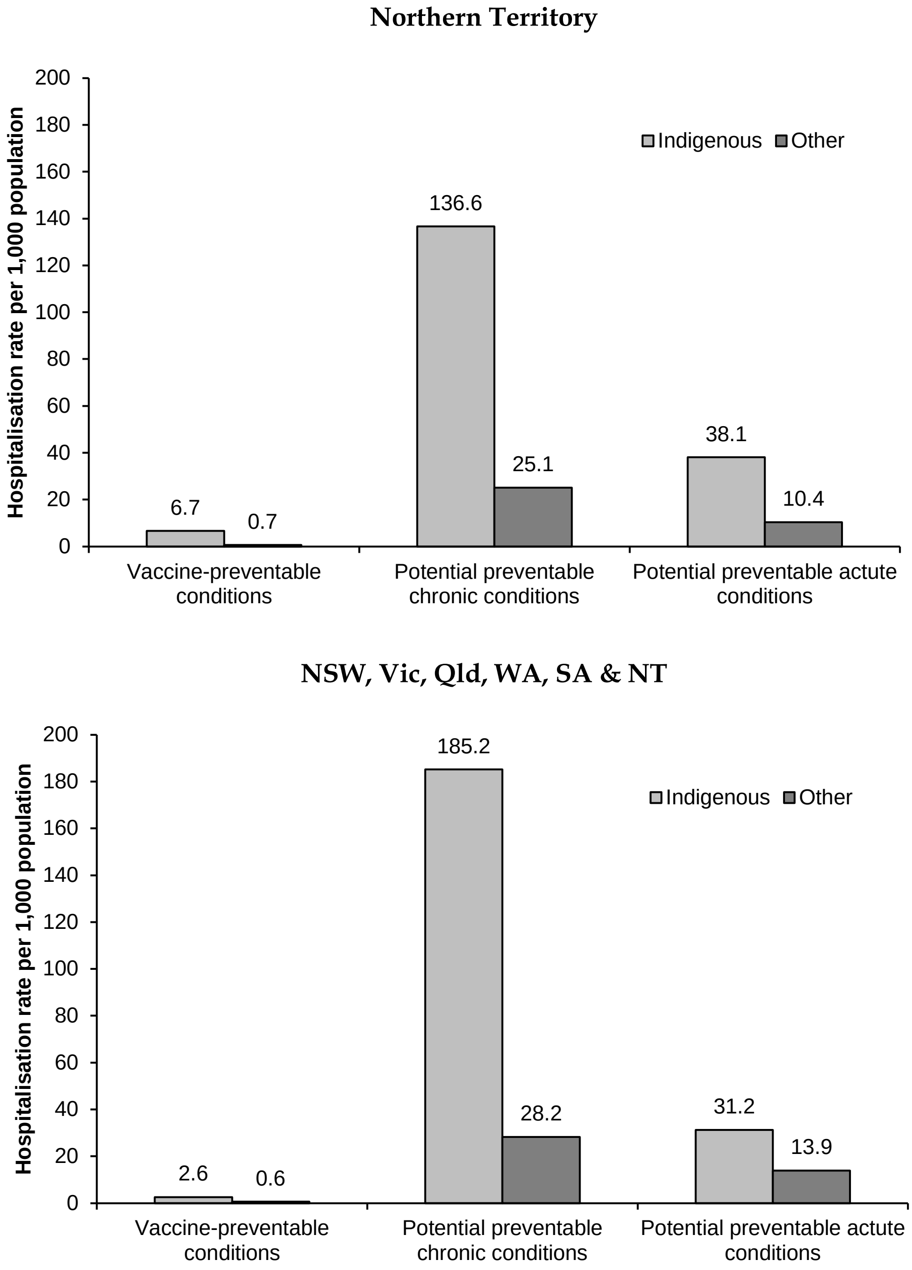
(e) Directly age-standardised using the Australian 2001 standard population.

(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.

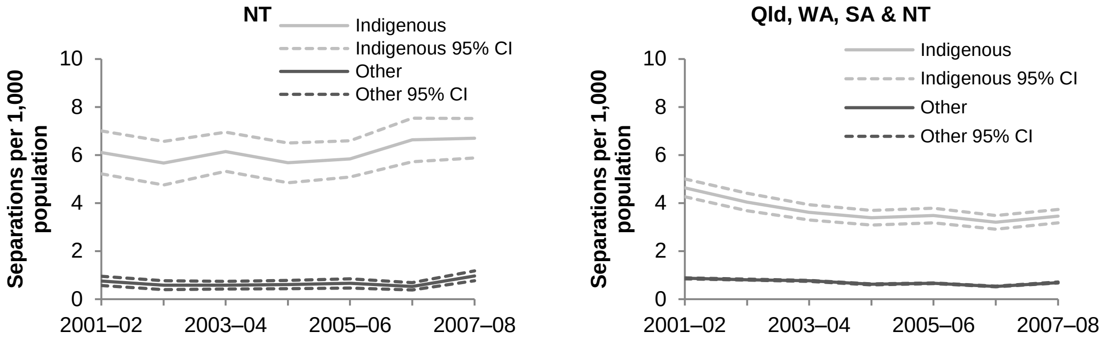


Source: AIHW analyses of NHMD

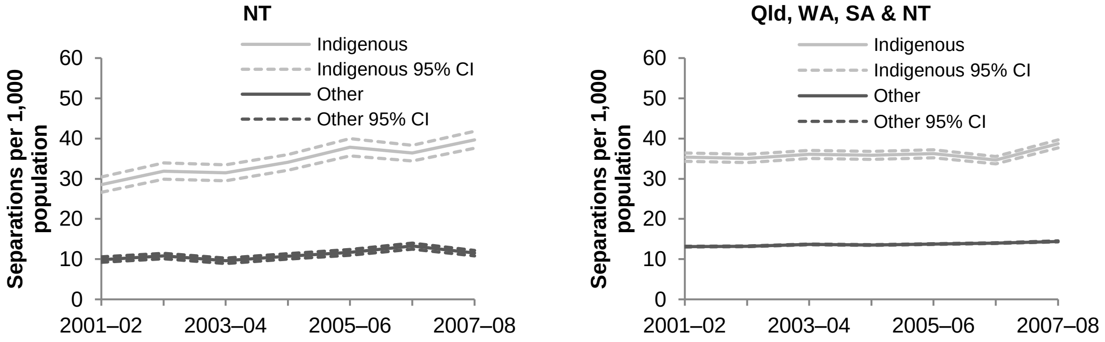
Figure 3.06.2: Age-standardised hospitalisation rates for ambulatory care sensitive hospital admissions, by Indigenous status, Northern Territory and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Hospitalisation trends

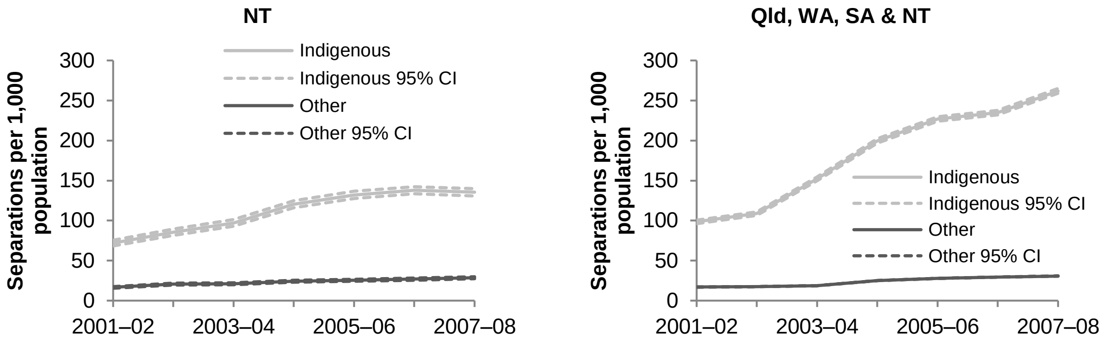
- Over the period 2001–02 to 2007–08 in Northern Territory for Indigenous Australians (see Figure 3.06.3):
    - there were no significant changes in the hospitalisation rate for vaccine preventable conditions
    - there were significant increases in the hospitalisation rate for potentially preventable acute conditions. The average yearly increase was 1.7 per 1,000 population, equivalent to a 37% increase over this period
    - there were significant increases in the hospitalisation rate for potentially preventable chronic conditions. The average yearly increase was 11.8 per 1,000 population, equivalent to a 98% increase over this period.
- Over the same period in Northern Territory for other people:
    - there were no significant changes in the hospitalisation rate for vaccine preventable conditions
    - there were significant increases in the hospitalisation rate for potentially preventable acute conditions. The average yearly increase was 0.4 per 1,000 population, equivalent to a 26% increase over this period
    - there were significant increases in the hospitalisation rate for potentially preventable chronic conditions. The average yearly increase was 1.9 per 1,000 population, equivalent to a 68% increase over this period.
- Over this period in Queensland, Western Australia, South Australia and the Northern Territory combined:
    - there were significant declines in hospitalisation rates for vaccine preventable conditions among both Indigenous Australians and other people
    - there were no significant changes in the hospitalisation rate for potentially preventable acute conditions among Indigenous Australians. However, the rate for other people increased significantly
    - there were significant increases in hospitalisation rates for potentially preventable chronic conditions among both Indigenous Australians and 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, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08

3.07 Health promotion

Interventions provided by clinicians and health promotion initiatives funded by governments and provided by a range of health professionals in the wider community for the Aboriginal and Torres Strait Islander population

Indigenous communities

The Community Housing and Infrastructure Needs Survey (CHINS) collects data from all Aboriginal and Torres Strait Islander housing organisations and discrete Aboriginal and Torres Strait Islander communities in Australia. The latest CHINS was enumerated from 1 March to 30 June 2006. In the 2006 CHINS, a community questionnaire collected detailed infrastructure information from all discrete Indigenous communities with a reported usual population of 50 persons or more, as well as for communities that had a reported usual population of fewer than 50 persons but which were not administered by a larger discrete Indigenous community or Resource Agency (375 communities). The 812 other communities had reported usual populations of fewer than 50 persons and were asked a subset of questions from the community questionnaire form: the short community questionnaire (ABS 2007).

For the 2006 Community Housing and Infrastructure Needs Survey (CHINS), data on health promotion programs were only collected from communities who completed the long community questionnaire. The health promotion questions in the CHINS do not collect information on the extent or quality of these activities, only that they have occurred. Therefore, these data are limited in their contribution to our understanding of the health promotion activities occurring in these discrete Indigenous communities.

- In 2006, around three-quarters (73%) of discrete Indigenous communities in the Northern Territory reported that one or more health promotion programs had been conducted in the community, with well babies programs reported by 65%, women’s health programs reported by 62% and men’s health programs reported by 61% of communities (Table 3.07.1, Figure 3.07.1).
- The Northern Territory had a higher proportion of health programs conducted in discrete Indigenous communities than in Australia (73% compared to 67%).

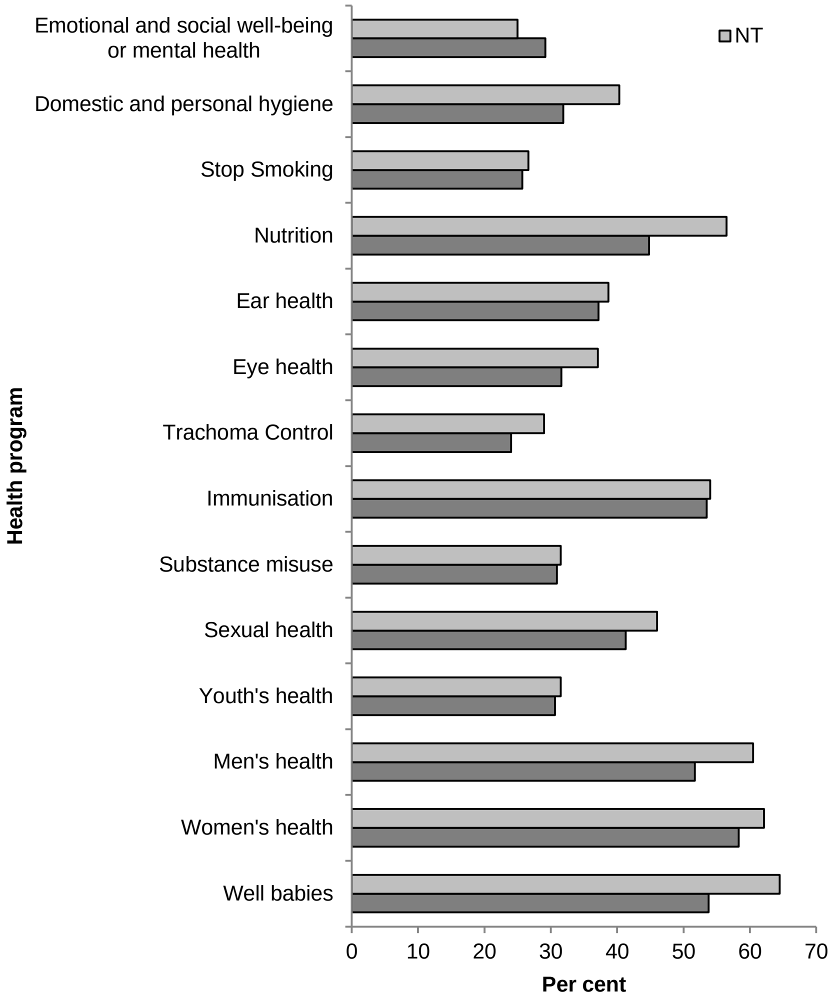
Table 3.07.1: Discrete Indigenous communities[(a)] located 10 kilometres or more from a hospital: Selected health promotion programs conducted in community, Northern Territory and Australia, 2006

Health promotion program	**NT**		**Australia**	
	No.	**%**	**No.**	**%**
Well babies	80	64.5	155	53.8
Women's health	77	62.1	168	58.3
Men's health	75	60.5	149	51.7
Youth's health	39	31.5	88	30.6
Sexual health	57	46.0	119	41.3
Substance misuse	39	31.5	89	30.9
Immunisation	67	54.0	154	53.5
Trachoma control	36	29.0	69	24.0
Eye health	46	37.1	91	31.6
Ear health	48	38.7	107	37.2
Nutrition	70	56.5	129	44.8
Stop smoking	33	26.6	74	25.7
Domestic and personal hygiene	50	40.3	92	31.9
Emotional and social wellbeing or mental health	31	25.0	84	29.2
Sub-total with at least one health promotion program	***91***	***73.4***	***194***	***67.4***
Sub-total with no health promotion programs	***33***	***26.6***	***93***	***32.3***
Not stated	—	—	1	0.3
Total(b)	**124**	**100.0**	**288**	**100.0**

(a) With a population of 50 or more, or a reported usual population of less than 50 but which were not linked to a parent community or resource agency.

(b) Excludes communities where distance to nearest hospital was not stated.

Source: AIHW analyses of ABS CHINS 2006.



Source: AIHW analyses of ABS CHINS 2006.

Figure 3.07.1: Discrete Indigenous communities located 10 kilometres or more from a hospital: Selected health promotion programs conducted in community, Northern Territory and Australia, 2006

3.08 Discharge against medical advice

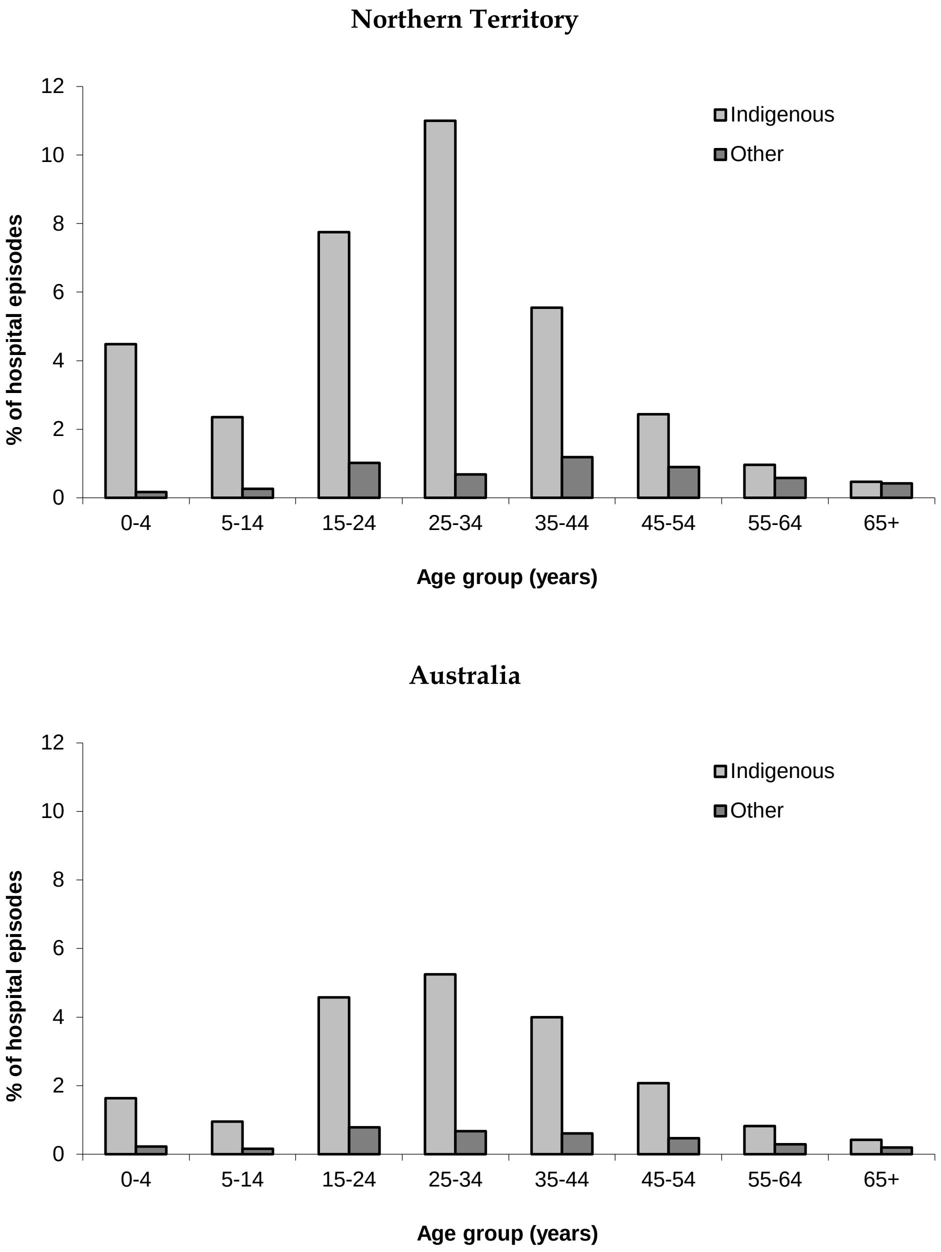
The rate at which Aboriginal and Torres Strait Islander peoples leave hospital against medical advice or are discharged at their own risk

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

- Overall, for the 2-year period July 2006 to June 2008, nearly 4% of hospitalisations of Indigenous Australians in the Northern Territory involved discharge against medical advice (excluding hospitalisations with a principal diagnosis of mental and behavioural disorders). This proportion was higher than that reported for Indigenous Australians in Australia (2.5%).
- After adjusting for differences in age structure, Indigenous people were close to seven (6.7) times as likely as other people to discharge against medical advice in the Northern Territory, and 6 times as likely in Australia.

Hospitalisations by age

- For the 2-year period July 2006 to June 2008 Indigenous people in the Northern Territory were much more likely to discharge from hospital against medical advice than other people across all age groups. For children aged 0 to 4 years, Indigenous people were 27 times more likely to discharge against medical advice compared to other people in this age group (Figure 3.08.1).
- In Australia, Indigenous people were more likely to discharge from hospital against medical advice than other people across all age groups as well.
- Indigenous people aged 25–34 years were most likely to discharge from hospital against medical advice (11% in the Northern Territory and 5% in Australia).

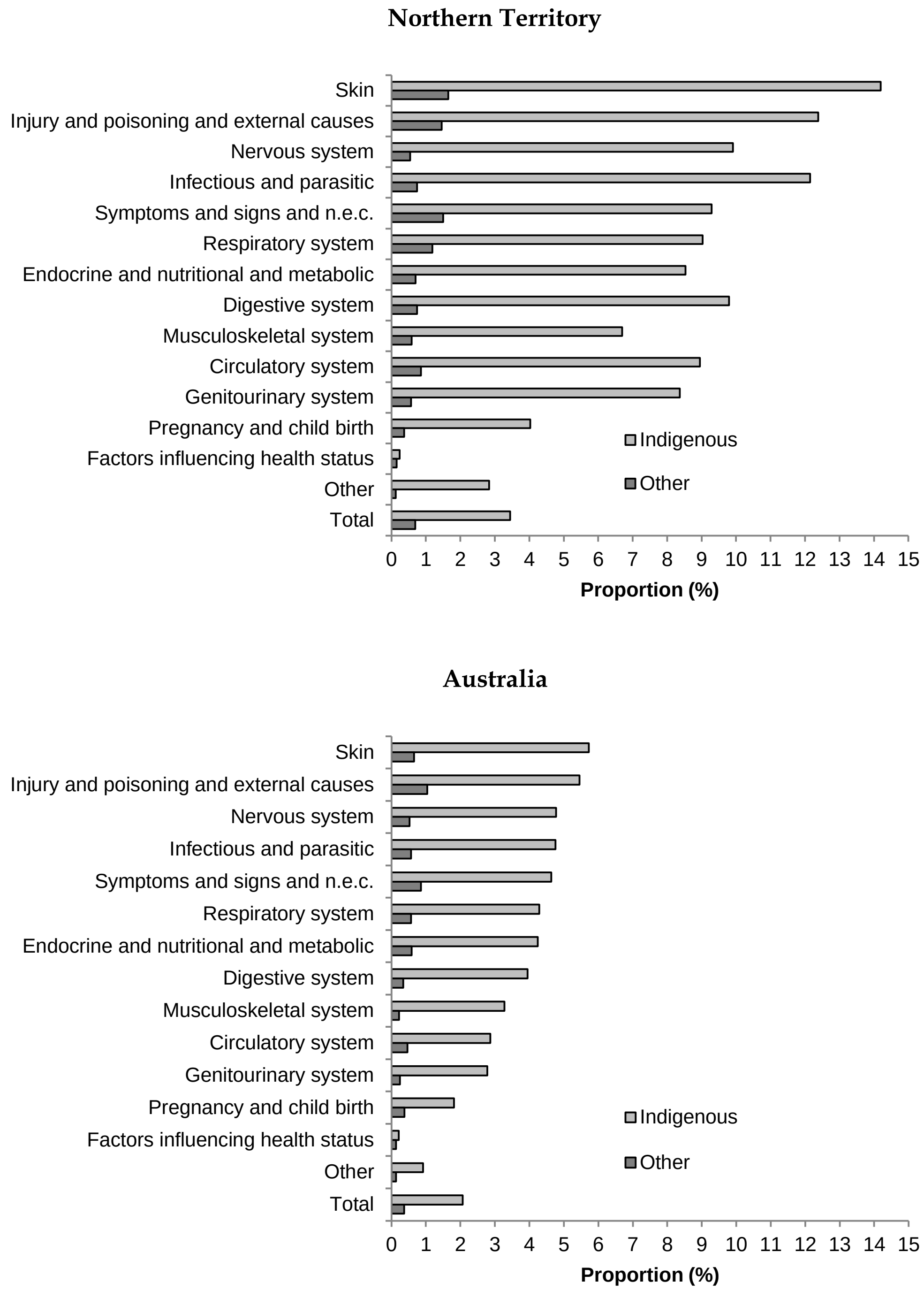


Source: AIHW analyses of NHMD.

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), Northern Territory and Australia, July 2006 to June 2008

Hospitalisations by diagnosis

- The most common principal diagnoses of hospitalisations for which Indigenous people in the Northern Territory discharged against medical advice were diseases of the skin (14%), followed by injury and poisoning and external causes (12%), and infectious and parasitic diseases (12%). Indigenous people discharged from hospital against medical advice at 16 times the rate of other people for infectious and parasitic diseases and nearly 9 times the rate of other people for diseases of the skin (8.6) and injury, poisoning and external causes (8.5) (Figure 3.08.2).
- In the Northern Territory, the greatest disparities between proportions of hospitalisations involving discharge against medical advice for Indigenous and other Australians were for other diseases (rate ratio of 23) and diseases of the nervous system (rate ratio of 18).
- The proportions of hospitalisations resulting in discharge against medical advice for Indigenous people were higher in the Northern Territory than in Australia for all principal diagnosis categories. For diseases of the circulatory system, diseases of the genitourinary system, and other diseases, discharge against medical advice for Indigenous patients in the Northern Territory was 3 times as likely as for other patients.



Note: n.e.c. not elsewhere classified.

Source: AIHW analyses of NHMD.

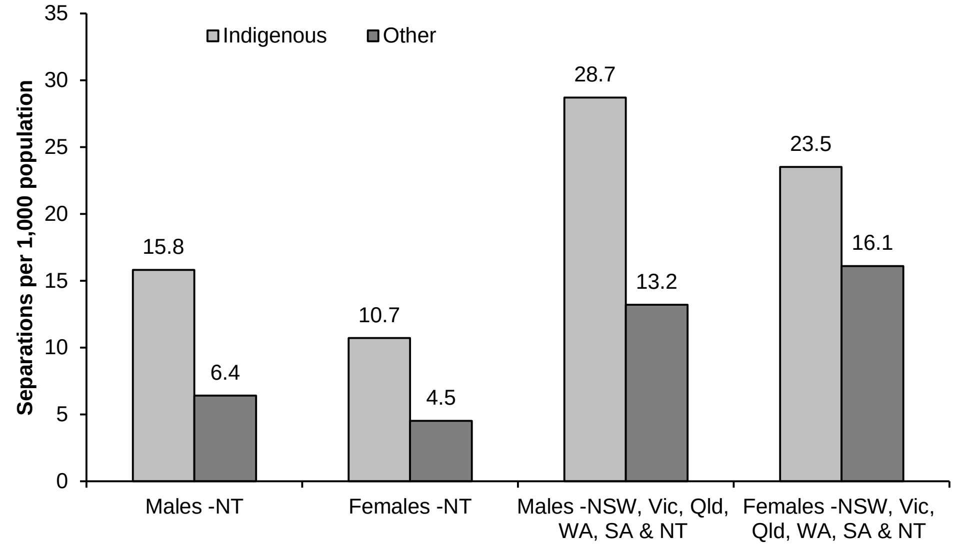
Figure 3.08.2: Per cent (age-standardised) of hospital episodes in which patients were discharged against medical advice, by Indigenous status and principal diagnosis (excluding mental and behavioural disorders), Northern Territory and Australia, July 2006 to June 2008

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

- In the 2-year period July 2006 to June 2008 in the Northern Territory, there were 8,696 hospitalisations of Indigenous people with a principal diagnosis of mental-health related conditions.
- Indigenous males and females were hospitalised for mental health related conditions at a higher rate than other males and females: Indigenous males were hospitalised at around two and a half (2.6) times the rate of other males, and Indigenous females were hospitalised at about twice (1.9 times) the rate of other 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 over twice (2.2 times) the rate of other males, while the rate for Indigenous females was one and a half times the rate of other females.



Source: AIHW analyses of NHMD.

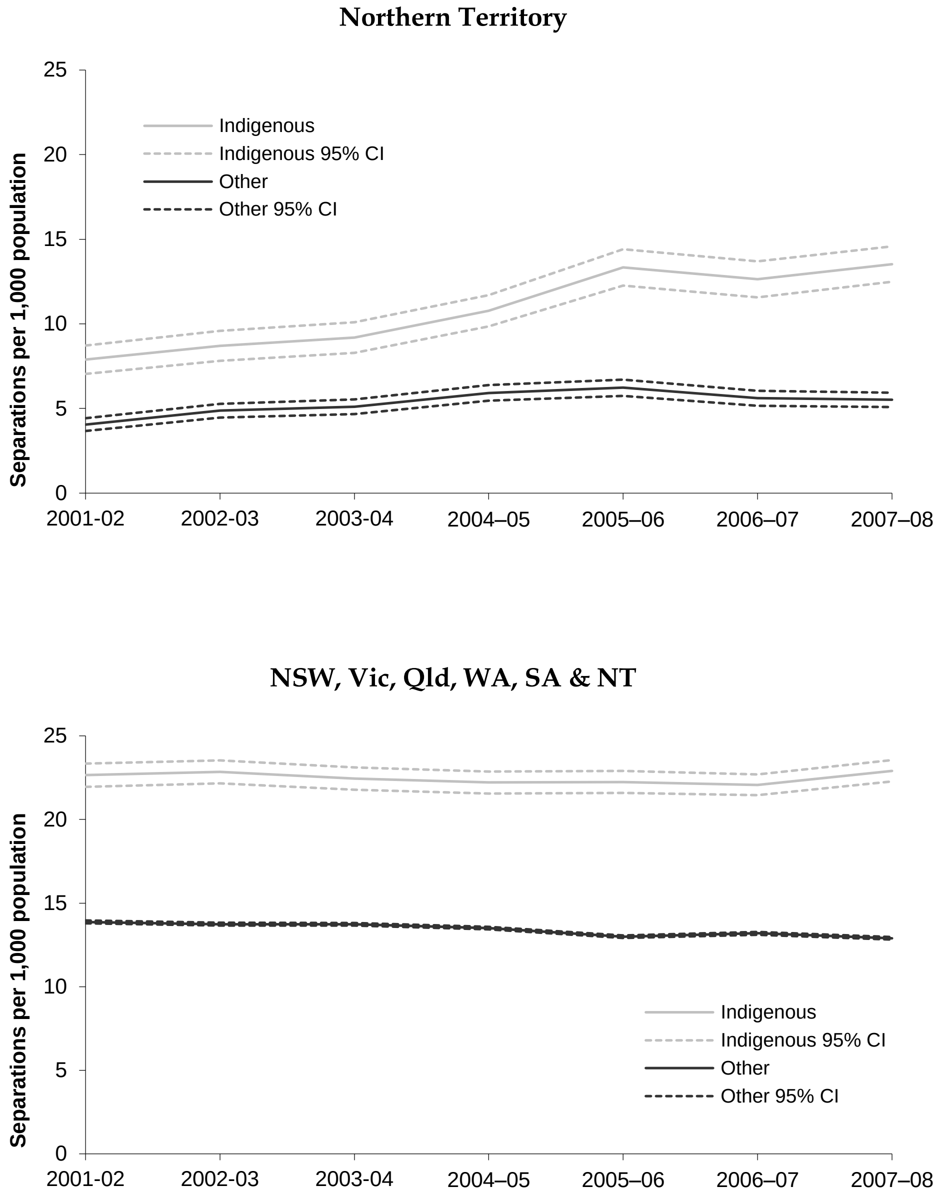
Figure 3.09.1: Age-standardised hospitalisation rates for principal diagnosis of mental health-related conditions by Indigenous status and sex, Northern Territory and NSW, Vic, Qld, WA, SA & NT combined, July 2006 to June 2008

Hospitalisation trends

- In the Northern Territory there were significant increases in hospitalisation rates for mental health related conditions among Indigenous and other people during the period 2001–02 to 2007–08. There was an average yearly increase in the rate of 1.0

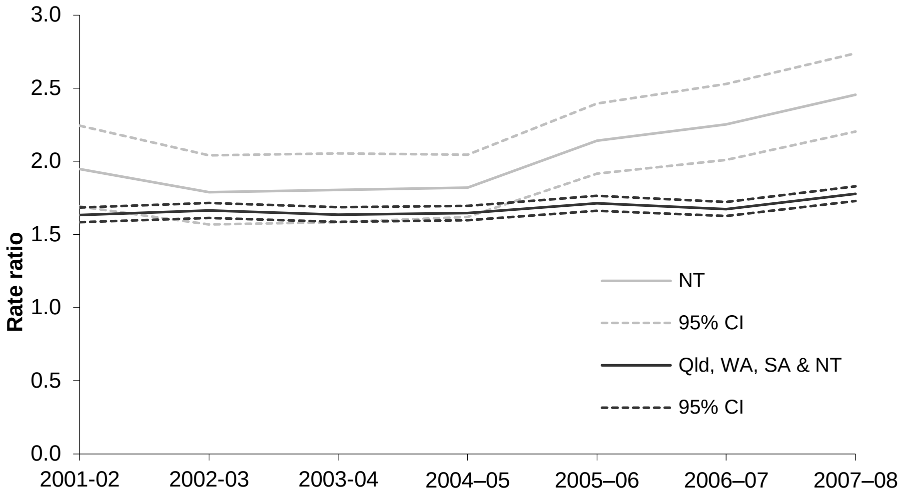
hospitalisations per 1,000 population for Indigenous people and 0.2 per 1,000 for other people (Figure 3.09.2).

- In Queensland, Western Australia, South Australia and the Northern Territory combined there was no significant change in hospitalisation rates for mental health related conditions among Indigenous people over the same period. The hospitalisation rate of other people decreased significantly, with an average yearly decline in the rate of 0.2 per 1,000.
- There were significant increases in the hospitalisation rate ratios between Indigenous and other Australia hospitalisation rates for mental-health related conditions in the Northern Territory and in the four jurisdictions combined (Figure 3.09.3).



Source: AIHW analyses of NHMD.

Figure 3.09.2: Hospitalisation rates from mental health-related conditions by Indigenous status, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08



Source: AIHW analyses of NHMD.

Figure 3.09.3: Hospitalisation rate ratios between Indigenous and other Australians from mental health-related conditions, Northern Territory and Qld, WA, SA & NT combined, 2001–02 to 2007–08

Community mental health care services

- In 2007–08, there were 11,159 client contacts with community mental health care services by people who identified as Aboriginal or Torres Strait Islander (31% of total service contacts) in the Northern Territory.
- In the Northern Territory, Indigenous people had slightly higher rate of contact with community mental health services than non-Indigenous people (172 compared to 157 per 1,000 population, with a rate ratio 1.1) (Table 3.09.1).
- In Australia, Indigenous people were two and a half times as likely as non-Indigenous people to have contact with community mental health care services. The number of service contacts per 1,000 population of Indigenous people in the Northern Territory was much lower than in Australia (172 compared to 737 per 1,000).

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

	Northern Territory	Australia
	Number	
Indigenous	11,159	362,429
Non-Indigenous	21,081	5,577,420
Not stated	3,906	434,418
Total	**36,146**	**6,374,267**
	Rate per 1,000 population (a)	
Indigenous	172	737
Other Australians(b)	157	294
Ratio(c)	1.1	2.5
Total	**161**	**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.

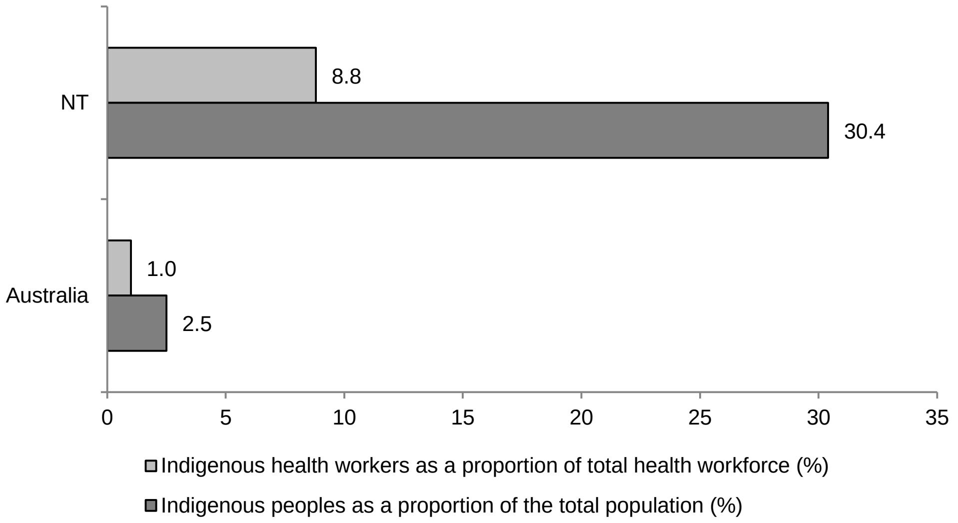
Note: Shading indicates that the Indigenous identification in the National Community Mental Health Care Database (NCMHCD) in these jurisdictions is in need of improvement. This is based on information provided by state and territory health authorities on the quality of their data in the NCMHCD. Data 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).

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 390 people aged 15 years and over in the Northern Territory who identified as Aboriginal or Torres Strait Islander who were employed in the health workforce.
- In 2006 in the Northern Territory, Aboriginal and Torres Strait Islander people aged 15 years and over accounted for around 9% of the total health workforce which was much lower than the proportion of the Northern Territory population that is Indigenous (30%).
- This is considerably higher than for Australia as a whole, where Aboriginal and Torres Strait Islander people accounted for 1.0% of the total health workforce and represented 2.5% of the total population.



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

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

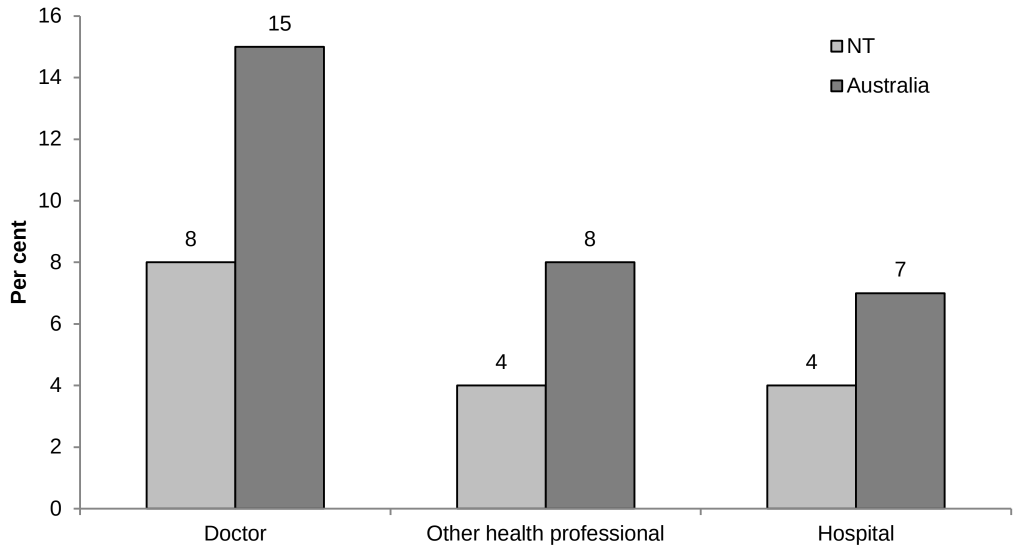
3.11 Competent governance

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

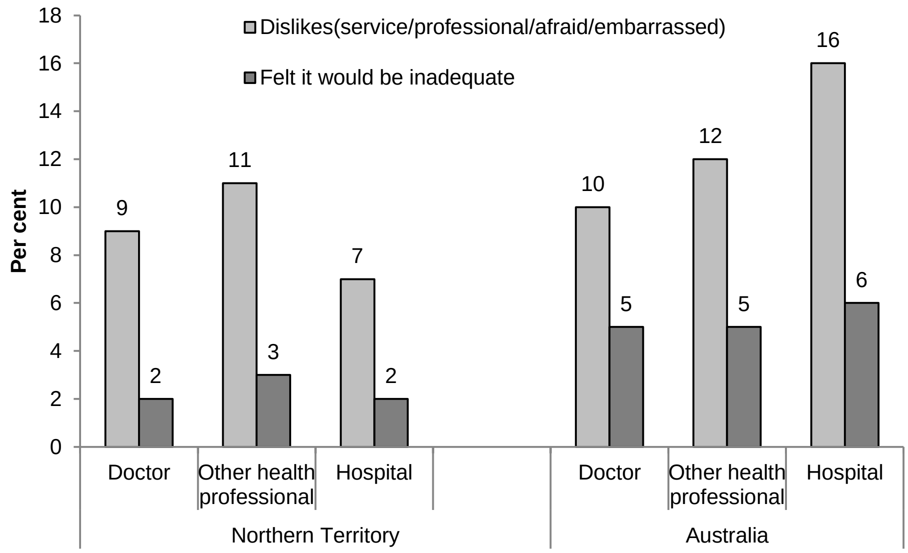
The 2004–05 National Aboriginal and Torres Strait Islander Health Survey collected data on the reasons why Indigenous Australians did not visit a doctor, hospital or other health professional in the last 12 months when they needed to.

- In 2004–05 in the Northern Territory, 8% of Indigenous Australians reported that they did not visit a doctor when needed in the last 12 months. Over the same period, 4% of Indigenous Australians reported that they did not visit other health professionals when they needed to and 4% reported that they did not visit a hospital when they needed to. These proportions are lower than those for Indigenous Australians in Australia (Figure 3.11.1).
- Of those Indigenous Australians in the Northern Territory who needed to visit a doctor but did not, approximately 9% reported that they did not go due to dislike of the service/professional, felt embarrassed or afraid; and 2% reported that they did not go because they felt the service would be inadequate (Figure 3.11.2). Among Indigenous Australians who needed to visit other health professionals but did not, these proportions were 11% and 3% respectively; and among Indigenous Australians who needed to visit a hospital but did not, these proportions were 7% and 2% respectively.



Source: AIHW analyses of NATSIHS 2004–05.

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



Source: AIHW analyses of NATSIHS 2004–05.

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

Aboriginal and Torres Strait Islander representation on health/hospital boards

Under the *Hospital Management Boards Act*, each public hospital in the Northern Territory is to have a board of eight members, five of whom are to be appointed by the Minister. Although the Act does not require hospitals to have Indigenous people on the boards, all Northern Territory hospitals make every effort to include Aboriginal members.

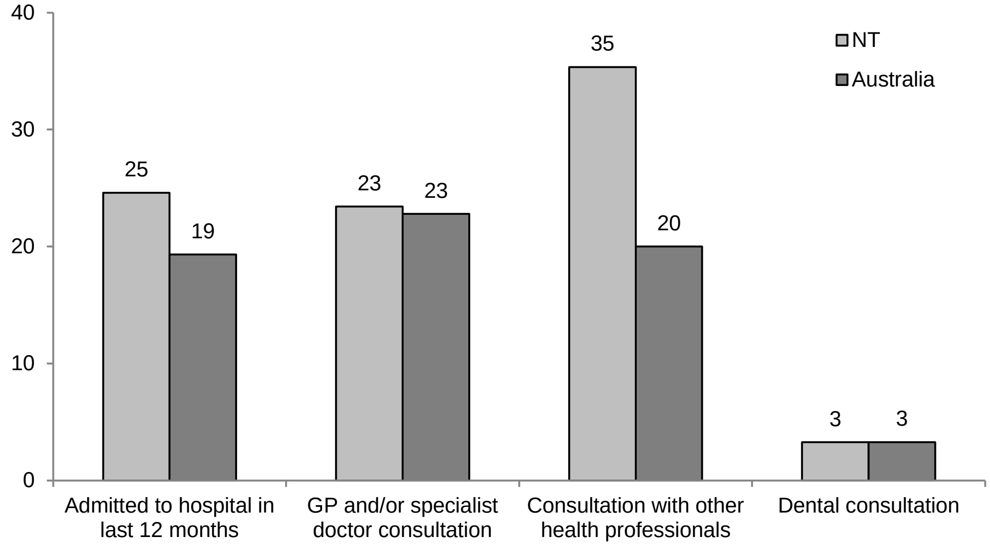
The Northern Territory has a wide array of representative health groups, many of which include Aboriginal representation and some of which require a majority of Aboriginal members. Examples of this latter group are the Northern Territory Aboriginal Ear Health Committee and the Northern Territory Aboriginal Eye Health Committee.

3.12 Access to services by types of service compared to need

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

Self-reported access to health care

- In 2004–05, a higher proportion of Indigenous Australians aged 15 years and over were admitted to hospital in last 12 months in the Northern Territory than in Australia (25% compared to 19%).
- In the two weeks prior to the NATSIHS in the Northern Territory, a similar proportion of Indigenous Australians aged 15 years and over consulted a GP and/or specialist doctor (23%), and consulted a dentist (3%) when compared to the proportions reported for the all Indigenous Australians aged 15 years and over in Australia.
- In the last two weeks, a higher proportion of Indigenous Australians aged 15 years and over consulted other health professionals in the Northern Territory (35%) than in Australia (20%).

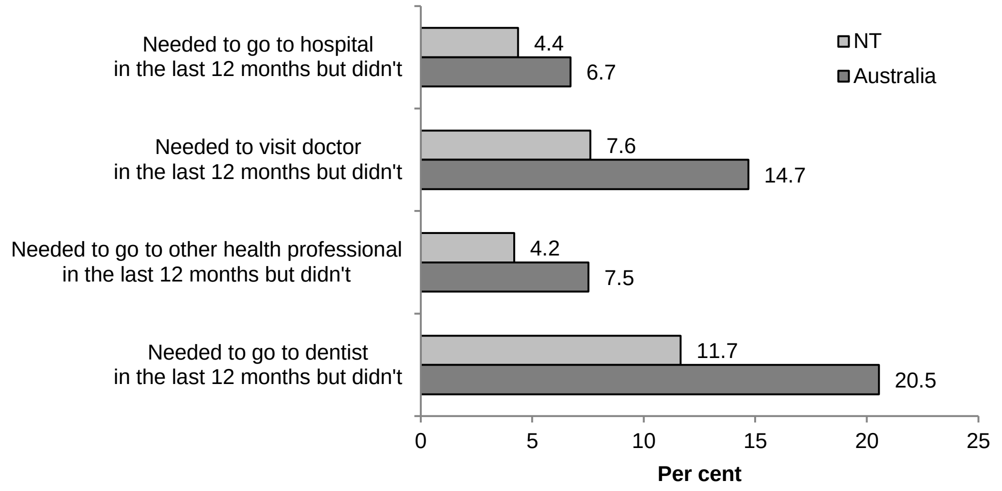


Source: ABS and AIHW analyses of NATSIHS 2004–05.

Figure 3.12.1: Per cent of Indigenous people aged 15 years 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), Northern Territory and Australia, 2004–05

Whether needed to access health care and reasons why did not

- In 2004–05, approximately 12% of Indigenous Australians in the Northern Territory reported they needed to go to a dentist in the last 12 months but did not, 8% needed to go to a doctor, 4% needed to go to other health professionals and 4% needed to go to hospital but did not.
- The proportion of Indigenous Australians who did not go to any of the above services when needed was lower than the corresponding proportion reported for Australia (21% for dentist, 15% for doctor, 8% for other health professional, and 7% for hospital).
- The most common reasons why Indigenous people in the Northern Territory did not go to a dentist when needed were transport/distance and the service was not available in the area (both around 33%). In comparison, for Indigenous people in Australia the most common reasons why a dentist was not visited when needed was cost (29%), followed by waiting time being too long or not available at the time required (22%).
- The most common reason why Indigenous people in the Northern Territory did not go to a doctor when needed was transport/distance (40%), followed by the service was not available in the area (21%). In comparison, the most common reason why Indigenous people across Australia did not go to a doctor when needed was decided not to seek care (26%), and too busy (24%).
- The most common reason why Indigenous people in the Northern Territory did not go to other health professionals when needed was being too busy (29%), followed by deciding not to seek care (18%), and service not available in the area (17%).
- The most common reason why Indigenous people in the Northern Territory did not visit a hospital when needed was transport/distance difficulties (53%), followed by the service being not available in the area (17). For all the Indigenous people in Australia, the most common reasons why they did not go to a hospital when needed were deciding not to seek care (25%) and transport/distance difficulties (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, Northern Territory and Australia, 2004–05

Table 3.12.1: Whether needed to go to a doctor, hospital, dentist or other health professional, by reasons did not go, Aboriginal and Torres Strait Islander peoples, Northern Territory and Australia, 2004–05

	Doctor		Hospital		Dentist		Other health professional	
	Northern Territory	Aust.	Northern Territory	Aust.	Northern Territory	Aust.	Northern Territory	Aust.
	%	%	%	%	%	%	%	%
Needed to go to service in the last 12 months but did not	8	15	4	7	12	21	4	8
Reasons did not visit								
Cost	6	12	7	4	8	29	9	28
Transport/Distance	40	14	53	19	33	11	15	8
Waiting time too long or not available at time required	16	14	7	16	21	22	13	9
Not available in area	21	4	17	3	33	8	17	7
Too busy (including work, personal or family responsibilities)	11	24	11	16	15	14	29	25
Dislikes (service/professional/afraid /embarrassed)	9	10	7	16	22	21	11	12
Felt it would be inadequate	2	5	2	6	1	2	3	5
Decided not to seek care	16	26	13	25	8	13	18	17
Other	10	11	13	15	7	8	12	12

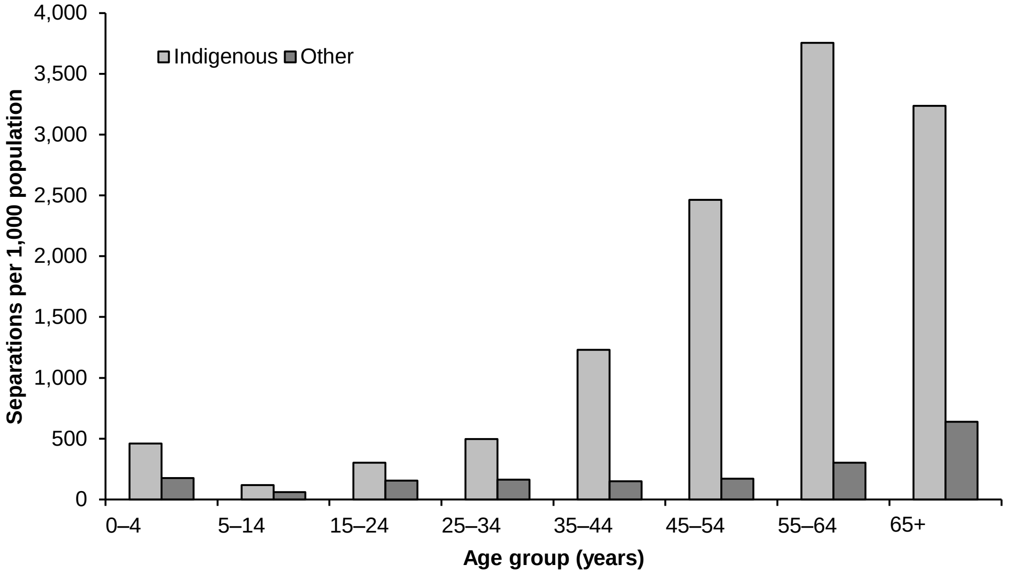
Source: ABS and AIHW analyses of NATSIHS 2004–05.

Hospitalisations

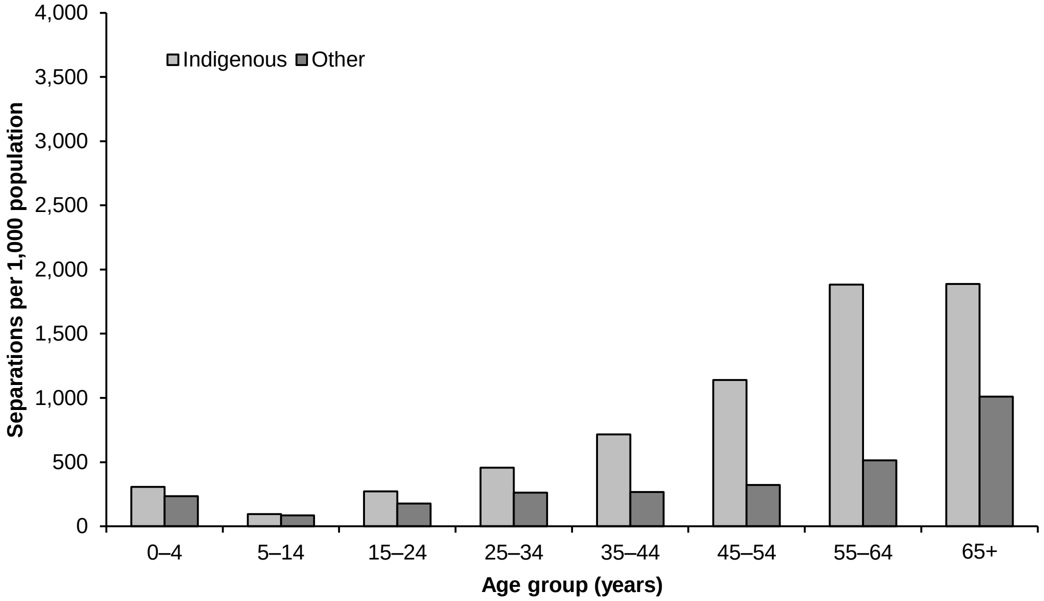
Hospitalisations by age

- In the 2-year period from July 2006 to June 2008 in the Northern Territory, Indigenous people had higher hospitalisation rates than other people across all age groups.
- In the Northern Territory hospitalisation rate was highest among those aged 55–64 years for Indigenous people (3,755 per 1,000), and among those aged 65 years and over for other people (639 per 1,000).
- Hospitalisation rates for Indigenous people were higher in the Northern Territory than in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined across all age groups.
- The greatest difference in hospitalisation rates between Indigenous and other people in the Northern Territory occurred in the 45–54 and 55–64 year age groups where Indigenous people were hospitalised at 14 and 12 times the rate of other people in these age groups respectively. A similar pattern was evident in the six jurisdictions combined however the rate ratios were lower, with Indigenous people in the 45–54 and 55–64 year age groups hospitalised at around three and a half times the rate of other people.

Northern Territory



NSW, Vic, Qld, WA, SA & NT



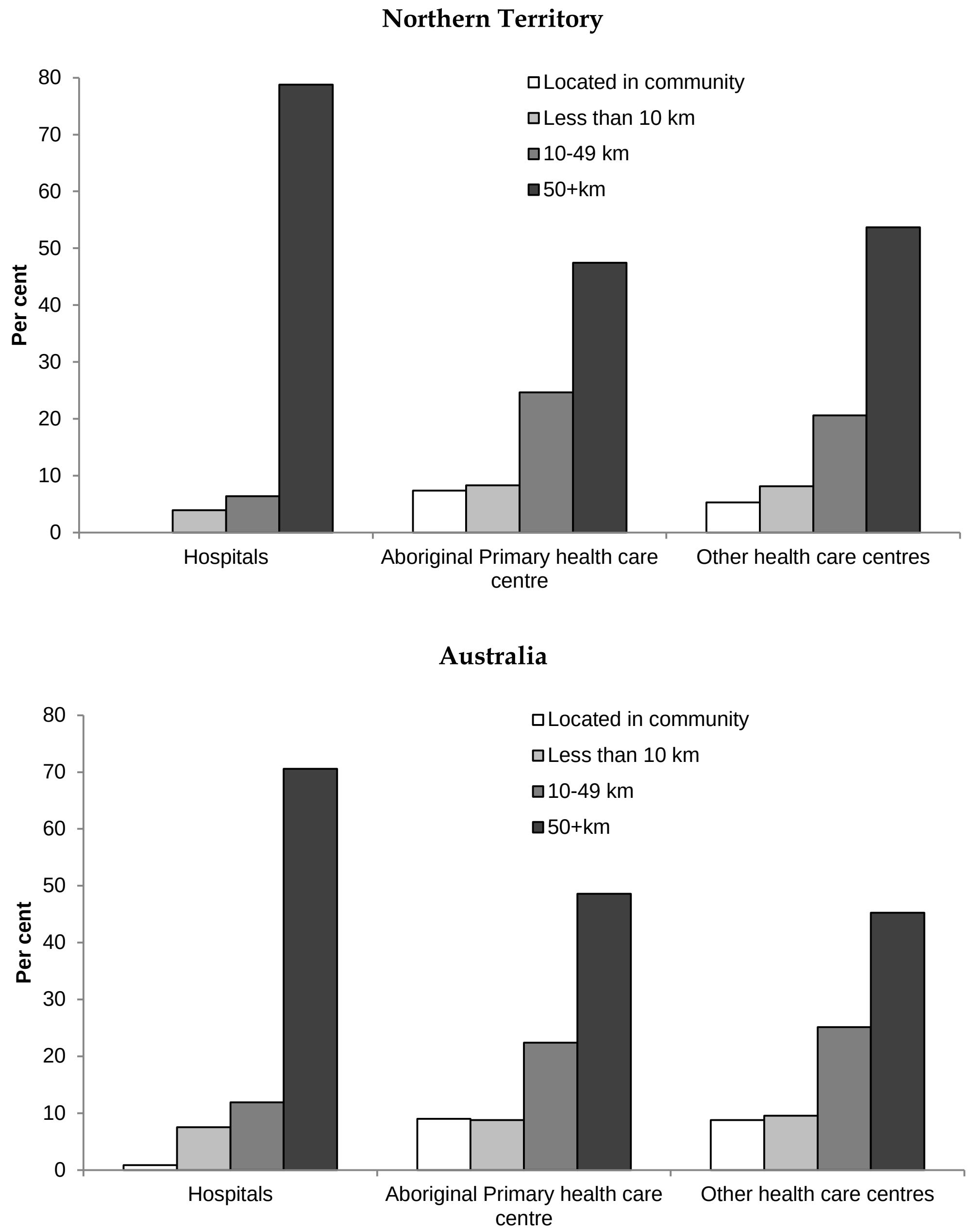
Source: AIHW analyses of NHMD.

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

Access to services—discrete Indigenous communities

The 2006 Community Housing and Infrastructure Needs Survey collected information on access to hospitals, Aboriginal Primary Health Care Centres and other (state-funded) health care centres.

- In 2006 in the Northern Territory, the majority of discrete Indigenous communities were located 50km or more from the nearest hospital, Aboriginal Primary Health Care Centre and other health care centres. No hospitals were located with communities and only 4% of communities had a hospital located within 10km. Around 7% of communities had an Aboriginal Primary Health Care Centre located in the community and 8% had an Aboriginal Primary Health Care Centre located within 10km. Approximately 5% of communities had other health care centres located in the community and 8% had other health care centres located within 10km.
- A similar pattern was observed for all Indigenous communities in Australia, where only 1% of discrete Indigenous communities had a hospital located in the community and 7% had a hospital located within 10km; 9% of communities had an Aboriginal Primary Health Care Centre located within the community and 9% had an Aboriginal Primary Health Care Centre located within 10km; and 9% of communities had other health care centres located within the community and 10% had other health care centres located less than 10km away.



Northern Territory

Australia

Source: ABS cat no. 4710.0.

Figure 3.12.4: Proportion of discrete Indigenous communities with access to health services, by distance to health services, Northern Territory and Australia, 2006

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 why people present at after-hours emergency departments including difficulties accessing primary care during school and work hours.

- Over the 2-year period from July 2006 to June 2008 in the Northern Territory, there were 111,642 episodes of care provided after-hours in emergency departments, 49,657 (44%) of which were for patients identified as Aboriginal or Torres Strait Islander. Almost half of all presentations to emergency departments by Indigenous patients (48%), and 43% of all presentations to emergency departments by non-Indigenous patients were for after-hours care (Table 3.14.1).
- There were 68,173 episodes of after-hours care provided by emergency departments for triage categories 4 (semi-urgent) and 5 (non-urgent) in the Northern Territory, 30,035 (44%) of which were for patients identified as Aboriginal and Torres Strait Islander. Around 45% of episodes to emergency departments for triage categories semi-urgent and non-urgent were after-hours for Indigenous Australians compared to 40% for non-Indigenous Australians.
- Around 60% of Indigenous presentations to emergency departments after-hours in the Northern Territory 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, Northern Territory and Australia, 2004–05 to 2005–06

	Semi-urgent & non-urgent		Total presentations	
	NT	**Australia**	**NT**	**Australia**
After-hours presentations				
Indigenous	30,035	139,703	49,657	225,183
Non-Indigenous	37,888	2,711,173	61,611	4,703,231
Not stated	249	119,030	374	214,801
Total	**68,173**	**2,969,907**	**111,642**	**5,143,215**
Total emergency department presentations				
Indigenous	66,331	302,457	103,892	467,115
Non-Indigenous	95,071	5,889,981	143,118	9,915,822
Not stated	476	246,337	698	432,767
Total	**161,878**	**6,438,775**	**247,708**	**10,815,704**
	Proportion of after-hours presentations out of all presentations to ED			
Indigenous	45.3	46.2	47.8	48.2
Non-Indigenous	39.9	46.0	43.0	47.4
Not stated	52.3	48.3	53.6	49.6
Total	**42.1**	**46.1**	**45.1**	**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 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.
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 2005–06. Therefore this data will only cover a sub-set of after-hours emergency episodes of care.

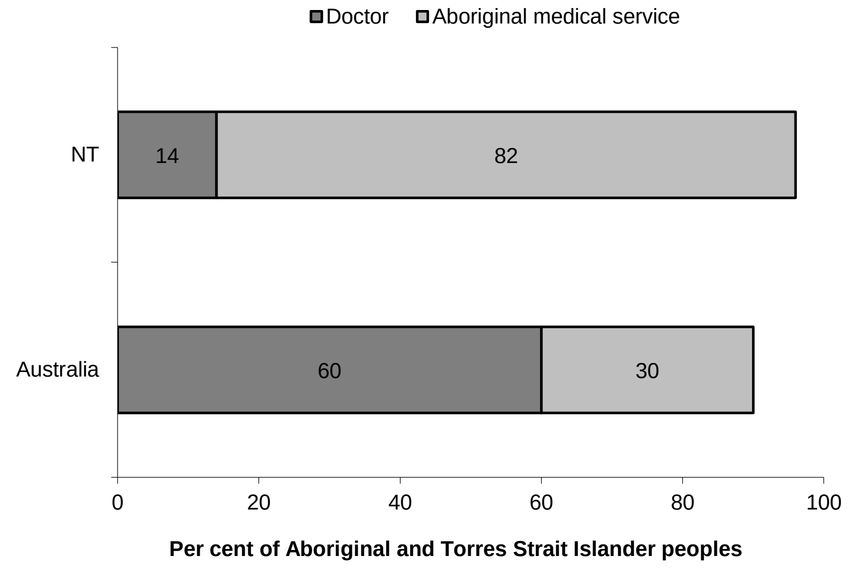
Source: AIHW analyses of National Non-admitted Patient Emergency Department Care Database (NAPEDCD).

3.15 Regular GP or health service

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

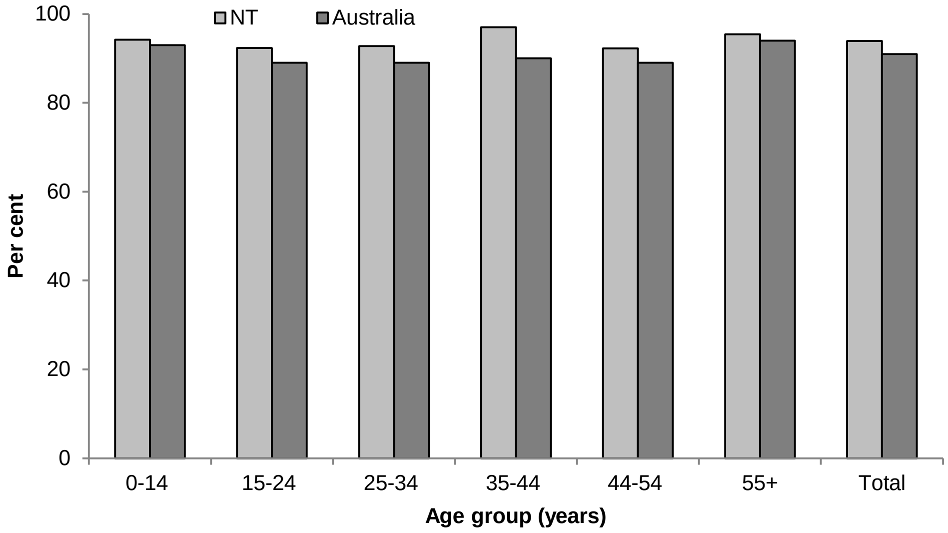
Whether visited same doctor/health service

- In 2004–05 in the Northern Territory, 14% of Indigenous people reported that they usually went to a doctor if they had a problem with their health, and 82% reported that they went to an Aboriginal medical service if they had a problem with their health.
- A very different pattern was observed nationally, where 60% of Indigenous Australians went to a doctor if they had a problem with their health, and 30% went to an Aboriginal medical service (Figure 3.15.1).
- Indigenous Australians aged 35–44 years in the Northern Territory were most likely to report that they usually went to the same doctor or health service (97%), followed by Indigenous Australians aged 55 years and over (95%) (Figure 3.15.2).
- Overall, a higher proportion of Indigenous Australians in the Northern Territory (94%) reported that they usually went to the same doctor or medical service than Indigenous people in Australia (91%).



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, Northern Territory 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, Northern Territory 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, approximately 1% of Indigenous Australians in the Northern Territory in *Non-remote* areas reported having asthma as a long term condition. This was much lower than the national prevalence of asthma reported by Indigenous Australians (18%) (Table 3.16.1).
- Of people with asthma in *Non-remote* areas, 25% of Indigenous people in the Northern Territory and Australia had a written asthma plan.
- The proportion of Indigenous people in the Northern Territory with asthma who had a written asthma plan was highest among those aged 5–14 years and 35–44 years (39% and 40% 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, Northern Territory and Australia, 2004–05

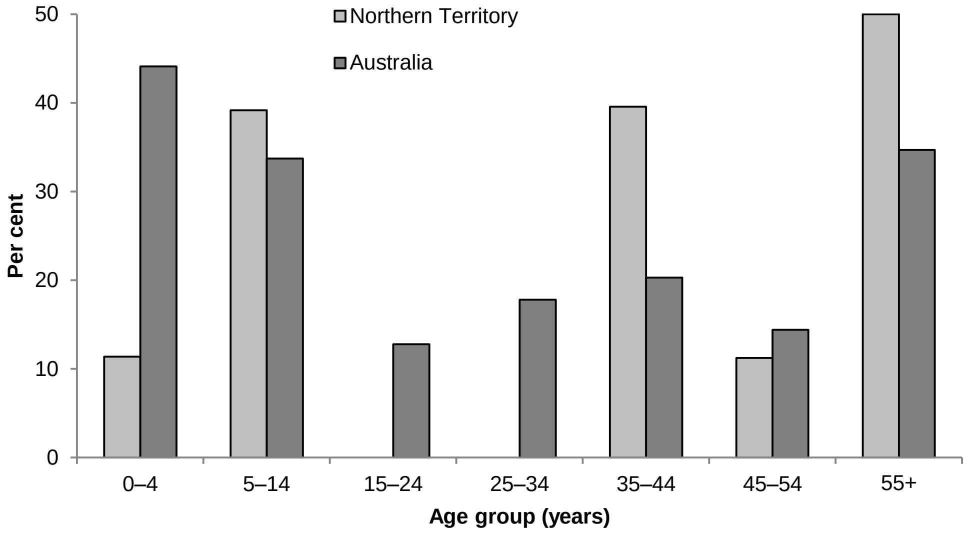
Jurisdiction	Does have a written asthma action plan	Does not have a written asthma action plan	Never heard of a written asthma action plan	Total[(a)]	Total with asthma	Total people with asthma
	%	%	%	%	%	No.
Northern Territory[(b)]						
Indigenous	24.8	72.1	3.1	100.0	0.7	983
Non-Indigenous	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Rate ratio	. .	. .	. .	. .	. .	. .
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 Australians and 0.5% of non-Indigenous Australians with asthma in *Non-remote* areas.

(b) Non-Indigenous data for Northern Territory not presented due to small sample size.

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 age group, Indigenous people, *Non-remote* areas, Northern Territory and Australia, 2004–05

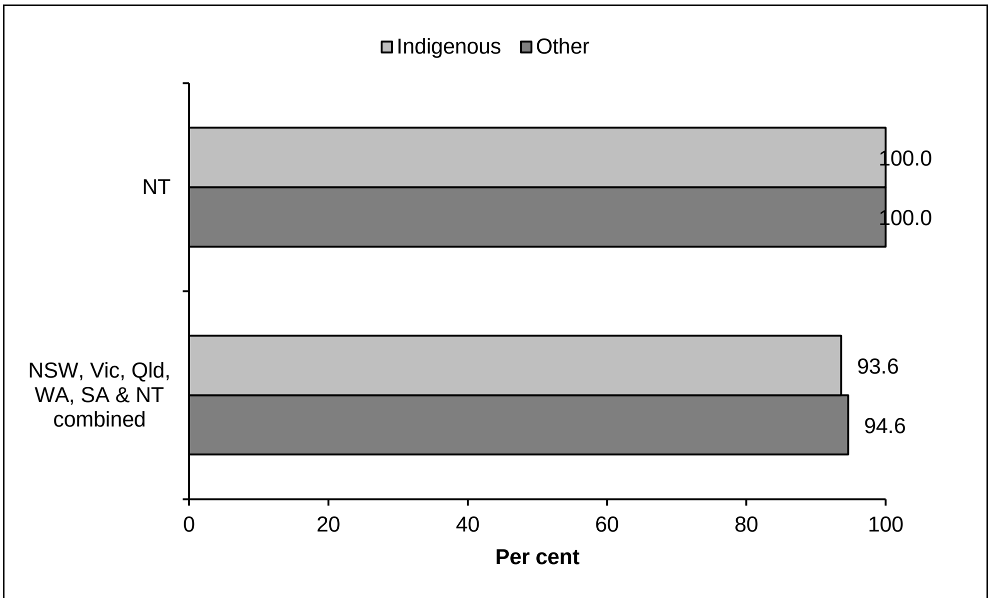
3.17 Accreditation

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 the Northern Territory, 100% of hospital admitted episodes for Indigenous and other people occurred in accredited hospitals.
- 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 to 95% of episodes for other people.

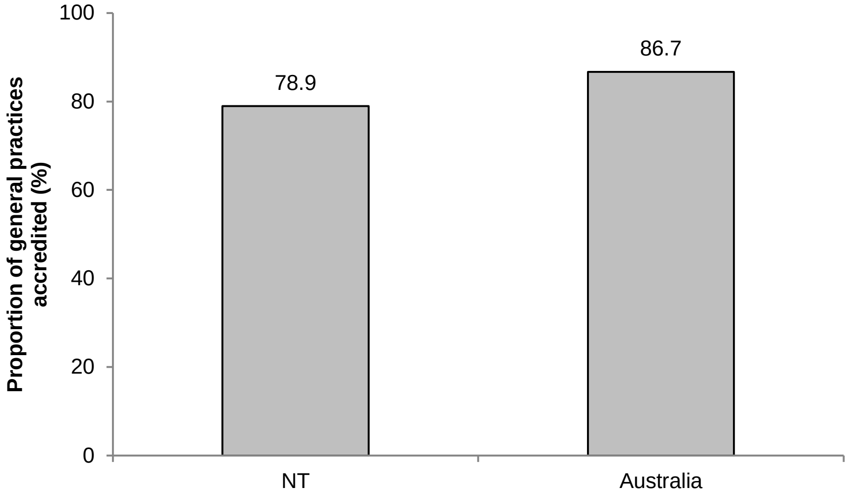


Source: AIHW analyses of National Public Hospitals Establishement Database.

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

General practice accreditation

- In 2008–09 in Northern Territory, 45 general practice divisions were accredited and 12 divisions were registered but not yet accredited. The proportion of accredited divisions among all the registered divisions was 79%, compared to 87% in Australia.



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, Northern Territory and Australia, 2008–09

3.18 Aboriginal and Torres Strait Islander peoples 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 the Northern Territory:
  - there were 166 enrolments in health-related courses by Indigenous undergraduate students. This made up 12.7% of total undergraduate enrolments
  - there were 15 completions in health-related courses by Indigenous undergraduate students. This made up 8.3% of total undergraduate completions in health-related courses (Table 3.18.1).
- In Australia, enrolments in health-related courses by Indigenous undergraduate students made up 1.6% of total undergraduate enrolments in health-related courses. Completions in health-related courses by Indigenous undergraduate students made up 1.0% of total undergraduate completions in health-related courses.
- In the Northern Territory, most enrolments of health-related courses by Indigenous undergraduate students were in public health (89 enrolments) and nursing (76 enrolments). Nationally, nursing and public health were also the most common types of health-related courses in which Indigenous students were enrolled or had completed.
- In the Northern Territory and Australia, public health had the highest Indigenous representation of all health-related university courses (100% of enrolments in the Northern Territory, 6.6% of enrolments and 6.2% of completions in Australia).

Table 3.18.1: Number of undergraduate students enrolled and completed health-related courses in the Tertiary Education sector, by qualification type, Northern Territory 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 (%)
Northern Territory						
Medical studies	0	0	. .	0	0	. .
Nursing	76(b)	1,131(b)	6.7	n.p.	166	n.p.
Pharmacy	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.
Dental studies	0	0	. .	0	0	. .
Optical science	0	0	. .	0	0	. .
Public health	89	89	100.0	n.p.	n.p.	n.p.
Radiography	0	0	. .	0	0	. .
Rehabilitation therapies	n.p.	n.p.	n.p.	0	0	. .
Total(a)	166	1,307	12.7	15	180	8.3
Australia						
Medical studies	128	12,165	1.1	13	2,024	0.6
Nursing	582(b)	32,807(b)	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 take 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 the Northern Territory, there were 600 Indigenous students enrolled in health-related courses in the VET sector and 26 Indigenous students who completed a health-related course in the VET sector. This made up 53% and 23% of total VET enrolments and completions in health-related courses respectively (Table 3.18.2).
- In 2008 in Australia, there were 6,143 Indigenous students enrolled in health-related courses in the VET sector, and 395 Indigenous students who completed a health-related course in the VET sector. This made up 6.4% and 3.8% of total VET enrolments and completions in health-related courses respectively.
- In the Northern Territory, the most common type of health-related course in which Indigenous VET students were enrolled or had completed in 2008 was public health (345 enrolled and 16 completed). Public health was also the most common type of health-related course in which Indigenous VET students in Australia were enrolled or had completed in 2008.
- In the Northern Territory, public health had the highest Indigenous representation for enrolments of all VET health-related courses in 2008 (88%). Nationally public health also had the highest Indigenous representation for enrolments (11%).

Table 3.18.2: Vocational education and training (VET) sector students enrolled and completed health-related courses, Northern Territory 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 (%)
			Northern Territory			
Medical studies	0	0	. .	0	0	. .
Nursing	6	86	7.0	n.p.	62	3.2
Pharmacy	0	0	. .	0	0	. .
Dental studies	n.p.	n.p.	n.p.	0	n.p.	0.0
Optical science	0	n.p.	0.0	0	0	. .
Public health	345	394	87.6	16	38	42.1
Rehabilitation therapies	0	0	. .	0	0	. .
Complementary therapies	0	0	. .	0	0	. .
Other health	247	639	38.7	n.p.	n.p.	57.1
Total	**600**	**1,136**	**52.8**	**26**	**115**	**22.6**
			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 to 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 the Northern Territory, the territory government was estimated to have spent, on average, $6,280 per Indigenous person compared with $1,808 per non-Indigenous person. This represents an Indigenous/non-Indigenous expenditure ratio of 3.5:1. Overall throughout Australia, state/territory governments were estimated to have spent, on average, $3,846 per Indigenous people compared to $1,651 per non-Indigenous person, equating to an Indigenous/non-Indigenous expenditure ratio of 2.3:1.
- The Northern Territory government spent more per person on Aboriginal and Torres Strait Islander peoples than on non-Indigenous people for all types of health goods and services. The highest expenditure per person for Indigenous and non-Indigenous people was for public hospital services ($4,209 and $1,177 respectively) followed by admitted patient services ($3,405 and $942 respectively). The same picture was evident nationally.

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

	Expenditure per person ($)			
	Northern Territory		Australia	
Health good or service type	**Indigenous**	**Non-Indigenous**	**Indigenous**	**Non-Indigenous**
Public hospital services				
Admitted patient services[(a)]	3,405	942	2,102	1,000
Non-admitted patients	804	234	627	282
Subtotal	*4,209*	*1,177*	*2,728*	*1,282*
Patient transport	352	103	194	76
Community health	1,018	226	665	174
Public health	634	140	155	55
Dental	64	36	59	26
Research	3	1	16	16
Health administration n.e.c.	0	0	. .	. .
Total	**6,280**	**1,808**	**3,846**	**1,651**
Indigenous: Non-Indigenous ratio	**3.5**	. .	**2.3**	. .

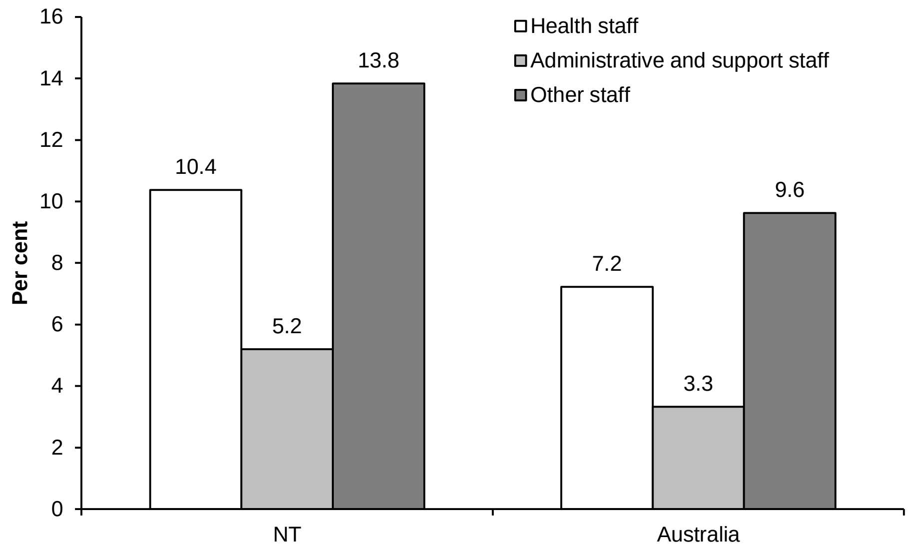
(a) Admitted patient expenditure adjusted for under-identification of Aboriginal and Torres Strait Islander people.

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 the 30 June 2008 in Northern Territory, 71.8 (10.4%) of full-time equivalent (FTE) health staff positions, 18.5 (5.2%) of administrative and support staff positions and 6.5 (13.8%) of other staff funded by the Australian Government were vacant.
- For Australia, 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 were vacant as at 30 June 2008.



Source: AIHW analyses of OATSIH Services Reporting data 2010.

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

Appendix 1 Data sources and quality

The Australian Childhood Immunisation Register

The Australian Childhood Immunisation Register (ACIR) is a national register that records details of vaccinations given to children under seven years of age who live in Australia. Immunisation coverage is produced at the national, state/territory and local level on a quarterly basis using the data recorded on the ACIR.

Coverage estimates for Aboriginal and Torres Strait Islander children include only those who identify as such and are registered on the ACIR. Children identified as Indigenous on the ACIR may not be representative of all Aboriginal and Torres Strait Islander children, and thus coverage estimates should 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 that the Australian Government is currently investigating.

Under-identification

General limitations of data available from the ACIR must be considered when used to estimate vaccination coverage. ACIR coverage estimates could overestimate or underestimate coverage, 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 data quality issues

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 approximately 99% of children are registered with Medicare by 12 months of age. A range of providers including general practitioners, councils, Aboriginal medical services and the state and territory health authorities notify Medicare Australia about immunisations.

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 National Immunisation Program Schedule (NIPS) for children born from 1 May 2004; the pneumococcal vaccine was added to the NIPS for children born from 1 January 2005; and the Rotavirus vaccine was added to the NIPS 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 this iteration of 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 years 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 years who are enrolled in Medicare as its denominator to calculate vaccine coverage rate (ABS and AIHW 2006). It is estimated that approximately 99% of children are registered with Medicare by 12 months of age. However, it is not currently possible to determine accurately whether this is true of the Indigenous Australian child population, nor whether Indigenous Australian children are less likely to be enrolled in Medicare. Children not registered with Medicare are added to the ACIR when a recognised immunisation provider supplies details of an eligible immunisation (DoHA 2006).

Australia and New Zealand Dialysis and Transplant Registry

The Australia and New Zealand Dialysis and Transplant Registry (ANZDATA) has supplied the data reported here on Indigenous people with end-stage renal disease (ESRD). 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, comorbidities 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

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 31st 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.

Community Housing and Infrastructure Needs Survey

The Community Housing and Infrastructure Needs Survey (CHINS) collects data from all Aboriginal and Torres Strait Islander housing organisations and discrete Aboriginal and Torres Strait Islander communities in Australia. The latest CHINS was enumerated from 1 March to 30 June 2006. The data were collected through personal interviews with key community and Indigenous Housing Organisation (IHO) representatives knowledgeable about housing and infrastructure issues. The Australian Bureau of Statistics (ABS) conducted the 2006 CHINS on behalf of, and with full funding from, the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA). Information collected includes:

- details of current housing stock, dwelling management practices and selected income and expenditure arrangements of Indigenous organisations that provide housing to Aboriginal and Torres Strait Islander people
- details of housing and related infrastructure, such as water, electricity, sewerage, drainage, rubbish collection and disposal, as well as other facilities such as transport, communication, education, sport and health services, available in discrete Aboriginal and Torres Strait Islander communities.

The 2006 information was collected on 496 IHOs which managed a total of 21,854 permanent dwellings. The majority of those dwellings were located in the Northern Territory (6,448), Queensland (6,230), New South Wales (4,176) and Western Australia (3,462). Information was also collected on 1,187 discrete Indigenous communities with a combined population of 92,960. Most of these communities were in Very remote regions of Australia, with 73% (865) having a population fewer than 50 people (ABS 2007a).

In the 2006 CHINS, a community questionnaire collected detailed infrastructure information from all discrete Indigenous communities with a reported usual population of 50 people or more. Information was also collected for communities which had a reported usual population of less than 50 people but which were not administered by a larger discrete Indigenous community or Resource Agency. There were 375 communities of this type. The 812 other communities which had reported usual populations of less than 50 people were asked a subset of questions from the community questionnaire form: the short community questionnaire (ABS 2007a).

Results from this survey were published in August 2007. FaHCSIA and the ABS jointly hold the CHINS data.

Selected data quality issues

The estimates are not subject to sampling error because the CHINS was designed as a complete enumeration of discrete Indigenous communities. However, data could not be obtained from a small number of communities. In addition, community representatives often estimated the community population without reference to records. Therefore, the data is subject non-sampling error.

Non-sampling errors which may affect the CHINS result include errors in reporting on the part of both respondents and interviewers due to a lack of knowledge of the data required, inability to provide accurate information or mistakes in recording responses to interview questions and errors arising during data processing.

In addition to the survey instrument and methodology testing conducted prior to the previous CHINS in 1999 and 2001, national, state and territory, and regional aggregate data from the 2006 CHINS have been compared with those collected in 2001. Various checks were conducted on related data items for consistency for the 2006 CHINS.

Further information on the CHINS can be found in the publication *Housing and infrastructure in Aboriginal and Torres Strait Islander communities, Australia 2006* (ABS 2007a).

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 that service providers collected based on the National Minimum Data Set for Community Mental Health Care.

In 2006–2007, 4.9% of service contacts of community mental health care services were for Aboriginal and/or Torres Strait Islander people.

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 between 25 and 35% of service contact records. Coverage for most other jurisdictions is estimated to be between 95 and 100% (AIHW METeOR).

The numerator includes people who receive a service in one jurisdiction but normally reside 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 the responsible agency for the Higher Education Statistics Collection, which includes information from higher education institutions such as universities and colleges of advanced education. This data collection contains statistics relating to students enrolled in higher education courses between 1 January and 31 December of each year in each Australian higher education provider.

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 postcode of home location. Using this variable results in participation rates incorrectly biased towards *Major cities* at the expense of *Regional and remote* areas because most campuses are in *Major cities*.

Selected data quality issues

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).

Institutions receive detailed written documentation about what information is required to be furnished in the form of an electronic help file. Universities design and produce their own statistical information (enrolment) forms. These are designed for institutions to use 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).

Approximately 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 held at the AIHW. The database 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.

In 2006–07 to 2007–08, emergency department s provided 10,815,704 episodes of care, 467,115 (4%) of which were for patients identified as Aboriginal or Torres Strait Islanders.

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 2008).

Selected other data quality issues

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, some states and territories provided data for some smaller hospitals.

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 these data will only cover a subset of emergency episodes of care.

The identification of Indigenous patients is not considered complete and varies among jurisdictions. This coverage estimate is likely to overestimate the level of coverage for Indigenous occasions of service 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 2008).

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

National Schools Statistics Collections 2009

Data for this measure come from the ABS National Schools Statistics Collection (NSSC). The NSSC is 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 the ABS publishes selected results annually 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 that the ABS has developed. 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 them 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

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, the Tasmanian Department of Education undertook processes 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, changes in such factors as the proportion of ungraded and/or mature-aged students from year to year may also noticeably affect the rates in the smaller jurisdictions. 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 data quality issues

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 2005).

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 are collected as part of the Perinatal National Minimum Data Set. Each state and territory has a perinatal collection based on birth notifications that midwives and other staff complete, 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 in the data collection. Over the period 2005–2007 there were approximately 11,100 ABS registered births to Indigenous fathers only, which represented 31% of registered Indigenous births (ABS 2006a, 2007b, 2008a).

Earlier years data 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 obtain Indigenous status information of mothers giving birth from admission records and how many collect this information independently. The assessment also involved analysis of the variability in the number and proportion of mothers recorded as Indigenous in the perinatal data collection over time and across jurisdictions for the period 1991–2004. The outcomes of this assessment showed that Indigenous status data from New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory are suitable for trends analysis. 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

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 to 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 of the Northern Territory. Due to 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 data quality issues

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 therefore overcomes 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, imperfect recall or individual interpretation of survey questions may affect some responses.

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 of Australia, including those living in *Remote* areas. The sample covered people aged 15 years 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 data quality issues

The NATSISS is conducted in all states and territories and includes *Remote* and *Non-remote* areas. The 2008 sample was 13,300 people in 6,900 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 years. 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 therefore may differ from information available from other sources or collected using different methodologies.

Data on health-related indicators have been age-standardised to the 2001 total Australian population to account for differences in the age structures of the states and territories and the Indigenous and non-Indigenous population.

Time series comparisons for the 2008 survey are available through the 1994 National Aboriginal and Torres Strait Islander Survey and the 2002 NATSISS. However not all data elements align across the 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 while the next survey will being 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. Where possible, the ABS has provided recommendations for non-Indigenous data comparisons and these have been adopted in this report.

The 2008 NATSISS has a relatively large level of under-coverage when compared to other ABS surveys. There was also an increase in under-coverage rate compared to previous ABS Indigenous surveys. For example, the estimated under-coverage in the 2004–05 National

Aboriginal and Torres Strait Islander Health Survey (NATSIHS) was 42%. The overall under-coverage rate for the 2008 NATSISS is approximately 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).

State/Territory Perinatal Collections

Data for this measure come from the state/territory-based perinatal collections ('midwives collections').

Each state and territory has a perinatal collection based on birth notification forms that midwives and other hospital staff complete, using information obtained from mothers and other hospital records. All jurisdictions record some aspects of most antenatal care, but the data collected vary by jurisdiction.

The Northern Territory, Queensland and South Australia collect data on the number of antenatal visits attended during pregnancy and the type of health-care professional consulted. New South Wales and the Northern Territory record the duration of pregnancy at the first antenatal session. Data on the use of antenatal care services were not available for the Australian Capital Territory, Victoria, Western Australia or Tasmania.

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

Selected data quality issues

Antenatal care data

All jurisdictions record self-reported information on some aspects of antenatal health status. The inventory of antenatal medical conditions reported on varies from jurisdiction to jurisdiction and they are not comparable.

Jurisdiction-level data are based on the state in which the birth has occurred, not the place of usual residence.

The current situation with regard to information on antenatal care visits is as follows:

Victoria, Tasmania and Western Australia and the Australian Capital Territory do not collect such information in their perinatal collections.

Data on the use of antenatal services by mothers was not collected in New South Wales. In 2007 NSW collected data for a new variable 'was antenatal care received', which should provide a more accurate picture of the use of antenatal sessions.

Queensland and South Australia did not collect data on the duration of pregnancy at the first antenatal visit, while New South Wales and the Northern Territory do record the duration of pregnancy at first antenatal visit.

The Northern Territory, Queensland and South Australia collect data on the number of antenatal care visits during pregnancy and the type of health-care professional consulted. However, the categories for the latter are not comparable.

The Northern Territory has experienced IT problems which make reporting difficult (personal communication), and data suffers from under-recording in Aboriginal communities.

All jurisdictions are working towards improving the quality of the Indigenous status data.

National Mortality Database

The National Mortality Database is a national collection of de-identified unit record level data. It comprises most of the information recorded on death registration forms and medical (cause of death) certificates, including Indigenous status. The Australian Institute of Health and Welfare (AIHW) maintains the database. The Registrars of Births, Deaths and Marriages provide information on the characteristics and causes of death of the deceased and the Australian Bureau of Statistics (ABS) codes this nationally. The medical practitioner certifying the death, or a coroner, supplies information on the cause of death. The data are updated each calendar year and are presented by state/territory of usual residence rather than state/territory where death occurs.

It is considered likely that most deaths of Aboriginal and Torres Strait Islander people are registered. However, by the family, health worker or funeral director does not report a proportion of these deceased as Aboriginal or Torres Strait Islander during the death registration process. That is, while 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 funeral director does not always ask the Indigenous status questionof relatives and friends of the deceased. Detailed breakdowns of Aboriginal and Torres Strait Islander deaths are therefore only provided for five jurisdictions—New South Wales, Queensland, South Australia, Western Australia and the Northern Territory (AIHW 2010a).

Deaths for which the Indigenous status of the deceased was not reported have been excluded from the analysis.

Additional revised 2007 and preliminary 2008 mortality data for this indicator were supplied by the ABS from the ABS Cause of Death database. For further information see *Causes of death, Australia, 2008* (ABS 2010c).

Data have been combined for the 5-year period 2004–2008 because of the small number of deaths from some conditions each year. Data have been analysed using the year of registration of death for all years. Note that the 2006 edition of this report used year of occurrence of death for all years of analysis except for the latest year of available data for which year of registration of death was used. Data published in this report may therefore differ slightly from those published in the previous edition for comparable years of data.

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 on the death registration. 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 being over-represented in unlinked death registrations, 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 2009a). 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 the period 2002–2006 using population estimates: New South Wales 45%, Victoria 32%, Queensland 51%, South Australia 62%, Western Australia 72%, Northern Territory 90%, Australia 55% (Tasmania and the Australian Capital Territory were not calculated because of small numbers) (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 current 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

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.

ABS Deaths Registration Database

The ABS Deaths Registration Database contains details of all deaths registered in Australia. This includes information on foetal (stillbirths) and neonatal deaths (deaths occurring in live births up to 28 days of age), by age of the baby, sex, state/territory of birth, Indigenous status and cause of death (ICD-10).

Data from the ABS Deaths Registration Database have been used in this measure, as cause of death can be ascertained and neonatal deaths are more comprehensively captured in this database.

Data are presented by state/territory of usual residence rather than state/territory of death. Although identification of Indigenous deaths is incomplete in all state and territory registration systems, the ABS and the AIHW have assessed four jurisdictions (Queensland since 1998, Western Australia, South Australia and the Northern Territory) as having adequate identification. These four jurisdictions represent approximately 60% of the Indigenous population of Australia.

Several years of data have been combined because of the small number of deaths from some conditions each year. The latest year for which mortality data are currently available is 2008.

The ABS defines the perinatal mortality rate as the number of foetal deaths (babies of at least 400 grams birthweight or a gestational age of at least 20 weeks) and neonatal deaths (death of a live birth which occurs during the first 28 days of life), and it is expressed as number of deaths per 1,000 live births during a given period. This definition of perinatal mortality is used in this report.

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, New South Wales, Victoria, South Australia, the Northern Territory and the Australian Capital Territory all have slightly different wording from the national standard for the instruction on those with both Aboriginal and Torres Strait Islander origin (ABS & AIHW 2005). Although the wording is only slightly different, it would be ideal to have all jurisdictions asking the question in exactly the same way. The National Perinatal Data Collection has more significant problems with compliance with the standard wording.

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 1997). As a result, the observed differences between Indigenous and non-Indigenous mortality are underestimates of the true differences.

Although the identification of Indigenous deaths is incomplete in all state and territory registration systems, the ABS and the AIHW have assessed four jurisdictions (Queensland, Western Australia, South Australia and the Northern Territory) as having adequate identification. Longer term mortality trend data are limited to three jurisdictions (Western Australia, South Australia and the Northern Territory) with over 10 years of adequate identification of Indigenous deaths in their recording systems. The late inclusion of a ‘not stated’ category for Indigenous status in 1998 has also influenced the quality of the time series data. 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 the period 2002–2006 using population estimates: New South Wales 45%, Victoria 32%, Queensland 51%, South Australia 62%, Western Australia 72%, the Northern Territory 90%, Australia 55% (Tasmania and the Australian Capital Territory were not calculated because of small numbers) (ABS 2007b).

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

Indigenous mortality rate for NSW is lower than the non-Indigenous mortality rate due to quality issue with Indigenous data for this state (ABS 2010c).

Other selected data quality issues

Deaths

The mortality rate for Indigenous Australians can be influenced by late registration of deaths, identification of Indigenous 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.

Numerator and denominator

The perinatal mortality rate also relies on birth registration data. Unfortunately, as with deaths, some Indigenous births are not correctly identified as Indigenous. The estimated identification of births as Indigenous in 2002–06 was 95%. Identification for the states and territories ranged from 83% for the Australian Capital Territory to 107% for the Northern Territory (ABS 2007b). Given that the identification is higher in births than deaths, it is likely that Indigenous perinatal mortality rates are underestimated.

The numerator and denominator are not based on the same collection or the same method of collection. Births are registered by the parents whereas death registration forms are completed by doctors and funeral directors. Therefore there would be inconsistency of Indigenous identification between the numerator and denominator.

Cause of death coding

Causes of death are based on the 10th revision of the International Classification of Diseases (ICD-10). Mortality coding using ICD-10 was introduced into Australia on 1 January 1997.

International data

International data are available for New Zealand, the United States and Canada using the WHO definition of perinatal mortality. However, the WHO definition differs markedly from the Australian definition of the perinatal period (see above) which was developed to be relevant for the Australian context. Therefore, Australian data include babies of at least at 400 grams (at least 20 weeks if birthweight is unavailable) whereas the WHO definition starts at 500 grams (22 weeks if birthweight is unavailable). In addition, the WHO defines perinatal deaths as less than 7 days whereas Australia includes deaths up to 28 days (Laws & Sullivan 2004). It would be possible to analyse Australian data on the WHO definitional basis, but it is not recommended for this performance measure.

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 under-count 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 data quality issues

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 under-counted (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 under-counts 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.

The AIHW collects these data each year 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 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 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, then 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 underestimates 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. State and territory health departments provide information annually to the AIHW on the characteristics, diagnoses and care of admitted patients in public and private hospitals.

Data are presented for the six jurisdictions that the AIHW has assessed 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 approximately 96% of the Indigenous population of Australia. Data are presented by state/territory of usual residence of the patient.

In the period 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 2-year 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

Some jurisdictions have slightly different approaches to the collection and storage of the standard Indigenous status question and categories in their hospital collections (AIHW 2005).

'Not stated' responses to the Indigenous status question were around 1% in public hospitals and 4% in private hospitals in 2007–08. This is a reduction from 1998–99 when 2% of responses in public hospitals and 8% of responses in private hospitals had a 'not stated' Indigenous status (AIHW 2009).

Under-identification

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Aboriginal and Torres Strait Islander people. A recent assessment of the level of Indigenous under-identification in hospital data in all states and territories implemented by the AIHW, suggests that 89% of Indigenous patients were correctly identified in Australian public hospital admission records in 2007–08 (AIHW 2010b). In other words, 11% of Indigenous patients were not identified, and the 'true' number of hospital admissions for Indigenous people was about 12% higher than reported. This assessment also indicates that all hospitals in New South Wales, Victoria, Queensland, Western Australia and South Australia and public hospitals in the Northern Territory have adequate Indigenous identification (80% or higher overall levels of Indigenous identification in public hospitals only) in their separations data.

For Tasmania and the Australian Capital Territory, the levels of Indigenous identification in hospital admission records in 2007–08 were not considered acceptable for analysis purposes. It has therefore been recommended that reporting of Indigenous hospital separations data before 2009–10 be limited to information from New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory, individually or in aggregate. These six jurisdictions cover 96% of the Indigenous population. The following caveats have also been recommended for analysis of hospitalisation data from selected jurisdictions (AIHW 2010b):

- Interpretation of results should take into account the relative quality of the data from the jurisdictions included.
- Interpretation of time series analysis should take into account the possible contribution of changes over time in ascertainment of Indigenous status to changes in hospitalisation rates for Indigenous people.
- Hospitalisation data for these six jurisdictions are not necessarily representative of other jurisdictions.

From the AIHW study, it was possible to produce correction factors for the level of Indigenous under-identification in hospital data for each jurisdiction and at the national level.

Under-identification by remoteness areas

There were acceptable levels of Indigenous identification for all remoteness areas, ranging from 80% in *Major cities* to 97% in *Remote* and *Very remote* areas. The quality of data supports analyses by remoteness areas, in aggregate, across states and territories. However, the sample size was insufficient to allow assessment of the quality of Indigenous identification by remoteness area within jurisdictions.

Selected other data quality issues

Separations

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

In all states and territories, the proportion of Aboriginal and Torres Strait Islander separations in public hospitals increased over the 11-year period 1996–97 to 2007–08, from 3.7% to 5.4%. In private hospitals, it stayed around 0.2% to 0.3% until 2003–04, when there was a modest increase to 0.5%.

OATSIH Services Reporting data collection

In 2008–09, the Australian Institute of Health and Welfare (AIHW) collected the data from the Aboriginal and Torres Strait Islander primary health care, substance use, and Bringing Them Home and Link Up counselling services funded by the Australian Government through the Office for Aboriginal and Torres Strait Islander Health (OATSIH). OATSIH-funded services include both Indigenous community controlled health organisations and non-community controlled health organisations. Note that the OATSIH Services Reporting (OSR) only includes Aboriginal and Torres Strait Islander health organisations that receive at least some Australian Government funding to facilitate access to primary health care.

This collection, referred to as the OSR data collection replaces the Service Activity Reporting (SAR), Drug and Alcohol Services Reporting (DASR), and Bringing Them Home and Link Up counselling data collections previously collected by the OATSIH.

The counting rules used in OSR data analyses treat each auspice service as a single service and this yields a larger numerator and denominator when calculating rates, whereas in earlier collections (SAR and DSAR) only the higher level service was counted. For example, a higher level service could have five auspice services under it and in OSR these will be counted as five individual services whereas in SAR and DSAR it was counted as a single service. While this change only marginally affects the aggregate rates, caution should be exercised when comparing rates with earlier data collection periods.

The OSR data collection included 211 Australian Government-funded Aboriginal and Torres Strait Islander primary health-care services. Service-level data on health care and health-related activities were collected by survey questionnaire for the 2008–09 financial year reporting period and provided data on episodes of care, service population, clients and staffing. Response rates to the OSR questionnaire by Aboriginal and Torres Strait Islander primary health-care services in 2008–09 were around 97%.

Of the 86 Bringing Them Home and Link Up counselling services, 81 (94%) responded to the OSR questionnaire, as well as five auspiced services. Many services providing Bringing Them Home and Link Up counselling are part of existing primary health-care or substance-use disorder-specific services.

Forty-five (90%) out of 50 substance-use disorder-specific services as well as three auspiced services responded to the OSR questionnaire.

Selected data quality issues

The data were collected using the OSR questionnaire, (surveying all auspiced services) which combined previously separate questionnaires for primary health, substance use, and Bringing Them Home and Link up counselling services.

OATSIH sent a paper copy of the 2008–09 OSR questionnaire to each participating service and asked the service to complete the relevant sections. The participating services sent their completed OSR questionnaires directly to the AIHW.

The AIHW examined all completed questionnaires received to identify any missing data and data quality issues. Where needed, AIHW staff contacted the relevant services to follow up and obtain additional or corrected data. After manually entering the data on the data repository system, staff conducted further data quality checks.

The AIHW identified three major problems with the data quality: missing data, inappropriate data provided for the question, and divergence of data from two or more questions. The majority of 2008–09 OSR questionnaires received had one or more of these data quality issues.

Further information can be found in the data quality statement in the *Aboriginal and Torres Strait Islander health services report, 2008–09* (AIHW 2010c).

Survey of Income and Housing

The ABS conducts the Survey of Income and Housing (SIH) every 2 years, with the first survey held in 1994–95. The survey was developed in order to provide broad aggregates for households within Australia. The current survey was conducted during the period of 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 years.

Selected data quality issues

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 survey in 2007–08 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 the survey did not cover households in *Very remote* areas. Data collected in the survey suggests that due to the small population in these areas it is likely this will have minimal impact.

Australian General Practice Accreditation Limited and the General Practice Accreditation Plus

Selected data quality issues

Australian General Practice Accreditation Limited (AGPAL)

AGPAL provides information on the total numbers of accredited practices and practices registered for accreditation. These data are published by Division of General Practice, but not Statistical Local Area (SLA).

General Practice Accreditation Plus (GPA+)

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

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