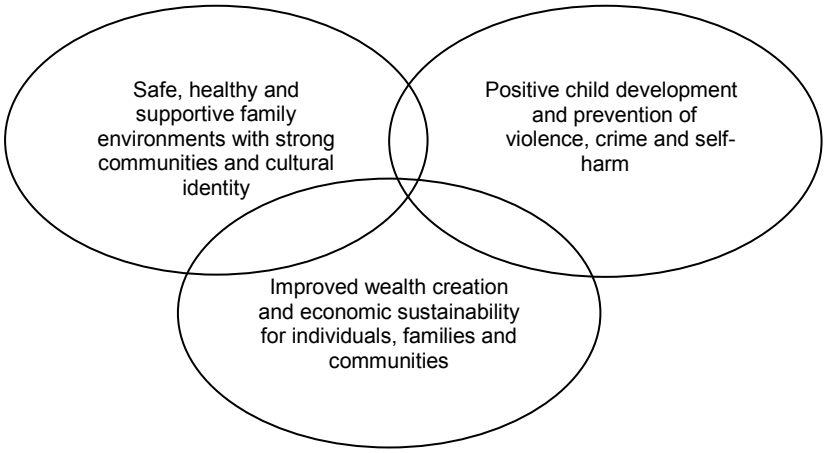
4 COAG targets and headline indicators



Headline indicators

COAG targets	Headline indicators
• Life expectancy • Young child mortality • Early childhood education • Reading, writing and numeracy • Year 12 attainment • Employment	• Post secondary education — participation and attainment • Disability and chronic disease • Household and individual income • Substantiated child abuse and neglect • Family and community violence • Imprisonment and juvenile detention

The three priority outcomes that sit at the top of the report's framework reflect COAG's vision for Indigenous Australians to have the same life opportunities as other Australians. The priority outcomes are interlinked — no single aspect of the priority outcomes can be achieved in isolation. 'Positive child development and prevention of violence, crime and self-harm' are key determinants in the achievement of 'safe, healthy and supportive family environments with strong communities and cultural identity'. Without these conditions in place, it is very difficult to achieve 'improved wealth creation and economic sustainability'.

The COAG targets and headline indicators reflect the extent to which this vision is becoming a reality. Like the priority outcomes themselves, there is a strong thread of interdependence in these indicators. Few of the COAG targets or headline indicators are likely to improve solely as the result of a single policy or a single agency. Positive change will generally require action across a range of areas.

These are generally high level indicators, and most would be expected to take some time to improve, even if effective policies were implemented in the strategic areas for action discussed in the following chapters:

- Life expectancy — life expectancy is a broad indicator of the long-term health and wellbeing of a population. Closing the Indigenous life expectancy gap within a generation is a COAG target (section 4.1)
- Young child mortality — young child mortality (particularly infant, or 0 to 1 year old, mortality) is an indicator of the general health of a population. Halving the gap in mortality rates for children under five within a decade is a COAG target (section 4.2)
- Early childhood education — children's experiences in their early years influence lifelong learning, behaviour and health. High quality early childhood education can enhance the social and cognitive skills necessary for achievement at school and later in life. Providing, within five years, access to high quality early childhood education for all Indigenous four year olds, including those in remote communities, is a COAG target (section 4.3)
- Reading, writing and numeracy — improved educational outcomes is seen as a key to overcoming many aspects of disadvantage. Halving the gap for Indigenous students in reading, writing and numeracy within a decade is a COAG target (section 4.4)
- Year 12 attainment — growing evidence emphasises the importance of continuing education after the period of compulsory schooling ends. At least halving the gap for Indigenous students in year 12 or equivalent attainment by 2020 is a COAG target (section 4.5)
- Employment — employment contributes to living standards, self-esteem and overall wellbeing. It is also important to families and communities. Halving the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade is a COAG target (section 4.6)
- Post secondary education, participation and attainment — an individual's education can affect employment prospects and incomes, but also their health, and the health of their children, as well as their ability to make informed life decisions (section 4.7)

- Disability and chronic disease — high rates of disability and chronic disease affect the quality of life of many Indigenous people. Disability and chronic disease can also affect other outcomes, by creating barriers to social interaction and reducing access to services, employment and education (section 4.8)
- Household and individual income — the economic wellbeing of families and individuals is largely determined by their income and wealth. Higher incomes can enable the purchase of better food, housing, recreation and health care. There may also be psychological benefits such as a greater sense of personal control and self-esteem (section 4.9)
- Substantiated child abuse and neglect — many Indigenous families and communities live under severe social strain, caused by a range of social and economic factors. Alcohol and substance misuse, and overcrowded living conditions are just some of the factors that can contribute to child abuse and neglect (section 4.10)
- Family and community violence — family and community violence problems are complex, and the impact of such violence may be felt from one generation to another (section 4.11)
- Imprisonment and juvenile detention — Indigenous people are over-represented in the criminal justice system, as both young people and adults. Poverty, unemployment, low levels of education and lack of access to social services are associated with high crime rates and high levels of imprisonment (section 4.12).

Attachment tables

Attachment tables for this chapter are identified in references throughout this chapter by an 'A' suffix (for example, table 4A.2.3). The attachment tables can be found on the Review web page (www.pc.gov.au/gsp), or users can contact the Secretariat directly.

4.1 Life expectancy

Box 4.1.1 **Key messages**

- Based on combined data for Australia for 2005–2007:
  - estimated life expectancy at birth for Indigenous males was 67.2 years, and for Indigenous females, 72.9 years. The corresponding estimates for non-Indigenous males and females were 78.7 years and 82.6 years, respectively (table 4.1.1 and figure 4.1.1)
  - the gap between Indigenous and non-Indigenous life expectancy at birth was 11.5 years for males and 9.7 years for females (table 4.1.1).
- Age specific death rates were higher for Indigenous than non-Indigenous people for all age groups for 2005–2007 (table 4.1.2).
- In Queensland, WA, SA and the NT combined, after adjusting for age differences in the two populations, for 2002–2006:
  - the Indigenous all causes mortality rate was 2.1 times the rate for non-Indigenous people (table 4.1.3)
  - Indigenous death rates were 8.8 times as high as non-Indigenous rates for diabetes, 5.7 times as high for cervical cancer, 4.2 times as high for kidney diseases and 3.3 times as high for digestive diseases (table 4.1.4).

The Council of Australian Governments (COAG) has committed to 'closing the life expectancy gap [between Indigenous and non-Indigenous Australians] within a generation'.[1] Life expectancy is an indicator of health status and refers to the average number of additional years a person of a given age and sex can expect to live, if current trends (age specific death rates[2]) were to continue throughout his or her lifetime. Life expectancy is widely viewed as a key measure of the health of populations. As well as being a fundamental health indicator, studies have found life expectancy to be highly correlated with a range of other factors including employment, education and overall economic wellbeing (Becker, Philipson and Soares 2003; Carson et al. 2007).

As well as data on life expectancy at birth, this section includes some additional information about Indigenous mortality:

- age specific death rates and median age at death
- age standardised mortality

1 Further information on COAG's commitments to addressing Indigenous disadvantage is included in appendix 1.

2 Age-specific death rates are the number of deaths registered (or occurring) during a calendar year at a specified age, per 100 000 of the estimated resident population of the same age (ABS 2006).

- mortality rate and excess deaths
- leading causes of death.

Life expectancy

Life expectancy is an indicator of the long-term health and wellbeing of Indigenous Australians. Improvements in outcomes across all of the strategic areas for action have the potential to affect life expectancy.

Disparities in life expectancy can be influenced by differences in income and education levels, access to quality health services, social factors and, to a lesser extent, environmental factors including overcrowded housing, lack of clean drinking water and inadequate sanitation (other sections of the report contain more information on some of these factors). Overcrowding of households (see section 9.1) can contribute to a range of poor health, educational, and safety outcomes for Indigenous people that may influence life expectancy (see diagram in chapter 3). Poor quality housing, including overcrowding, can increase psychological stress (AHMAC 2008). British research has shown that poor quality housing associated with significantly higher risk of high blood pressure and that long term exposure to an adverse environment, in this case poor quality housing in a cold climate, can damage health and increase the risk of stroke and coronary heart disease (Mitchell, Blane and Bartley 2002).

People from lower socioeconomic groups suffer from higher rates of ill health and death at younger ages, and are more likely to exhibit risky behaviours such as smoking and excessive alcohol consumption, poor nutrition, and lack of exercise (see sections 7.4, 7.5, 10.1 and 10.3), which, in turn, contribute to higher rates of chronic disease. Chronic diseases (for example, circulatory diseases, diabetes, kidney diseases, respiratory diseases and cancer) are responsible for 70 per cent of the health gap (ill health and mortality) between Indigenous and non-Indigenous people (Vos et al. 2007) and 59 per cent of excess mortality for Indigenous people (AHMAC 2008).

Improvements in Indigenous life expectancy may be achieved by promoting positive health behaviours. Positive cultural, social and economic factors all help to make healthy choices viable. Alternatively, poor community functioning, poverty, disadvantage and stress can lead to unhealthy behaviours — smoking, insufficient physical activity, poor nutrition, risky alcohol consumption and illicit drug use.

Improving access to high quality health services can have a positive impact on life expectancy through increased levels of preventative care, increased early diagnosis

of diseases (such as diabetes) and more effective treatment of chronic diseases (see sections 7.1 and 7.2).

Since the 2007 report was published, the ABS has used population data from the 2006 Census and Post Enumeration Survey, and death registrations data to estimate Indigenous and non-Indigenous life expectancy at birth for 2005–2007. In November 2008, the ABS released a discussion paper assessing various methods used to calculate life expectancy for Indigenous people (ABS 2008b). The ABS concluded that the indirect method that had been used to calculate Indigenous life expectancies included in the 2005 and 2007 editions of this report was no longer adequate and that previously published Indigenous life expectancy estimates for 1996–2001 may have been too low (although the disparity in outcomes between Indigenous and non-Indigenous people would still be substantial). However, it is not possible to recalculate identification rates for Indigenous deaths in earlier periods.

After consulting with experts and data users on the preferred method, the ABS has used a direct demographic method to derive Indigenous life expectancy estimates for 2005–2007. This method applies identification factors (obtained from the ABS Census Data Enhancement (CDE) Indigenous Mortality Quality Study) to death registrations data to adjust for under-identification of Indigenous people in death registrations (ABS 2009).

Despite the ABS's efforts to improve the accuracy of Indigenous life expectancy estimates, the underlying population and death registrations data have limitations. Therefore, life expectancy estimates included in this report are experimental and are reported with confidence intervals that reflect these limitations.

While the life expectancy estimates presented here are the best that can be compiled with currently available data, it is not possible to present time-series or trend statistics for Indigenous life expectancy. Differences between the 1996–2001 and 2005–2007 life expectancy estimates should not be interpreted as measuring changes in Indigenous life expectancy at birth over time.

Differences between the estimated life expectancies for Indigenous males and females and for Indigenous Australians in different states and territories should be interpreted with care as they are sensitive to the demographic assumptions and differential quality of death registrations data across states and territories. Due to the small number of Indigenous deaths in Victoria, SA, Tasmania and the ACT, it is not possible to produce life expectancy estimates for these states and territories.

Box 4.1.2 **Estimating Indigenous life expectancy**

Estimation of life expectancy requires complete and accurate data on deaths and reliable estimates of the population at risk of dying, by age and sex. Estimating life expectancy for Indigenous people is difficult because of inherent uncertainties in these data. Indigenous population estimates are derived from the Census. However, not all Indigenous people are counted in the Census, so the ABS uses information from the Post Enumeration Survey to make adjustments to the Census count in order to derive population estimates.

Identification of Indigenous deaths in death registrations data is incomplete and varies between states and territories. While it is expected that most Indigenous deaths are registered, not all are identified as Indigenous when they are registered. The ABS has linked Census records from 2006 and death records from August 2006 to June 2007 to estimate the identification rate of Indigenous deaths (ABS 2008c). Nationally, the ABS estimates the identification rate of Indigenous deaths at around 92 per cent (ABS 2009). (Indigenous identification in deaths data for the NT has been much more accurate since the 1960s — research on mortality over time in the NT is reported later in this section.)

Table 4.1.1 **Estimated Indigenous life expectancies at birth, 2005–2007**

	Life expectancy at birth		*95% confidence intervals*	
	Males	*Females*	*Males*	*Females*
NSW	69.9	75.0	68.6–71.2	73.9–76.1
Queensland	68.3	73.6	67.3–69.3	72.8–74.4
WA	65.0	70.4	63.8–66.2	69.4–71.4
NT	61.5	69.2	60.5–62.5	68.4–70.0
Australia[a]	67.2	72.9	66.3–68.1	72.1–73.7

[a] Includes all states and territories.

Source: ABS (2009); table 4A.1.1.

Based on data for 2005–2007, the estimated life expectancy at birth:

- for Indigenous males was 67.2 years; 11.5 years less than for non-Indigenous males (table 4.1.1, figure 4.1.1)
- for Indigenous females was 72.9 years; 9.7 years less than for non-Indigenous females (table 4.1.1, figure 4.1.1)

Figure 4.1.1 **Life expectancy at birth, Indigenous and non-Indigenous population, 2005–2007[a, b]**

[a] Indigenous data are for the Australian Aboriginal and Torres Strait Islander population, and include an adjustment for under-identification of Indigenous deaths. [b]The ABS has calculated confidence intervals for Indigenous life expectancy at birth, which are shown in table 4.1.1. Confidence intervals have not been calculated for non-Indigenous life expectancy.

Source: ABS (2009); table 4A.1.1.

- In both the Indigenous and non-Indigenous populations, females tend to live longer than males. Based on data for 2005–2007 for Australia, estimated life expectancy at birth for Indigenous females was 5.6 years higher than for Indigenous males. The size of the 'gender gap' in the non-Indigenous population was 3.9 years (figure 4.1.1).
- Life expectancy at birth for non-Indigenous males was 78.7 years, while the life expectancy at birth of non-Indigenous females was 82.6 years (figure 4.1.1).

The NT is the only jurisdiction in which Indigenous identification in mortality has been of sufficient and sustained quality to allow time series analysis. A recent study by Wilson, Condon and Barnes (2007) found that the life expectancy of Indigenous people in the NT had risen by eight years for men (from 52 to 60 years) and 14 years for women (from 54 to 68 years) over the past 40 years (1967 to 2004). Over the same period total Australian life expectancy rose ten years for males (from 68 to 78 years) and nine years for females (from 74 to 83 years). The gap between Indigenous and non-Indigenous life expectancies in the NT remains large, but over 40 years, the gap between Indigenous and non-Indigenous female life expectancy has narrowed from 20 to 15 years (Wilson, Condon and Barnes 2007). Over the more recent period from 1981 to 2004, life expectancy for Indigenous males in the NT changed little while life expectancy for Indigenous females in the NT increased from 63.5 to 68.2 years (Fearnley and Li 2007).

The gap in life expectancy between Indigenous and non-Indigenous people in Australia is larger than in other countries where Indigenous peoples share a similar history of relatively recent European colonisation, for example Canada (gap of 8 years for males and 6 years for females) (AIHW 2009) and New Zealand (gap of 9 years for males and 8 years for females) (Statistics New Zealand 2008). Caution must be used in comparing data with other countries due to variations in data quality and scope, estimation methods and coverage of the Indigenous populations and definitions of who is an Indigenous person.

Age specific death rates and median age at death

Table 4.1.2 **Age specific death rates, 2005–2007**[a, b]

	Males			*Females*		
Age (years)	*Indigenous*	*Non-Indigenous*	*Rate ratio*[c]	*Indigenous*	*Non-Indigenous*	*Rate ratio*[c]
			NSW/QLD[d]			
0[e]	11.1	5.2	2.2	7.7	4.1	1.9
1–4	51.8	23.9	2.2	29.3	19.3	1.5
5–14	20.4	11.3	1.8	11.6	8.4	1.4
15–24	94.1	59.2	1.6	48.6	23.5	2.1
25–34	191.2	85.0	2.2	111.1	33.8	3.3
35–44	462.1	128.1	3.6	269.6	68.7	3.9
45–54	862.1	278.9	3.1	506.6	167.9	3.0
55–64	1675.8	674.8	2.5	1143.3	400.0	2.9
65 and over	5091.4	4217.6	1.2	4173.9	3681.2	1.1
			WA/SA/NT[f]			
0 [e]	14.0	3.6	3.9	10.1	3.8	2.6
1–4	79.9	25.4	3.1	69.7	15.0	4.6
5–14	36.5	7.8	4.7	28.2	7.7	3.6
15–24	260.2	67.1	3.9	113.8	26.6	4.3
25–34	503.6	100.4	5.0	264.8	37.5	7.1
35–44	1080.6	139.3	7.8	578.8	73.3	7.9
45–54	1565.2	282.3	5.5	972.1	167.1	5.8
55–64	2682.7	660.9	4.1	2022.0	376.0	5.4
65 and over	6729.5	4190.4	1.6	5334.1	3625.9	1.5

[a] Deaths per 100 000 population except age zero. [b] Indigenous rates are based on deaths registered as Indigenous and are, therefore, likely to be underestimated. Data are subject to a degree of uncertainty and apparent differences in mortality estimates between jurisdictions may not be statistically significant. [c] Indigenous rate divided by the non-Indigenous rate. [d] Data for NSW and Queensland combined. [e] Infant deaths per 1000 live births. [f] Data for WA, SA and the NT combined.

Source: ABS (2008a) *Deaths Australia 2007*, Cat. no. 3302.0.

- For 2005–2007 combined, age specific death rates (deaths per 100 000 population) were higher for Indigenous than non-Indigenous people for all age groups (table 4.1.2).
- For all age groups below 65 years in WA, SA and the NT combined, the age-specific death rates for Indigenous people were at least twice the rate for non-Indigenous people (table 4.1.2).
- In NSW and Queensland combined, the age-specific death rates for Indigenous people were at least twice the rate for non-Indigenous people, for all age groups between 25 and 64 years (table 4.1.2).
- The greatest differences were for those people aged between 35 and 54, where Indigenous death rates were from three to eight times those for non-Indigenous people (table 4.1.2).

Median age at death is another way of looking at Indigenous mortality but estimates should be treated with caution. Differences in coverage rates by age can lead to biased summary results; for example, higher coverage of infant deaths than deaths in older age groups may lead to underestimates of median age at death. The Indigenous population has a younger age structure than the non-Indigenous population, which also influences median age at death values (ABS 2008a). Furthermore, median age at death is not a sensitive measure of changing mortality over time (Coory and Baade 2003).

- In 2007, median ages at death in all states and territories for which data were available were significantly lower for Indigenous males and females than non-Indigenous males and females (table 4A.1.2).
- Median ages at death for Indigenous people fluctuated between 2000 and 2007 but no clear trend was apparent (table 4A.1.2).

Age standardised mortality

Another measure of Indigenous mortality is age standardised mortality from all causes. Age standardised mortality data are for the period 2002–2006 and are limited to Queensland, WA, SA and the NT — states and territories with an acceptable level of Indigenous identification in deaths data. Data for NSW will be available for future reports as NSW data are now considered to have sufficient identification of Indigenous deaths. Data for 2003–2007 including NSW were not available in time for this report.

Table 4.1.3 **All causes mortality, age standardised, by Indigenous status, Queensland, WA, SA and the NT, 2002–2006**[a, b, c, d, e]

	Indigenous	*Non-Indigenous*	*Rate ratio*
	Rate per 100 000	*Rate per 100 000*	
Queensland	1184.3	620.0	1.9
WA	1357.8	592.9	2.3
SA	1089.4	627.6	1.7
NT	1661.1	664.4	2.5
Qld, WA, SA and the NT	**1318.0**	**615.7**	**2.1**

[a] Data are reported for Queensland, WA, SA and the NT only. These four jurisdictions were considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure. [b] Data are presented for a five year grouping because of small numbers each year. [c] Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous all causes mortality rate. [d] Deaths are by year of registration. [e] Directly age-standardised using the 2001 standard Australian population.

Source: AIHW (2009); table 4A.1.3.

In Queensland, WA, SA and the NT combined, after adjusting for the age differences in the two populations:

- the Indigenous all causes mortality rate was 2.1 times the rate for non-Indigenous people, based on data from 2002–2006 (table 4.1.3)
- the Indigenous all causes mortality rate decreased by 2.0 per cent between 1998 and 2006. Over the same period the non-Indigenous rate decreased by 16.1 per cent (table 4A.1.4).

Table 4A.1.4 contains further data on mortality rates, rate ratios and rate differences over the period 1998 to 2006.

An independent examination of mortality for the NT only, over a long period (1967–2000), reported that Indigenous all-cause mortality rates in the NT declined overall and for all age groups. Declines were greater for females than males, and greater in younger and older age groups than in the early and middle adult years (25–64 years). However, the declines in Indigenous mortality, 'did not keep pace with the relative decline for the total Australian population' (Condon et al. 2004).

Mortality rate (and excess deaths) by leading causes

Table 4.1.4 shows leading causes of Indigenous mortality. Age standardised mortality data are for the period 2002–2006 and were only available for Queensland, WA, SA and the NT. Data for NSW will also be available for future reports as they are now considered to have sufficient coverage of Indigenous deaths.

Table 4.1.4 Causes of death, age standardised, by Indigenous status, Qld, WA, SA and the NT, 2002–2006[a]

	Indigenous	*Non-Indigenous*	*Rate ratio*
	Rate per 100 000	*Rate per 100 000*	
Circulatory diseases	411.7	221.4	1.9
External causes	105.8	38.3	2.8
Cancer	240.0	183.2	1.3
Lung cancer[f]	57.7	35.2	1.6
Cervical cancer[f, g]	6.2	1.1	5.7
Endocrine, metabolic & nutritional disorders	151.1	22.0	6.9
Diabetes[f]	133.6	15.3	8.8
Respiratory diseases	136.4	53.4	2.6
Digestive diseases	67.4	20.5	3.3
Conditions originating in perinatal period	7.7	2.8	2.8
Nervous system diseases	26.8	21.2	1.3
Kidney diseases	40.2	9.6	4.2
Infectious and parasitic diseases	22.9	7.3	3.1
Other causes[h]	108.1	36.1	3.0
All causes	**1318.0**	**615.7**	**2.1**

[a] Data are reported for Queensland, WA, SA and the NT only. These four jurisdictions were considered to have adequate levels of Indigenous identification in mortality data. They do not represent a quasi-Australian figure. [b] Data are presented for a five year grouping because of small numbers each year. [c] Although most deaths of Indigenous people are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these data are likely to underestimate the Indigenous all causes mortality rate. Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all cause under-identification (coverage estimates). [d] Deaths are by year of registration. [e] Directly age-standardised using the 2001 standard Australian population. [f] Data for lung cancer and cervical cancer are a subset of data presented for all cancers; data for diabetes are a subset of data presented for all endocrine, metabolic and nutritional disorders. [g] Rates for cervical cancer are for females only. [h] See table 4A.1.5 for a full list of diseases included as part of other causes.

Source: AIHW (2009); table 4A.1.5.

For 2002–2006 in Queensland, WA, SA and the NT combined, after adjusting for the age differences in the two populations:

- Indigenous people died at higher rates than non-Indigenous people for all causes listed in table 4.1.4
- the leading causes of death for Indigenous people were circulatory diseases (411.7 per 100 000), cancer (240.0 per 100 000), endocrine, metabolic and nutritional disorders (mostly diabetes) (151.1 per 100 000) and respiratory diseases (136.4 per 100 000) (table 4.1.4)
- Indigenous death rates were 8.8 times as high as non-Indigenous rates for diabetes, 5.7 times as high for cervical cancer, 4.2 times as high for kidney diseases and 3.3 times as high for digestive diseases (table 4.1.4).

Table 4A.1.6 presents data on numbers and proportions of excess Indigenous deaths by cause.

4.2 Young child mortality

Box 4.2.1 Key messages

- Indigenous perinatal[3] and infant (within one year) mortality rates improved in recent years in most states and territories for which data are available, but remain two to three times the non-Indigenous rates (figures 4.2.1 to 4.2.4).
- Indigenous child mortality rates for the 1–4 years and 0–4 years age groups remained relatively constant in the period 1997–99 to 2005–07 at between two and four times the non-Indigenous rates (figures 4.2.5 and 4.2.7).

Halving the gap in mortality rates for Indigenous children under five within a decade is a COAG target (COAG 2008). The COAG indicators for this target are:

- child under five mortality rate (and excess deaths[4])
- mortality rates (and excess deaths) by leading causes
  - perinatal, infant[5], 1–4 and 0–4 years.

The mortality rate for children under five years is a key indicator of the general health and wellbeing of a population. In examining the mortality rates for children aged 0–4 years presented in this section, readers should note that the mortality experience of infants is different to that for children aged one year or over. Most childhood deaths occur in the first year of life and are captured in the perinatal and infant mortality rates. In 2004-05, deaths in the first year of life comprised 68 per cent of all childhood deaths, while deaths of children aged 1–4 years comprised 15 per cent (with the remaining 17 per cent in the 5–14 years age group)

3 Perinatal mortality is defined as the death of an infant within 28 days of birth (neonatal death) or of a fetus (unborn child) that weighs at least 400 grams or that is of a gestational age of at least 20 weeks (AIHW 2009).

4 While families and communities may hope to avoid all childhood deaths, data tell us that some deaths will occur. The term excess deaths is used to describe the extent to which more Indigenous deaths occur than would be anticipated based on the rate for non-Indigenous people. Excess deaths are calculated by subtracting the expected Indigenous deaths (based on age, sex and cause specific rate of non-Indigenous Australians) from the number of actual cause-specific deaths in the Indigenous population (AIHW 2009).

5 Infant mortality is defined as the number of deaths of children between birth and exactly one year of age.

(ABS 2007). The leading causes of deaths for Indigenous infants were conditions originating in the perinatal period (AIHW 2009).

The main risk factors for perinatal mortality are low birthweight (section 5.3) and pre-term birth. Other factors which may be associated with perinatal mortality are smoking during pregnancy, infection, inadequate maternal nutrition and underutilisation of antenatal services (AIHW 2009). Antenatal visits provide opportunities to inform mothers about risk factors, identify 'at risk' fetuses and allow for implementation of primary prevention strategies (see section 5.1 and 5.3).

There was a dramatic decline in overall infant mortality rates in Australia over the 20th century (the rate of infant deaths decreased from 103 deaths per 1000 live births in 1900 to 4.2 deaths per 1000 live births in 2007). During the first half of the 20th century, a significant share of this decline was associated with improvements in public sanitation and health education. By the 1940s, the development of vaccines and mass vaccination programs resulted in further gains. Improved medical technology and education campaigns about the importance of immunisation, and more recently, in the case of sudden infant death syndrome, infant sleeping position, have led to further modest declines in infant deaths (ABS 1996 and 2008a). For the total population, the infant mortality rate has been consistently higher for males than females over the past 20 years (ABS 2008a).

The death rate for young children (aged 1–4 years) is lower than for infant and perinatal deaths. The mortality rate for children aged 1–4 years has declined over the 20th century, but this decline has not been as dramatic as for infant and perinatal death rates. Research has shown that once the infancy period has passed, injury deaths emerge as one of the leading causes of death for children aged 1–4 years. There has been an overall decline in injury specific child deaths over the last two decades, partly from a decline in transport deaths and a decrease in drownings that may be a result of laws in most states and territories making fencing around swimming pools compulsory (ABS 2005).

At present, estimates of the child mortality rates among Australia's Indigenous population are imprecise:

> The exact scale of difference between the Indigenous and total population mortality is difficult to establish conclusively, due to data quality issues with Indigenous deaths data and the uncertainties inherent with estimating and projecting the size and structure of the Indigenous population over time. Caution should be exercised when undertaking analysis of Indigenous mortality and in particular trends in Indigenous mortality (ABS 2008a).

The ABS suggests that under-identification of Indigenous child mortality is mainly due to under-identification of Indigenous children in deaths data. Although each

jurisdiction now asks a standard question about the Indigenous status of the deceased, it is sometimes left unanswered or recorded incorrectly. The ABS suggests rates of Indigenous identification vary with how the information is collected (for example, by surveys or through administrative data) and who provides the information (for example, the person of interest, a relative, a health professional or an official) and other factors that influence data collected for death certificates (ABS 2008a).

Although the total proportion of deaths for which Indigenous status is not stated is quite small (1.0 per cent), the Indigenous Mortality Quality Study conducted as part of the ABS Census Data Enhancement project identified substantial mis-classification of Indigenous status in death registrations, contributing to the under identification of Indigenous deaths (ABS 2008a and 2008b).

There is limited information on the variation of under-coverage of Indigenous mortality across age groups, and differences may exist across adult and child deaths. At the time of publication of the ABS Indigenous Mortality Quality Study a conclusion had not been reached in relation to the differences across age groups (ABS 2008b). At present, the AIHW is undertaking data linkage research on Indigenous deaths, comparing deaths in hospital and aged care facilities, which may provide further information on the differences across age groups in the future.

When evaluating mortality data, differences in Indigenous identification methodology between the denominator and the numerator must be acknowledged. Indigenous identification of deaths data is usually given by the parent or relative of the deceased infant, but in birth registrations Indigenous status is ascribed from the parents Indigenous status. In addition the birth data used for calculation of rates in this indicator are on a year of registration basis and time lags may exist due to delays in registration and of the provision of that information to the ABS from state/territory registrars of births, deaths and marriages (ABS 2008c).

Mortality rate data reported are sourced from the ABS. Infant mortality rate data are taken from the ABS *Deaths Australia* (ABS 2008a) publication, and the perinatal, 1–4 years and 0–4 years mortality rates are from unpublished data. Indigenous mortality data only contain sufficient identification of Indigenous deaths for NSW, Queensland, WA, SA, and the NT. Data on causes of death are taken from the AIHW *Aboriginal and Torres Strait Islander Health Performance Framework 2008: Detailed Analysis* (AIHW 2009), and were available for perinatal, infant and 0–4 years deaths. Causes of death data were not available up to 2007, which include NSW, and are only available for Queensland, WA, SA and the NT which had sufficient identification of Indigenous deaths.

Some examples of programs designed to reduce Indigenous young child mortality are reported in box 4.2.2.

Box 4.2.2 **'Things that work'— young child mortality**

The **Safe Sleeping project** in WA addresses the significantly increased risk of Indigenous infants in Western Australia dying from Sudden Infant Death Syndrome (SIDS) compared to non-Indigenous infants.

Although the cause of SIDS is unknown, the project aims to promote awareness in WA Indigenous communities of risk factors associated with SIDS. The project involved community consultation and collaboration with Indigenous and non-Indigenous health workers and researchers and is coordinated through Indigenous women.

An evaluation of the initial outcomes of the project found that it has significantly increased awareness of risk factors (AMA 2008 and SIDS and Kids Western Australia).

The **Aboriginal Maternal and Infant Health Strategy** (AMIHS) commenced in 2000-01 across seven sites in NSW through the Aboriginal Health Partnership, with funding from the NSW Department of Health. The aim is to improve the health of Aboriginal women during pregnancy and decrease perinatal mortality through:

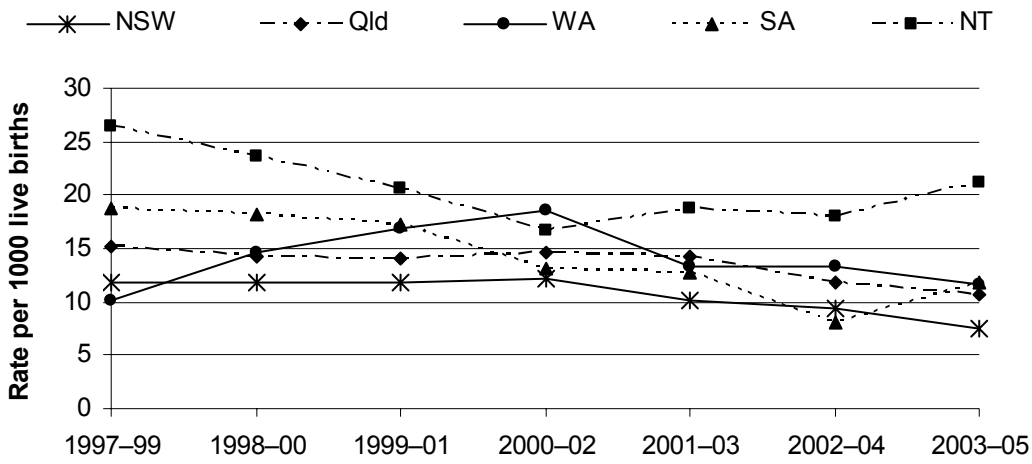
- providing women with health education and a female peer support network
- accessing a pre-existing Aboriginal Women's Reference Group to guide service development and empower communities
- providing transport services to Aboriginal mothers
- in rural and remote communities, establishing teams of midwives and Aboriginal health workers to provide accessible services
- the implementation of the Training and Support Unit (TSU) in partnership with the University of Sydney, to provide maternal and infant preparatory courses for Aboriginal workers.

A 2005 evaluation of the AMIHS found that between 1996–2000 and 2001–2003: Aboriginal perinatal mortality fell from 20.4 per 1000 to 14.2 per 1000; premature births fell from 20 per cent to 11 per cent; and breastfeeding and antenatal attendance improved. The program was a finalist in the Baxter 2006 NSW Health Awards, and a further three sites were funded under the same service delivery model (ARCHI 2009).

Perinatal mortality

The ABS is in the process of adopting new wording and expanded definitions in its perinatals collection to achieve consistency between ABS collections and other external collections. As a result perinatal deaths were removed for the Causes of Death publication released in Mach 2009. A separate Perinatal Deaths publication will be released in June 2009, providing data for the years 1999–2007 (ABS, unpublished). Data for this report are therefore only available up until the period 2003–05.

Figure 4.2.1 **Indigenous perinatal mortality, 1997–99 to 2003–05**[a]

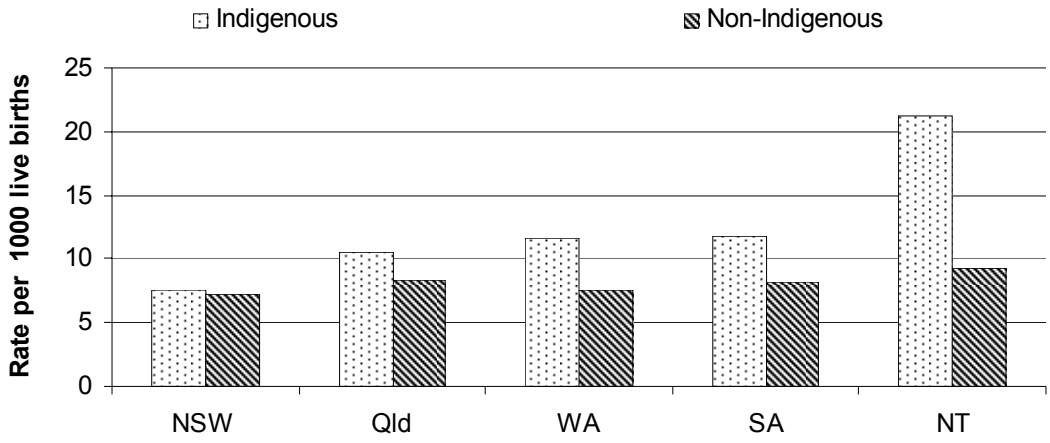


a The perinatal mortality rate is defined as the death of an infant within 28 days of birth (neonatal death) or of a fetus (unborn child) that weighs at least 400 grams or that is of a gestational age of at least 20 weeks.

Source: ABS (unpublished), table 4A.2.1.

- Between 1997–99 and 2003–05, Indigenous perinatal mortality fell in NSW, Queensland, SA and the NT. The Indigenous perinatal mortality rate for WA fluctuated over the period (figure 4.2.1).
- The Indigenous perinatal mortality rate was consistently higher than the non-Indigenous rate over the period 1997–99 to 2003–05 for all jurisdictions for which data were available (table 4A.2.1).

Figure 4.2.2 **Perinatal mortality by Indigenous status, 2003–05** [a]



[a] The perinatal mortality rate is defined as the death of an infant within 28 days of birth (neonatal death) or of a fetus (unborn child) that weighs at least 400 grams or that is of a gestational age of at least 20 weeks.

Source: ABS (unpublished); table 4A.2.1.

For the period 2003–05:

- perinatal mortality rates among Indigenous babies were higher than for non-Indigenous babies for all states and territories for which data are available. Indigenous to non-Indigenous perinatal mortality rate ratios ranged from 1.0 for NSW to 2.3 for the NT (figure 4.2.2)
- the perinatal mortality rate for Indigenous males (27.7 per 1000 live births) was greater than for Indigenous females, (14.2 per 1000 live births) (table 4A.2.1).

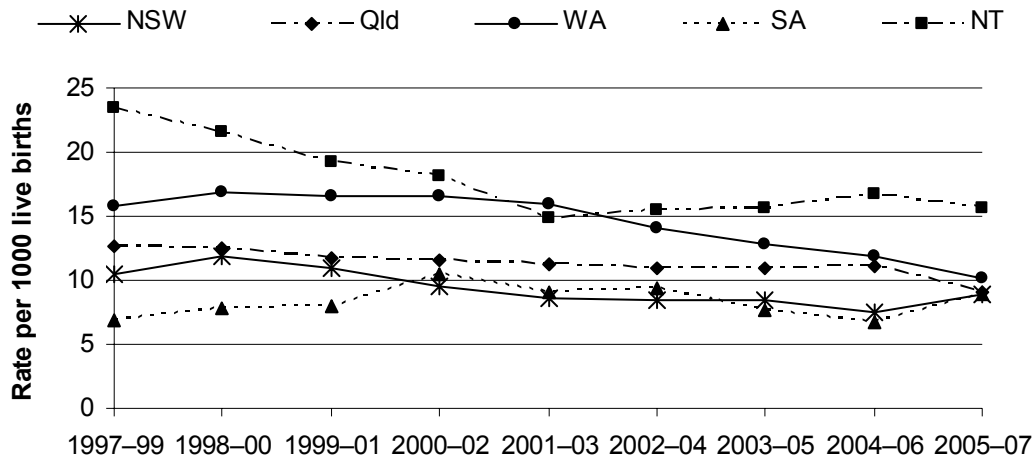
Data on causes of perinatal deaths are taken from AIHW (2009). Perinatal cause of death data should be interpreted with care as the level of identification by cause is unknown, hence rates are not available. For the period 2001–2005, in Queensland, WA, SA and the NT combined:

- the major cause of perinatal death originating in the fetus or infant, was 'other conditions originating in the perinatal period' (41.0 per cent of deaths of Indigenous babies. This was followed by 'disorders related to length of gestation and fetal growth' (22.8 per cent of deaths of Indigenous babies) (table 4A.2.5)
- the major cause of perinatal deaths originating in the mother was the 'fetus or newborn affected by complications of placenta, cord and membranes' (30.1 per cent of deaths of Indigenous babies) (table 4A.2.5).

Data on excess perinatal deaths were unavailable for inclusion in the 2009 report.

Infant mortality

Figure 4.2.3 **Indigenous infant mortality, 1997–99 to 2005–07**[a]

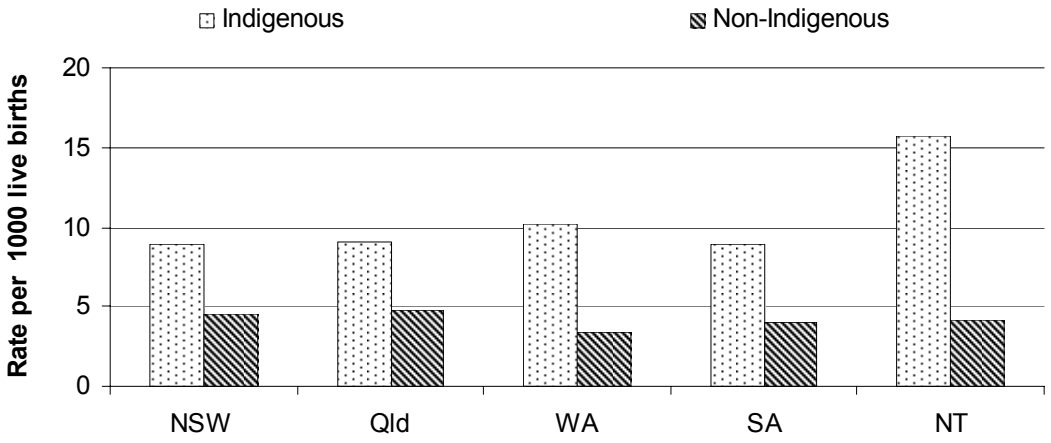


a The infant mortality rate is defined as the number of deaths of children between birth and exactly one year of age per 1000 live births.

Source: ABS (2008a), *Deaths Australia, 2007* (and previous issues); table 4A.2.2.

- Between 1997–99 and 2005–07, Indigenous infant mortality fell in NSW, Queensland, WA and the NT (figure 4.2.3). The rate for SA fluctuated over this period. Infant mortality rates for the non-Indigenous populations fell over the same time period, but the improvement has not been as large as for Indigenous infants (table 4A.2.2).

Figure 4.2.4 **Infant mortality, by Indigenous status, 2005–07**[a]



a The infant mortality rate is defined as the number of deaths of children between birth and exactly one year of age per 1000 live births.

Source: ABS (2008), *Deaths Australia, 2007*; table 4A.2.2.

- Infant mortality rates among Indigenous infants were about two to three times higher than for non-Indigenous infants for the period 2005–2007, in states and territories for which data are available (figure 4.2.4).
- Indigenous infants in the US, Canada and New Zealand have higher mortality rates than infants in the general populations of those countries, but the gap is not as large as between Aboriginal and Torres Strait Islander infants in Australia and the general population (AHMAC 2008).

Data on causes of infant death are taken from AIHW (2009). In Queensland, WA, SA and the NT combined for the period 2002–2006:

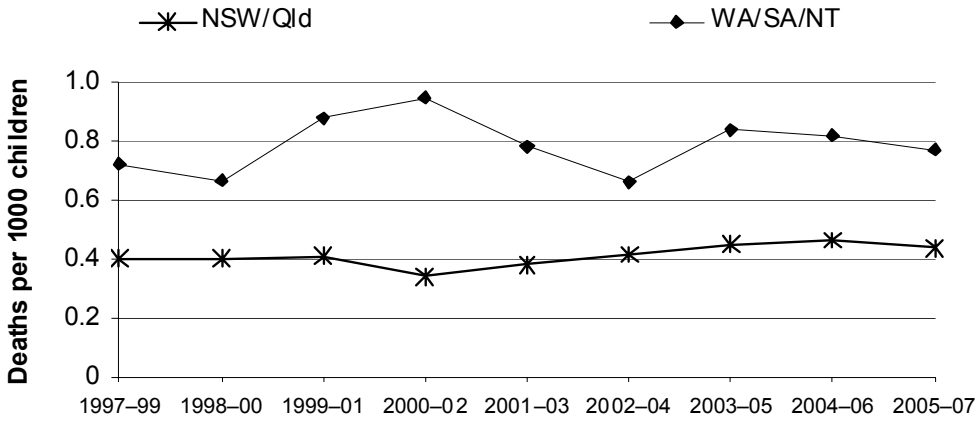
- the leading cause of Indigenous infant mortality was 'conditions originating in the perinatal period', such as birth trauma, disorders related to fetal growth, complications of pregnancy, labour and delivery, and respiratory and cardiovascular disorders specific to the perinatal period. This was also the leading cause of infant mortality for non-Indigenous infants, but Indigenous infants died of this group of causes at nearly three times the rate of non-Indigenous infants (5.7 and 2.1 per 1000 live births respectively) (table 4A.2.6)
- infant mortality rates from diseases of the respiratory system were much greater for Indigenous babies (0.9 per 1000 live births) than for non-Indigenous babies (0.1 per 1000 live births) (table 4A.2.6)

Data on excess infant deaths were unavailable for this report.

Mortality 1–4 years

Due to the small numbers of Indigenous deaths in the 1–4 year age group and the imprecision of estimates of Indigenous child mortality, data have been aggregated into two groups (NSW/Queensland and WA/SA/NT). These combinations were made by grouping states and territories with similar levels of coverage of Indigenous deaths. When interpreting differences between the two groups it needs to be acknowledged that part of these variations may be due to the lower levels of coverage of Indigenous deaths in NSW and Queensland than in WA, SA and the NT.

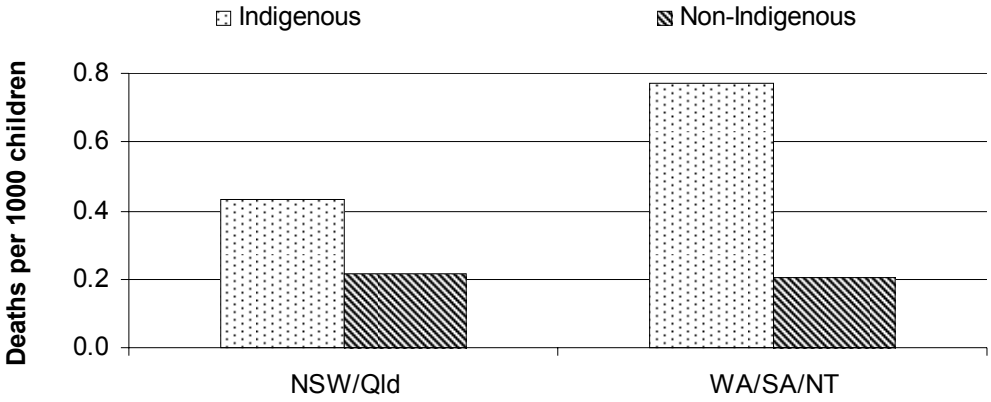
Figure 4.2.5 **Indigenous mortality, children aged 1–4 years, 1997–99 to 2005–07**



Source: ABS *Deaths Australia* (unpublished); table 4A.2.3.

- Between 1997–99 and 2005–07 Indigenous mortality for the 1–4 year age group remained relatively constant in both NSW/Queensland and WA/SA/NT, particularly compared to the significant decline in infant mortality rates over the same period (figure 4.2.5 and figure 4.2.3). Over the period, in both NSW/Queensland and WA/SA/NT, the Indigenous rate remained consistently higher than that for non-Indigenous children (table 4A.2.3).
- The rate for NSW/Queensland was lower than the rate for WA/SA/NT, over the period 1997–99 to 2005–07, although part of this difference may be due to the lower levels of coverage of Indigenous deaths in NSW and Queensland than in WA, SA and the NT (figure 4.2.5).

Figure 4.2.6 **Mortality, children aged 1–4 years, by Indigenous status, 2005–07**



Source: ABS *Deaths Australia* (unpublished); table 4A.2.3.

During 2005–07:

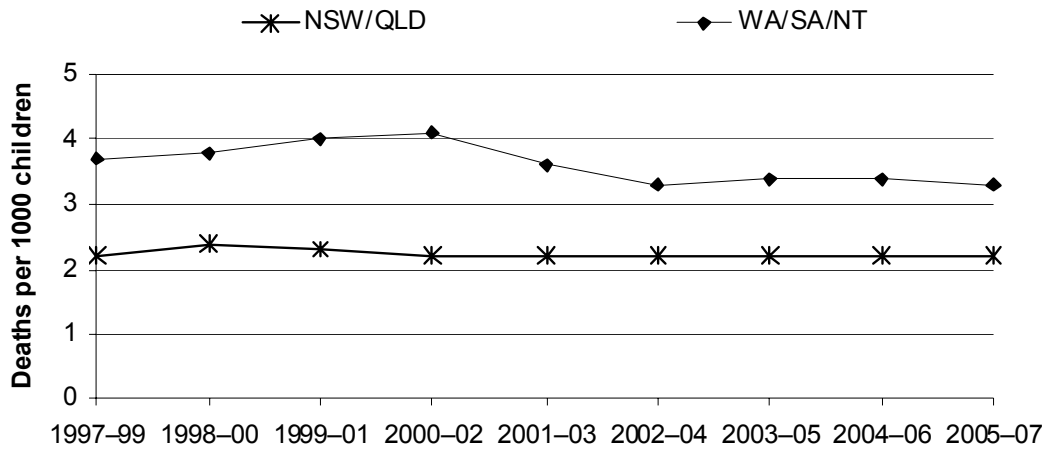
- Indigenous mortality rates for children aged 1–4 years were two and four times higher than those for non-Indigenous children in NSW/Queensland and WA/SA/NT, respectively (figure 4.2.6 and table 4A.2.3).
- The Indigenous mortality rate for children aged 1–4 years in WA/SA/NT was nearly twice the rate in NSW/Queensland. Non-Indigenous mortality rates for children aged 1–4 years were similar in the two regions (figure 4.2.6).

The major causes of death for Indigenous and non-Indigenous children aged 1–4 years, as well as data on excess deaths for this age group, were unavailable for this report.

Mortality 0–4 years

Due to the small numbers of deaths of children aged 0–4 years and the imprecise estimates of child mortality among Australia's Indigenous population, data have been aggregated into two groups (NSW/Queensland and WA/SA/NT). These combinations were made by grouping states and territories with similar levels of coverage of Indigenous deaths. When interpreting differences between the two groups it needs to be acknowledged that part of these variations may be due to the lower levels of coverage of Indigenous deaths in NSW and Queensland than in WA, SA and the NT.

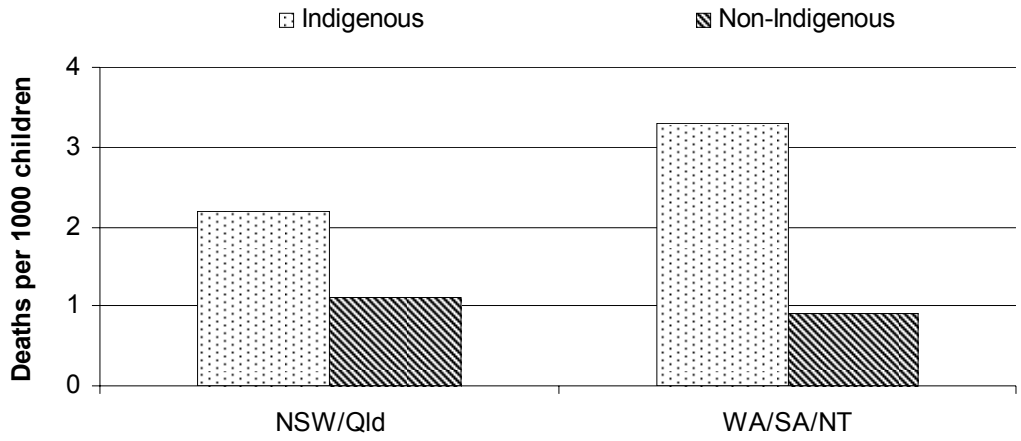
Figure 4.2.7 **Indigenous mortality, children aged 0–4 years, 1997–99 to 2005–07**



Source: ABS *Deaths Australia* (unpublished), table 4A.2.4.

- Between 1997–99 and 2005–07, Indigenous mortality for the 0–4 year age group remained relatively constant in both NSW/Queensland and WA/SA/NT (figure 4.2.7). A similar fairly constant rate occurred throughout the same period for non-Indigenous children, but the Indigenous rate was two to four times as high as the non-Indigenous rate (table 4A.2.4).
- Throughout the period 1997–99 to 2005–07 the Indigenous 0–4 year mortality rate in WA/SA/NT combined was consistently higher than the rate in NSW/Queensland, but part of this difference may be due to the lower levels of coverage of Indigenous deaths in NSW and Queensland than in WA, SA and the NT (figure 4.2.7).

Figure 4.2.8 **Mortality, children aged 0–4 years, by Indigenous status, 2005–07**



Source: ABS (2008), *Deaths Australia,* (unpublished); table 4A.2.4.

In 2005–07:

- mortality rates for Indigenous children aged 0–4 years were 2.0 and 3.6 times as high as those for non-Indigenous children in NSW/Queensland and WA/SA/NT, respectively (figure 4.2.8)
- mortality rates for Indigenous children aged 0–4 years were 1.5 times as high in WA/SA/NT as in NSW/Queensland. For non-Indigenous children the rate in NSW/Queensland was 1.2 times as high as in WA/SA/NT (figure 4.2.8).

Data on 0–4 year causes of death are taken from AIHW (2009). For children aged 0–4 years in Queensland, WA, SA and NT combined for the period 2002–2006, the leading cause of death for Indigenous and non-Indigenous children was 'conditions originating in the perinatal period', with the Indigenous rate around three times the rate for non-Indigenous children (1.2 and 0.4 per 1000 children, respectively) (table 4A.2.7).

4.3 Early childhood education

Box 4.3.1 **Key messages**

- There is no single source for data on Indigenous preschool participation and it is therefore difficult to draw conclusions about participation rates.

The Council of Australian Governments (COAG) has recognised the importance of early childhood education for Indigenous children by including it as one of its six targets for closing outcomes gaps for Indigenous Australians. COAG's target is to ensure that, within five years, all Indigenous four year olds, including those in remote communities, have access to high quality early childhood education.

The following key measures were listed against the early childhood education indicator in the revised OID framework endorsed by COAG in November 2008:

- proportion of Indigenous children who are enrolled in an early childhood education program delivered by a four year university qualified teacher in the year before formal schooling
- proportion of Indigenous three year olds in early childhood education
- proportion of Indigenous children participating in formal education and care services.

In 2008, COAG endorsed a National Partnership Agreement for Indigenous Early Childhood Development, which identified the importance of reducing the gap in developmental outcomes between Indigenous and non-Indigenous children. Similarly, the National Partnership Agreement on Early Childhood Education includes increasing early childhood education participation rates, particularly for Indigenous and disadvantaged children, as a national priority. Both National Partnership Agreements include a commitment to universal access, under which all Indigenous children have access to affordable, high quality early childhood education in the year before formal schooling (COAG 2008).

Children's experiences in their early years affect their development and influence lifelong learning, behaviour and health (Mustard 2007; McCain, Mustard and Shanker 2007). Early childhood education programs are associated with increased levels of school completion and enhanced literacy and social skills (Ou and Reynolds 2004; Reynolds et al. 2001; Mustard 2007; Schweinhart 2007). Child care has been acknowledged as providing development opportunities for children, as well as supporting the needs of families, and can be considered be a significant influence in a child's early education (McCain, Mustard and Shanker 2007). The provision of services to children during their early years may provide an opportunity for early intervention to address developmental problems (see chapter 5 for information on factors influencing early childhood development).

Investment in early childhood education, particularly for disadvantaged children, is more effective than intervention at later ages (Heckman 2006). Children who have access to, and attend, good quality early childhood education programs have a head

start at school (Elliott 2006; Frigo and Adams 2002; Schweinhart 2007; Sparling, Ramey and Ramey 2007).

The quality of early childhood education programs, including program content and staff quality, influence attendance and outcomes for children. The provision of culturally appropriate programs is an important factor influencing children's attendance and children's readiness for school (Fordham and Schwab 2007; High 2008; Sims et. al. 2008). For Indigenous children, the presence of an Indigenous preschool worker is likely to have a positive influence on preschool attendance (Biddle 2007; Fordham and Schwab 2007).

This indicator examines preschool participation for Indigenous children aged 3–5 years. In Australia, preschool attendance is not compulsory. Preschool programs are offered to children in each of the two years prior to commencing full time school, and are available to children aged 3–5 years. However, there are some barriers to accessing preschool in the forms of fees and program availability, particularly in remote and very remote regions (ANAO 2002; HREOC 2000; NTDE 1999).

Data for the early childhood education indicator are sourced from the National Preschool Census (NPC), the ABS Census of Population and Housing (ABS Census) and the Report on Government Services.

There is no single, definitive source for data on Indigenous participation in preschool programs in Australia. This section draws on NPC data to present participation rates based on preschool enrolments as a proportion of preschool aged children in the population, and data on preschool participation for children aged 3–5 years from the ABS Census. Participation rates do not reflect whether a child actually attends preschool on a regular basis, therefore, this report also includes data on preschool attendance, based on absences from non-government preschools during 2007.

The proportion of people living in regional and remote areas was higher for Indigenous people (67.9 per cent) than for non-Indigenous people (30.6 per cent) in 2006 (ABS 2008). The impact of geographic remoteness on preschool attendance is explored briefly in this section, using data from the ABS Census.

This report also includes data on child care services and participation in early childhood education and care services.

Case studies on early childhood education programs

The case studies in box 4.3.2 describe activities within organisations and Indigenous communities that demonstrate the benefits of early childhood education programs.

Box 4.3.2 'Things that work' — increasing preschool attendance and learning outcomes

The **Yappera Children's Service Cooperative (Victoria)**, based in Thornbury in Melbourne, is a multifunctional Aboriginal children's service that assists Koori families in the surrounding area to participate in child care and kindergarten. The centre first began operating in an informal capacity in 1982 and the Australian Government has provided recurrent funding to the service since 1988. The centre supports 60 children per day and is linked to organisations that provide additional services such as speech therapy, exercise programs, drama workshops, parent/carer activities and programs, dental, audiology and optometry visits and support services for a smooth transition to primary school. The committee members are all Koori, and their approach to management and support enables strong links with the local community and promotes a philosophy of strengthening culture and participation (Victorian Government, unpublished).

The **Bound for Success Pre-Prep in Indigenous Communities (Queensland)** program is a Queensland Government initiative to provide high quality, consistent early childhood education programs for children aged three and a half to four and a half living in 29 Cape York and Torres Strait communities and 6 other Aboriginal communities. Funding has been provided over four years (2006–2010) to enhance the provision of existing early childhood education programs.

In February 2008, 566 children were attending an early childhood education program across the 35 communities. The location and ownership for each early childhood education program is different, and learning programs are developed specifically to meet the needs of Indigenous children in each community (Queensland Government, unpublished).

The **South Australian preschool policy** has enabled Indigenous 3 year olds to access state preschools for over 30 years. Qualified teachers and early childhood workers emphasise working with families and communities to develop shared understandings, positive relationships and culturally inclusive practices. Programs are guided by the South Australian Curriculum, Standards and Accountability Framework, which supports ongoing learning across children's services and schools. Eight broad outcomes for children 0–5 years include trust and confidence, personal and group identity, positive relationships with others, effective communication, intellectual inquisitiveness, physical competencies and wellbeing. In the last six years, enrolments have increased from 994 in term 2, 2003, and reached 1141 in term 2, 2008, the highest ever number of Aboriginal children accessing preschool education in SA (SA Government, unpublished).

(Continued next page)

Box 4.3.2 (continued)

The **Aboriginal Early Years Program (Tasmania)** has been supporting parents and caregivers of Indigenous children aged 0–5 years since 2005. The program has been successful in connecting Indigenous families with their local early childhood education services and has provided parents with culturally appropriate activities to nurture and stimulate children's learning, emphasising early literacy, language development and school readiness (Tasmanian Government unpublished).

The **Mobile Preschool Program (NT)** provides Indigenous children in remote NT communities with access to preschool. Funded by the NT Government, there are 19 mobile preschools currently operating in the Central Australia, Katherine and Barkley regions and from the Top End Group School. Each preschool has a teacher who travels to five remote community sites to support assistant teachers with local community knowledge delivering daily preschool activities. In the Eastern Plenty and Sandover Highways region, the mobile preschool program has increased preschool access for Indigenous 3–5 year olds in the area (NT Government unpublished).

The **Mobile Early Childhood Service (MECS)**, funded by the Australian Government, provides early childhood services (including parenting support, health and early learning) for children aged 0–5 years in the NT. The mobile service delivery model had been piloted in three hubs of up to six sites, and between seven and 25 children participate in the program at each site, depending on the specific community. The long term goal of these mobile services is to transfer service delivery to local community councils (Australian Government unpublished).

Preschool enrolments and participation

Data on the number of children enrolled in preschool are available from the National Preschool Census (NPC). These data exclude children enrolled in preschool programs delivered in child care settings (for example, long day care services) and, therefore, do not represent participation in all early childhood education programs. Data from the NPC show that between 2002 and 2007, the number of Indigenous children enrolled in preschool increased slightly from 8729 to 9627 (tables 4A.3.1 and 4A.3.3).

Preschool enrolment rates, calculated as preschool enrolments divided by the number of preschool aged children in the population, are presented in tables 4A.3.2 and 4A.3.3. Nationally, in 2007:

- 17.2 per cent of Indigenous 3 year olds, and 12.5 per cent of non-Indigenous 3 year olds were enrolled in preschool
- 51.9 per cent of Indigenous 4 year olds, and 50.1 per cent of non-Indigenous 4 year olds were enrolled in preschool

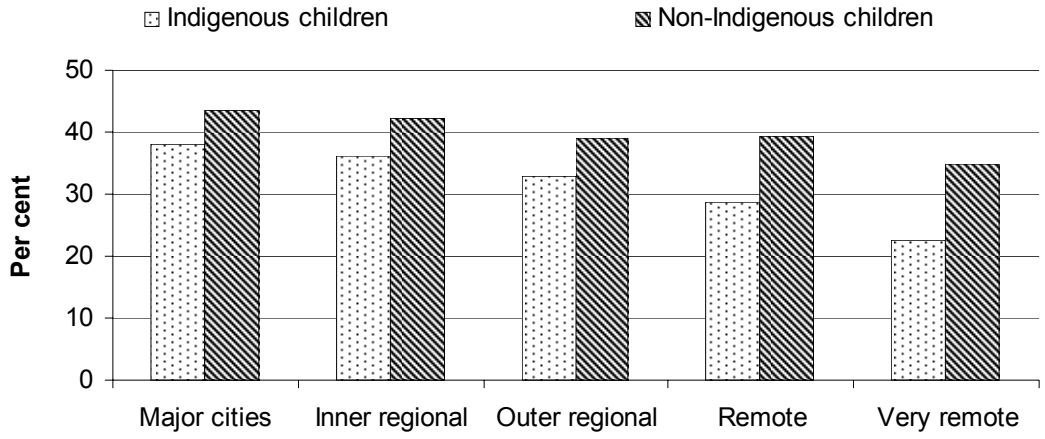
- 10.6 per cent of Indigenous 5 year olds, and 18.1 per cent of non-Indigenous 5 year olds were enrolled in preschool (table 4A.3.2).

These data should be interpreted with care as there are different arrangements across states and territories (including different starting ages for preschool and primary school), and there are problems identifying and counting Indigenous children enrolled in preschools. Definitions of preschool also vary across states and territories. Indigenous population projections used to calculate the rates are based on the 2001 ABS Census and data for single year age groups for single jurisdictions are subject to an increasing degree of error. Revised population estimates will be published by the ABS in late 2009.

Supplementary data on preschool participation for children aged 3–5 years from the ABS Census are presented in tables 4A.3.4–4A.3.6. Data from the ABS Census differ from NPC data, as ABS Census data are based on responses from parents/guardians to a question on the type of educational institution that the child was attending (with one option for response being preschool), while NPC data are sourced directly from preschools. Differences may arise due to parents/guardians interpretation of the term 'preschool', as preschool program names vary across states and territories. As noted elsewhere in this report (chapter 2 and appendix 4), there was an undercount of Indigenous people in the 2006 ABS Census, which may also affect the results, and data should be interpreted with care.

Addressing differential access due to remoteness is a key part of the COAG target for Indigenous children's participation in early childhood education. Figure 4.3.1 shows preschool participation rates for Indigenous and non-Indigenous children aged 3–5 years, by remoteness area.

Figure 4.3.1 **Preschool participation rates for children aged 3–5 years, by remoteness area, 2006**[a, b, c]



[a] Preschool participation data sourced from the ABS Census of Population and Housing are based on responses from parents/guardians to a question on the type of educational institution that the child attended, with one option for response being preschool. Preschool is not defined in the ABS Census and variability in data may occur due to parents/guardians interpretation of the term 'preschool' (as preschool program names vary across states and territories). These data may also differ from other preschool data presented in this report which are based on enrolment and/or attendance data reported by preschools. [b] As noted in chapter 2 and appendix 4, there are difficulties in collecting data on the Indigenous population, and there was an undercount of Indigenous persons in the ABS Census. [c] Data exclude children where Indigenous status was not stated.

Source: ABS (unpublished), derived from 2006 *Census of Population and Housing*; table 4A.3.6.

- Preschool participation rates derived from the 2006 ABS Census for children aged 3–5 years (33.2 per cent for Indigenous children and 42.8 per cent for non-Indigenous children) are different to those derived from the NPC (table 4A.3.4). Consequently, it is difficult to draw conclusions about preschool participation rates.
- Nationally in 2006, Indigenous children participated in preschool at lower rates than non-Indigenous children in all remoteness areas (figure 4.3.1).

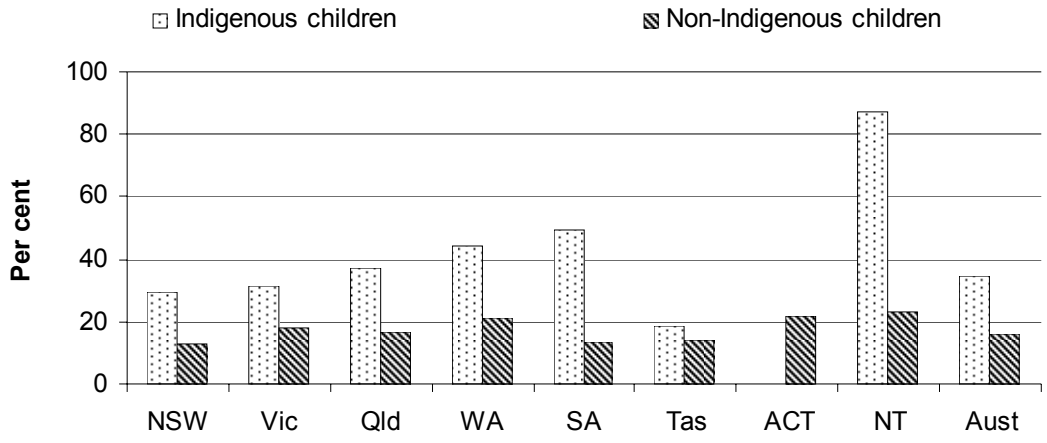
Preschool attendance

Data on preschool attendance were sourced from the NPC for 2007 and relate only to children enrolled in non-government preschools. The NPC collected data from 3248 non-government preschools nationally, which represents approximately 70 per cent of all preschools, but only 44 per cent of Indigenous enrolments, although these proportions vary across states and territories (DEEWR 2008, table 4A.3.1).

In this section, attendance rates are measured by absentee rates, with a low absentee rate indicating a higher rate of attendance. In the NPC, a child was considered

'absent' if they missed one or more of the sessions they were enrolled in during the NPC reference week. Figure 4.3.2 shows the absentee rates for Indigenous and non-Indigenous children who were enrolled in non-government preschools in 2007.

Figure 4.3.2 **Enrolled children absent from non-government preschools, 2007** [a, b, c, d, e, f, g]



[a] Data on attendance are limited to non-government preschools, and exclude government preschools. At the national level, around 70 per cent of children are in preschools considered to be 'non-government', though this percentage varies across jurisdictions. [b] Preschool attendance is not compulsory. [c] Attendance measured during the week of 30 July–3 August 2007. Children are counted as absent if they miss one or more of the sessions that they were enrolled in during this week. Absences due to illness may be higher during winter than at other times of the year. [d] 'Non-Indigenous children' has been derived by subtracting 'Indigenous children' from 'all children'. [e] There were no Indigenous children enrolled in ACT non-government preschools absent during the Census week. [f] In the NT, only 7.7 per cent of children attending preschools were enrolled in non-government preschools. [g] The Australian totals do not include data for the ACT.

Source: DEEWR (unpublished), *National Preschool Census* 2007; table 4A.3.7.

- Figure 4.3.2 shows that, nationally, in 2007, the proportion of Indigenous children absent from preschool (34.5 per cent) was significantly higher than the proportion of non-Indigenous children absent from preschool (16.2 per cent) (table 4A.3.7).

Early childhood education and care

This section presents data on the representation of children in government funded and/or provided early childhood education and care services. Early childhood education and care services refer to preschool programs and formal child care services, where formal child care services include long day care, family day care, vacation care, outside school hours care, occasional care and other formal care services.

The Report on Government Services 2009 (SCRGSP 2009) includes data on Australian, State and Territory Government funded and/or provided child care

services, and State and Territory Government funded and/or provided preschool services. More than eighty per cent of children attend Australian Government funded and/or provided child care services (SCRGSP 2009), but data were not available for Indigenous children attending Australian Government child care services.

Table 4A.3.8 shows the representation of Indigenous and non-Indigenous children aged 0–12 years in State and Territory funded and/or provided early childhood education and care services. Representation is measured by the number of children attending child care and preschool services as a proportion of children in the community. Data in this section are for NSW, Victoria, Queensland, SA, and Tasmania combined, as data for children attending State and Territory Government child care services in WA, ACT and the NT were not available.

- Indigenous children's representation in early childhood education and care services in 2007-08 (6.3 per cent) was lower than for all children (7.9 per cent), but this varies across jurisdictions (table 4A.3.8).

4.4 Reading, writing and numeracy

Box 4.4.1 **Key messages**

- There were generally no significant changes in Indigenous year 3, 5 and 7 students' performance against the national benchmarks for reading, writing and numeracy between 1999 (2001 for year 7 students) and 2007 (figures 4.4.2, 4.4.4 and 4.4.6).
- A substantially lower proportion of Indigenous than non-Indigenous students in all year levels achieved the national minimum standards for reading, writing and numeracy in 2008 (figures 4.4.1, 4.4.3, 4.4.5 and 4.4.7).
- Indigenous students' learning outcomes declined, and the gap between Indigenous students and all students increased, as remoteness increased (figure 4.4.9).
- As Indigenous students progressed through school, the proportion who achieved the national benchmarks decreased for reading (from year 3 to year 5) and numeracy (from year 3 to year 5, and year 5 to year 7) (figure 4.4.8).
- Participation rates in national tests are lower for Indigenous students than for all students, and the gap increases as year levels increase (tables 4A.4.11; 23; 35; 47).

Halving the gap for Indigenous students in reading, writing and numeracy achievements within a decade is a COAG target (COAG communiqué, November 2008).

The COAG indicators for this target are:

- National Assessment Program — Literacy and Numeracy (NAPLAN) performance
- NAPLAN student participation rates.

This chapter presents nationally comparable learning outcomes data for 2008 for years 3, 5, 7 and 9 reading, writing and numeracy. Nationally comparable learning outcomes data for years 3, 5 and 7 for 2007 and previous years are reported in the attachment tables.

The disparity in academic performance between Indigenous students and non-Indigenous students is evident from year 1 onwards, and is maintained until the mid high school years (Zubrick et al. 2006). Studies have shown that, unless preschool learning and early primary school assistance are provided, underperforming students are rarely able to catch up (Ou and Reynolds 2004; Reynolds et al. 2001; Schweinhart 2005). Section 4.3 has more information on preschool and early learning.

There is evidence that the gap in cognitive test scores between Indigenous and non-Indigenous children is relatively small, and may widen over the life cycle (Leigh and Gong, 2008). By the age of 10, Indigenous children have substantially lower levels of academic achievement compared to non-Indigenous children, with their relative performance deteriorating further over the next two years (Bradley et al. 2007).

Absenteeism from school affects students' academic performance. On average, Indigenous students miss around 26 days of school per year compared with 8 days for all students (Zubrick et al. 2006). Indigenous students living in remote and very remote locations are likely to miss an even greater number of school days (Zubrick et al. 2006). Section 6.1 has more information on student attendance.

Another factor associated with academic performance is emotional distress. Aboriginal students at high risk of clinically significant emotional or behavioural difficulties were almost three times more likely to have low academic performance compared with Aboriginal students at low risk (Zubrick et al. 2006). Section 7.7 has more information on mental health and social and emotional wellbeing issues for children.

Achieving literacy and numeracy benchmarks for years 5 and 7 has a significant effect on participation in year 12 and entry into higher education (ACER 2004). Evidence suggests that school leavers who lack fundamental skills in literacy and numeracy face poor employment prospects (ACER 2004).

Studies have also highlighted the link between health and education (Schwab and Sutherland 2004; Zubrick et al. 2006). Low literacy has been identified as a significant barrier to improving the health of Indigenous people (Schwab and Sutherland 2004).

Some examples of initiatives that are improving educational outcomes for Indigenous students are summarised in box 4.4.2.

Box 4.4.2 'Things that work' — early literacy engagement

The **MULTILIT pilot program** improved the reading ability of Indigenous children at Coen State School in Cape York in Queensland. The program involved taking the 15 least proficient readers and giving them intensive, systematic instruction in phonics for 17 to 18 weeks by specialist teachers (IRUA 2006; Devine 2006).

Since the Coen pilot, MULTILIT has been expanded as part of the broader Cape York Welfare Reform Trial, which began on 1 July 2008, to Hope Vale and Mossman Gorge (OATSIP 2008), and was rolled out in Aurukun in term 1, 2009 (Queensland Government unpublished). In addition, the MULTILIT program provided assistance to Indigenous students at the Redfern Tutorial Centre in NSW, under the auspices of the Exodus Foundation. Results for the second intake of MULTILIT students under the 2007 program at the Centre showed that after 18 weeks of instruction the cohort made average gains of: 13 months in reading accuracy; 7 months in comprehension; and 15 months in spelling (Australian Government unpublished).

MINILIT, a modified version of MULTILIT, was offered to younger students in years 1 and 2 at the Redfern Tutorial Centre. Results for the second intake of MINILIT students showed that, after 15 weeks of instruction, the cohort made average gains of: 8 months in single word recognition and 11 months in spelling (Australian Government unpublished).

The **National Accelerated Literacy Program (NALP)** is an enhancement of the **Scaffolding Literacy Program** initially introduced at the Kulkarriya Community School. More than 70 schools across the NT participate in the NALP. There have been significant improvements in literacy outcomes for the students involved in the program. An evaluation by the Charles Darwin University found that the 2007 average progress rate for NT Accelerated Literacy students was 1.18 reading year levels per year (on average one reading level per year is expected of students) (SSPR 2008).

The **Finding Your Pathway into School and Beyond** program was introduced at Port Dalrymple and South George Town Primary Schools in Tasmania in 2007. The aim of this program was to improve Aboriginal students' literacy. Computers and specialised software were bought, which enabled students to undertake self-paced learning. Home usage and loan of the computers was used as an incentive to encourage participation. There has been an increase in school attendance and a decrease in suspension rates. The project is assisting 55 Aboriginal students, and attendance rates have increased to 95 per cent (Tasmanian Government unpublished).

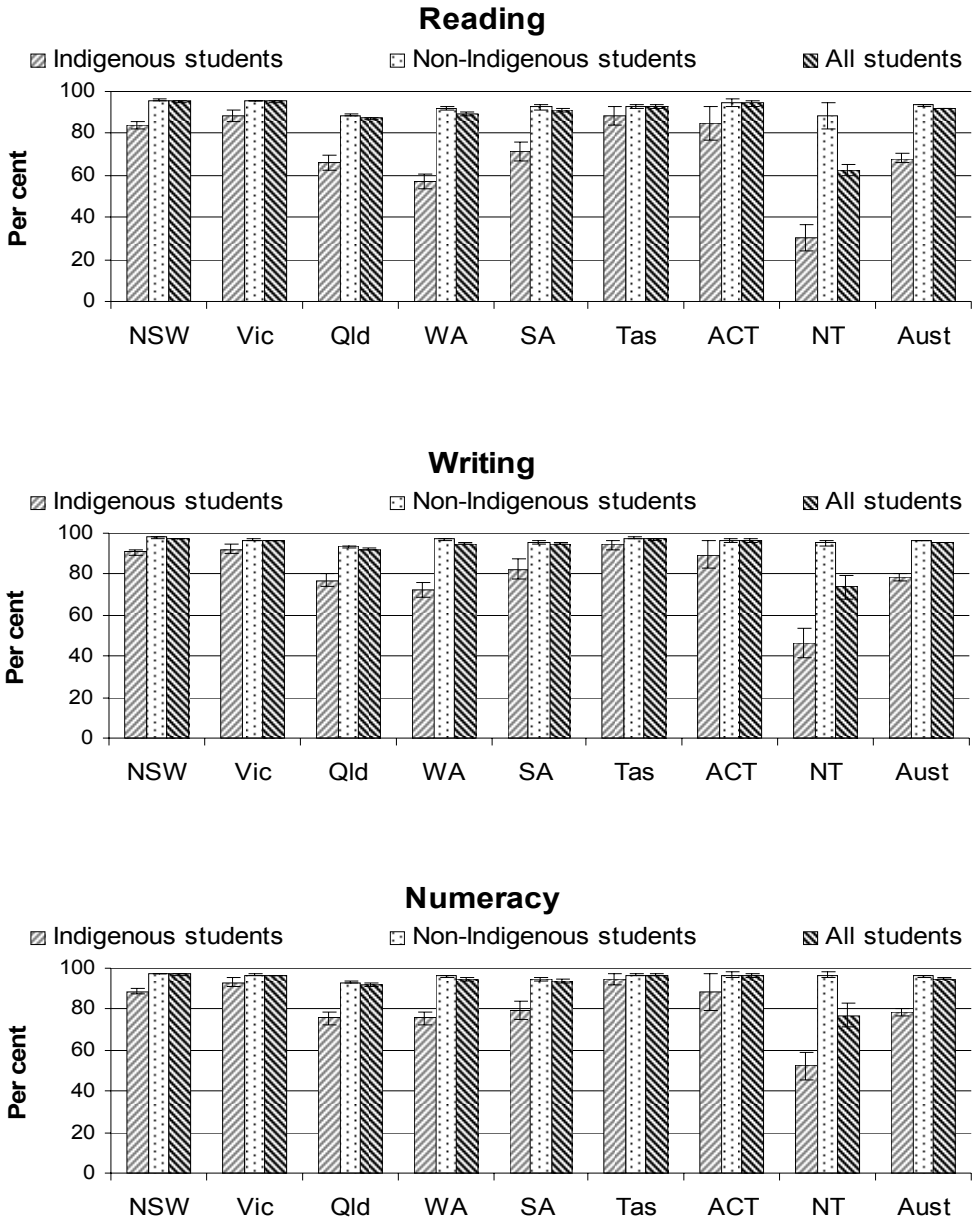
In March 1997, MCEETYA agreed to the development of national benchmarks for use in reporting years 3, 5 and 7 students' reading, writing and numeracy performance (reporting began with year 3 and year 5 in 1999, and year 7 in 2001). These benchmarks describe the nationally agreed minimum acceptable standard in each area of study at particular year levels. A student who does not achieve the benchmark standard will have difficulty making sufficient progress at school.

In 2008, national common tests were introduced for the first time (replacing the previous State/Territory based assessments) — the NAPLAN. Reporting by benchmarks was replaced with reporting by 'national minimum standards'. Therefore 2008 NAPLAN data are not directly comparable with previous years. This report includes 2008 NAPLAN data for the most recent results (which are available for Indigenous and non-Indigenous students) and 1999 to 2007 benchmark data for trend information (which are available for Indigenous and all students).

Care needs to be taken in interpreting the learning outcomes data, because differences in student achievement may sometimes be the result of sampling or measurement error. The publication of confidence intervals with the results reflects the uncertainty associated with the measurement of student achievement. The tables reporting achievement percentages include 95 per cent confidence intervals. (For example, a result of 80 per cent with a confidence interval of ± 2.7 per cent means that we can say with 95 per cent confidence that between 77.3 and 82.7 per cent of the students achieved the benchmark or national minimum standard.)

Year 3

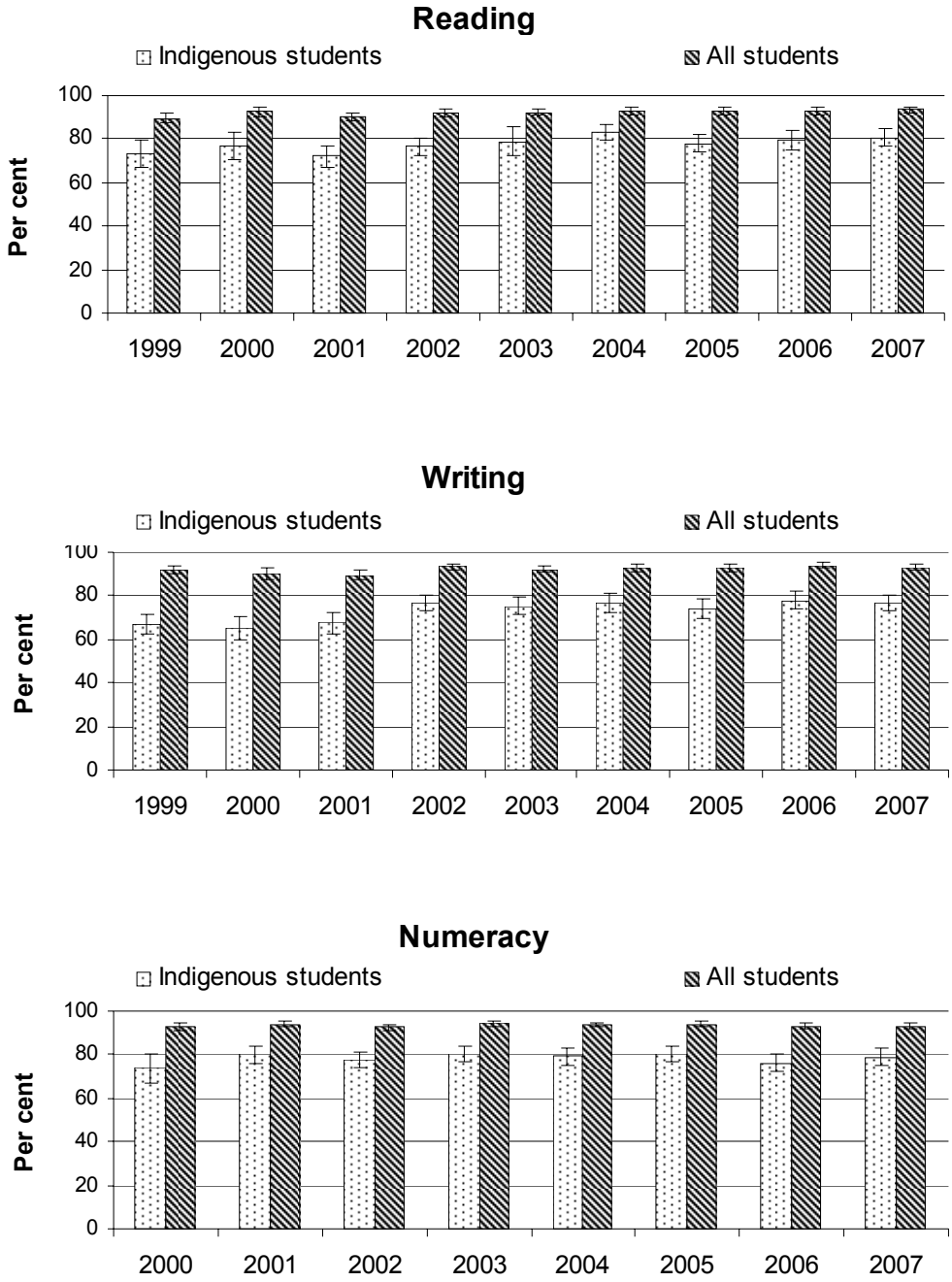
Figure 4.4.1 **Proportion of year 3 students who achieved the national minimum standard by learning domain, by State and Territory, 2008[a, b]**



a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent. **b** Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.1, 4A.4.3 and 4A.4.9.

Figure 4.4.2 **Proportion of year 3 students who achieved the national benchmarks by learning domain, 1999–2007**[a, b, c, d, e]



[a] The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent. [b] Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varied across jurisdictions. Readers are urged to be cautious when comparing results. [c] Some movements in the results over time might have occurred because of the State/Territory equating processes, and may not reflect actual changes in student performance. [d] The methods used to identify Indigenous students varied across jurisdictions. [e] Numeracy data only collected from 2000 onwards.

Source: MCEETYA (various years); tables 4A.4.49–51.

Nationally in 2008:

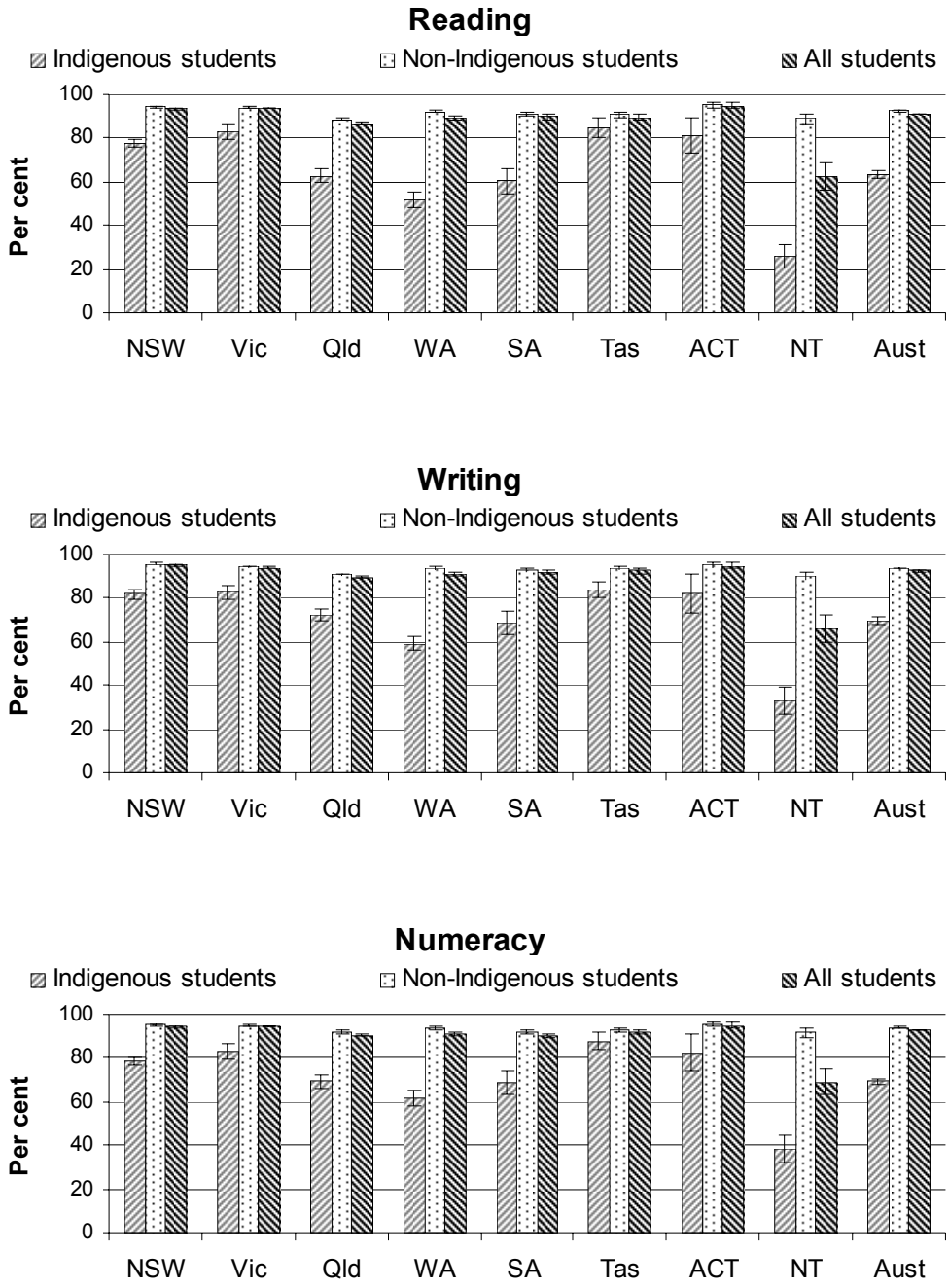
- 68.3 per cent of year 3 Indigenous students achieved the national minimum standard for reading compared to 93.5 per cent of non-Indigenous year 3 students (figure 4.4.1)
- 78.8 per cent of year 3 Indigenous students achieved the national minimum standard for writing compared to 96.4 per cent of non-Indigenous students (figure 4.4.1)
- 78.6 per cent of year 3 Indigenous students achieved the national minimum standard in numeracy compared to 96.0 per cent of non-Indigenous students (figure 4.4.1).

From 1999 (2000 in the case of numeracy) to 2007:

- there was no clear trend (and no statistically significant difference) in the proportion of year 3 Indigenous students who achieved the reading benchmark (figure 4.4.2)
- the proportion of year 3 Indigenous students who achieved the writing benchmark increased significantly between 2001 and 2002 (figure 4.4.2)
- there was no statistically significant change over time in the proportion of year 3 Indigenous students who achieved the numeracy benchmark (figure 4.4.2)
- the proportion of students who achieved the benchmark was lower for Indigenous students, relative to all students, for all years, for reading, writing and numeracy (figure 4.4.2).

Year 5

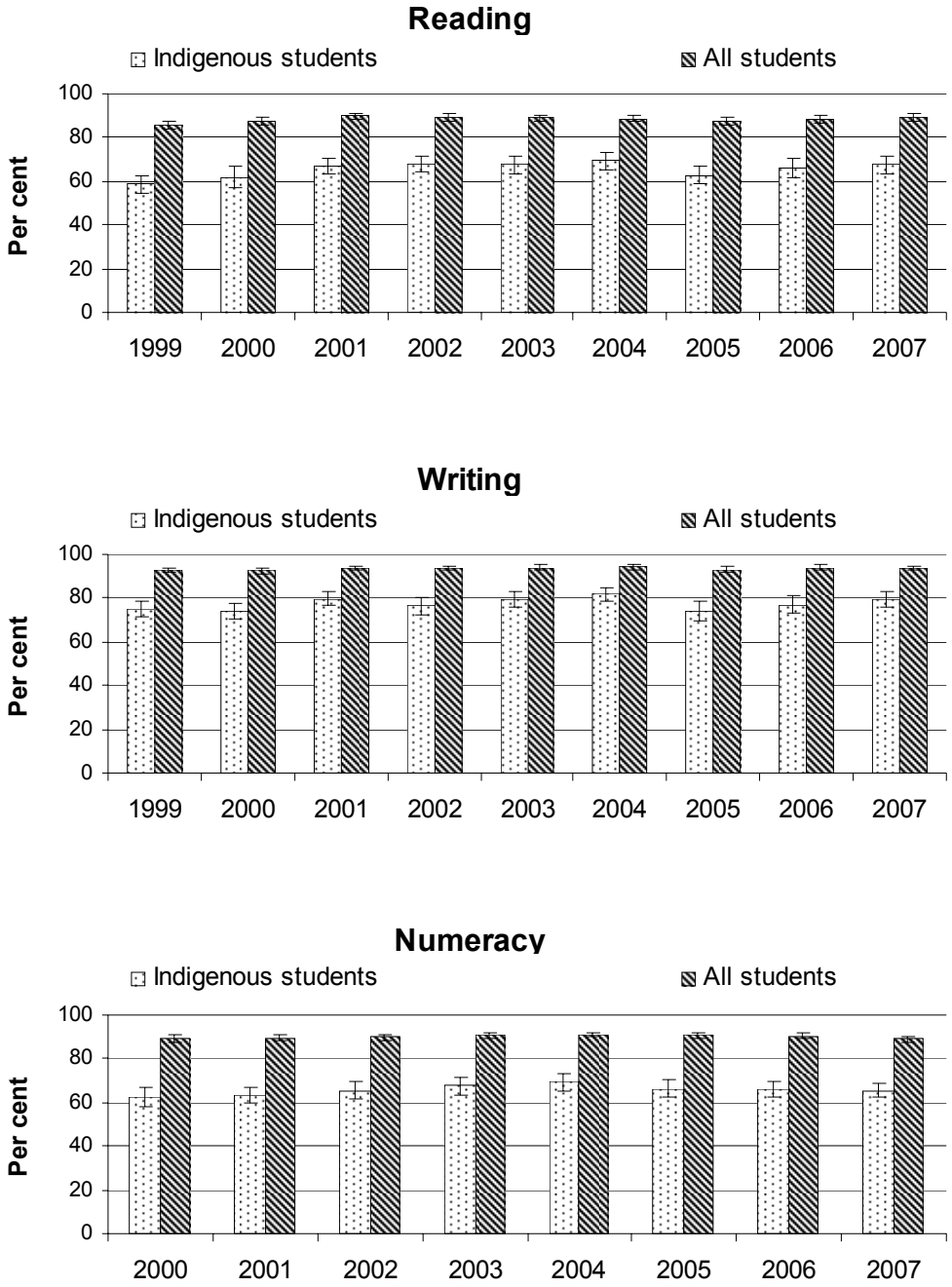
Figure 4.4.3 **Proportion of year 5 students who achieved the national minimum standard by learning domain, by State and Territory, 2008[a, b]**



[a] The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent. [b] Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.13, 4A.4.15 and 4A.4.21.

Figure 4.4.4 **Proportion of year 5 students who achieved the national benchmarks by learning domain, 1999–2007**[a, b, c, d, e]



[a] The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent. [b] Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varied across jurisdictions. Readers are urged to be cautious when comparing results. [c] Some movements in the results over time might have occurred because of the State/Territory equating processes, and may not reflect actual changes in student performance. [d] The methods used to identify Indigenous students varied across jurisdictions. [e] Numeracy data is only available from 2000 onwards.

Source: MCEETYA (various years); tables 4A.4.52–54.

Nationally in 2008:

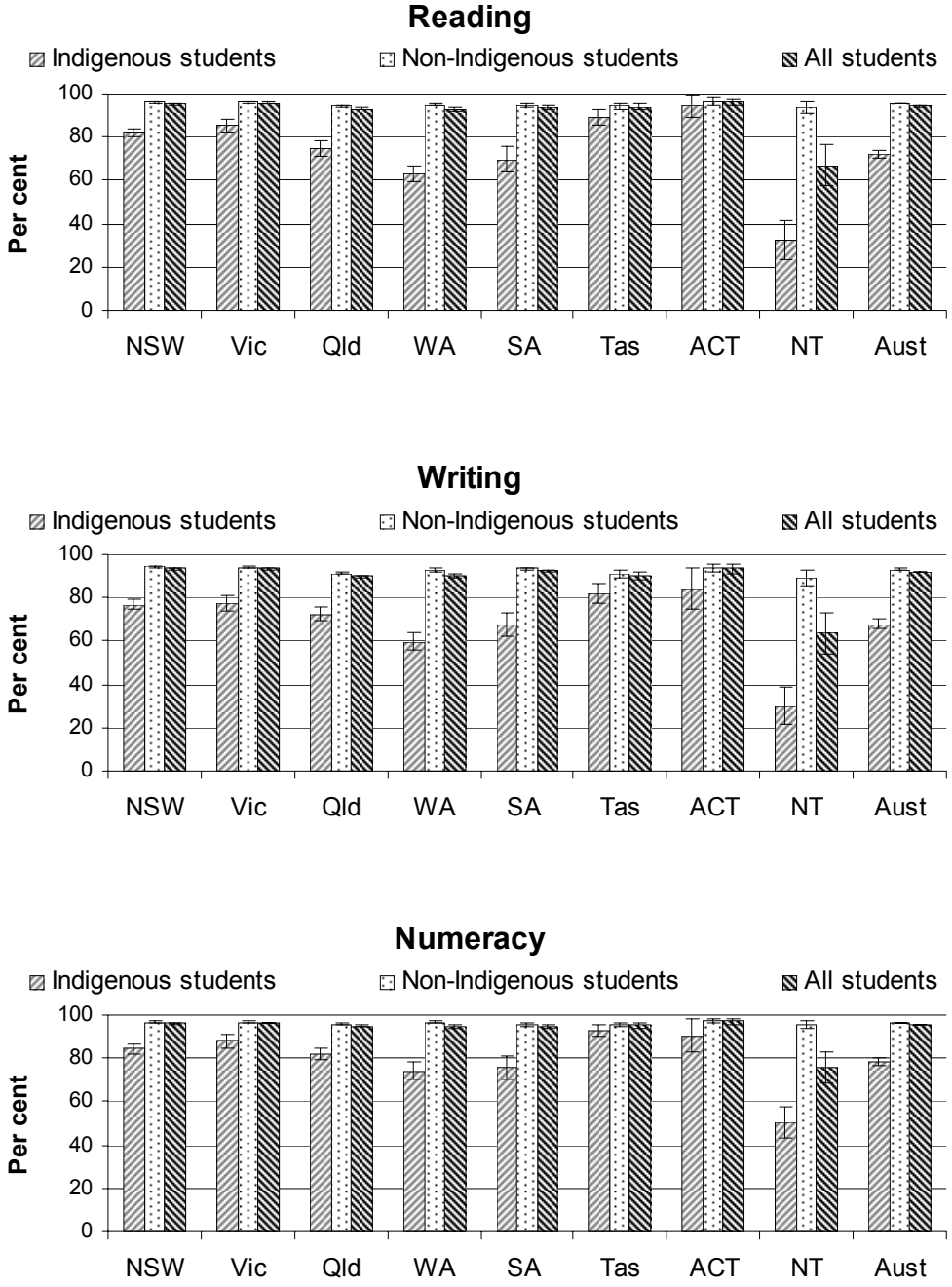
- 63.4 per cent of year 5 Indigenous students achieved the national minimum standard for reading compared with 92.6 per cent of non-Indigenous students (figure 4.4.3)
- 69.7 per cent of year 5 Indigenous students achieved the national minimum standard for writing compared to 93.9 per cent of non-Indigenous students (figure 4.4.3)
- 69.2 per cent of year 5 Indigenous students achieved the national minimum standard for numeracy compared to 94.0 per cent of non-Indigenous students (figure 4.4.3)
- the proportions of year 5 Indigenous students who achieved the national minimum standards for reading, writing and numeracy varied significantly across some states and territories (figure 4.4.3).

From 1999 (2000 for numeracy) to 2007:

- there was no statistically significant change over time in the proportion of year 5 Indigenous students who achieved the reading, writing or numeracy benchmarks (figure 4.4.4).
- performance levels for all students were consistently higher than for Indigenous students over time (figure 4.4.4).

Year 7

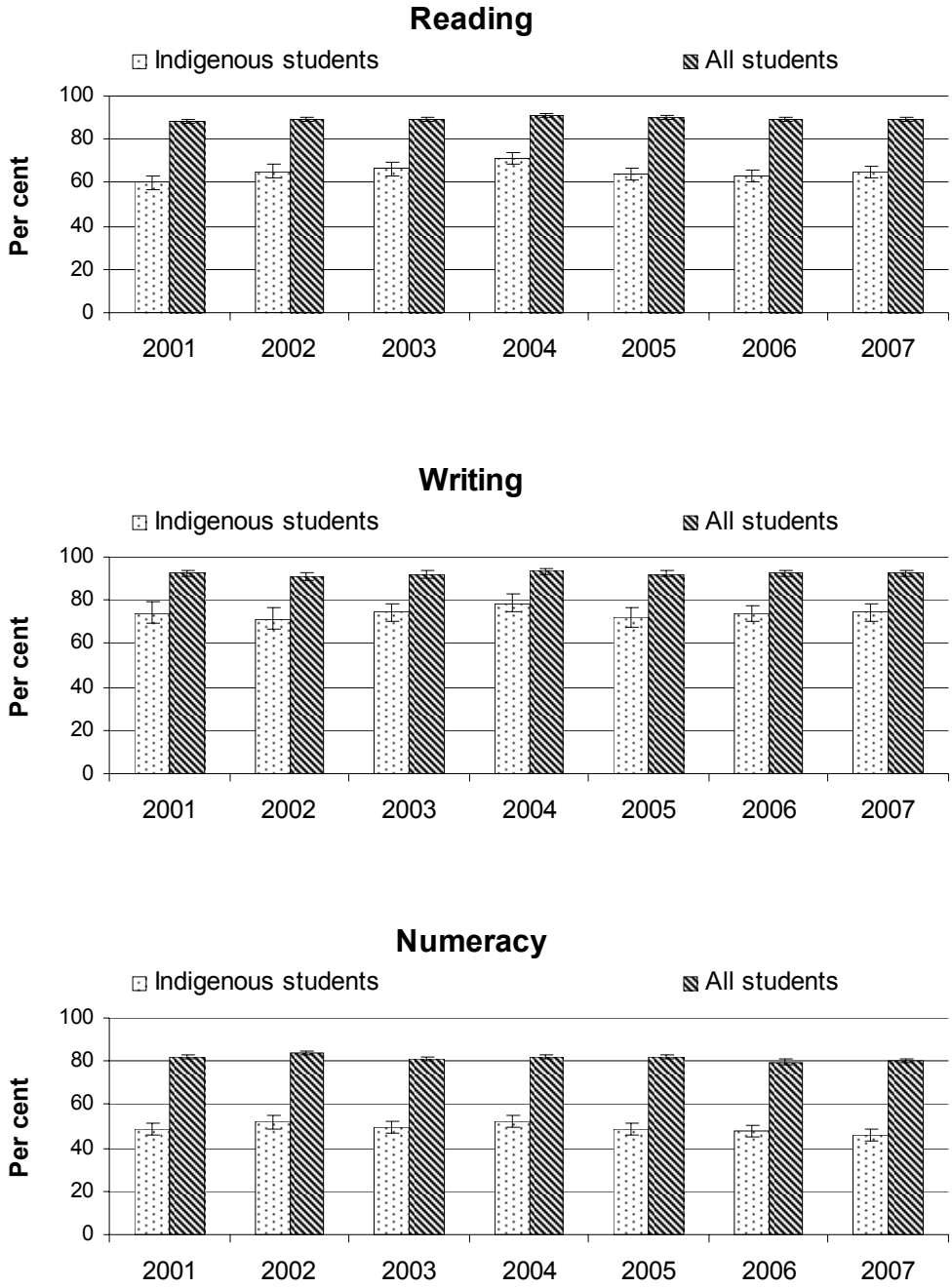
Figure 4.4.5 **Proportion of year 7 students who achieved the national minimum standard by learning domain, by State and Territory, 2008[a, b]**



a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent. **b** Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.25, 4A.4.27 and 4A.4.33.

Figure 4.4.6 **Proportion of year 7 students who achieved the national benchmarks by learning domain, 2001–2007**[a, b, c, d]



[a] The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent. [b] Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varied across jurisdictions. Readers are urged to be cautious when comparing results. [c] Some movements in the results over time might have occurred because of the State/Territory equating processes, and may not reflect actual changes in student performance. [d] The methods used to identify Indigenous students varied across jurisdictions.

Source: MCEETYA (various years); tables 4A.4.55–57.

Nationally in 2008:

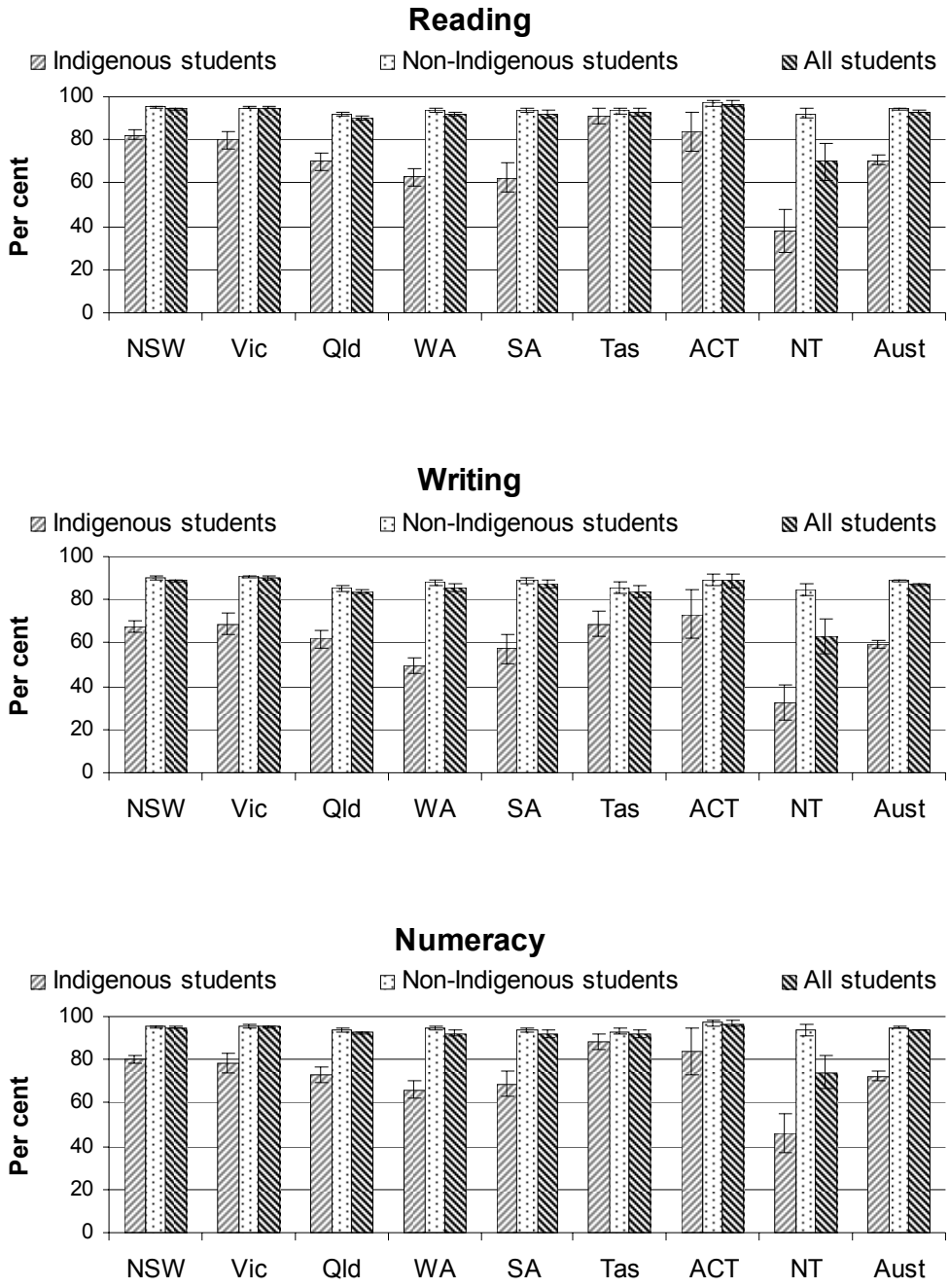
- 71.9 per cent of year 7 Indigenous students achieved the national minimum standard for reading compared to 95.4 per cent of non-Indigenous students (figure 4.4.5)
- 67.9 per cent of year 7 Indigenous students achieved the national minimum standard for writing compared to 93.2 per cent of non-Indigenous students (figure 4.4.5)
- 78.6 per cent of year 7 Indigenous students achieved the national minimum standard for numeracy compared to 96.4 per cent of non-Indigenous students (figure 4.4.5)
- there was significant variation across some states and territories in the proportion of year 7 Indigenous students who achieved the national minimum standard for reading, writing and numeracy (figure 4.4.5).

From 2001 to 2007:

- there was no statistically significant change over time in the proportions of year 7 Indigenous students who achieved the reading, writing and numeracy benchmarks (figure 4.4.6)
- performance levels for all students have been consistently higher than for Indigenous students over time for reading, writing and numeracy (figure 4.4.6).

Year 9

Figure 4.4.7 **Proportion of year 9 students who achieved the national minimum standard by learning domain, by State and Territory, 2008[a, b]**



a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent. **b** Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.37, 4A.4.39 and 4A.4.45.

Nationally in 2008:

- 70.7 per cent of year 9 Indigenous students achieved the national minimum standard for reading compared to 94.2 per cent of non-Indigenous students (figure 4.4.7)
- 59.7 per cent of year 9 Indigenous students achieved the national minimum standard for writing compared to 88.8 per cent of non-Indigenous students (figure 4.4.7)
- 72.5 per cent of year 9 Indigenous students achieved the national minimum standard for numeracy compared to 94.8 per cent of non-Indigenous students (figure 4.4.7).
- the proportion of year 9 Indigenous students who achieved the national minimum standards for reading, writing and numeracy varied significantly across some states and territories in 2008 (figure 4.4.7).

Comparisons of year 3, 5 and 7 learning outcomes

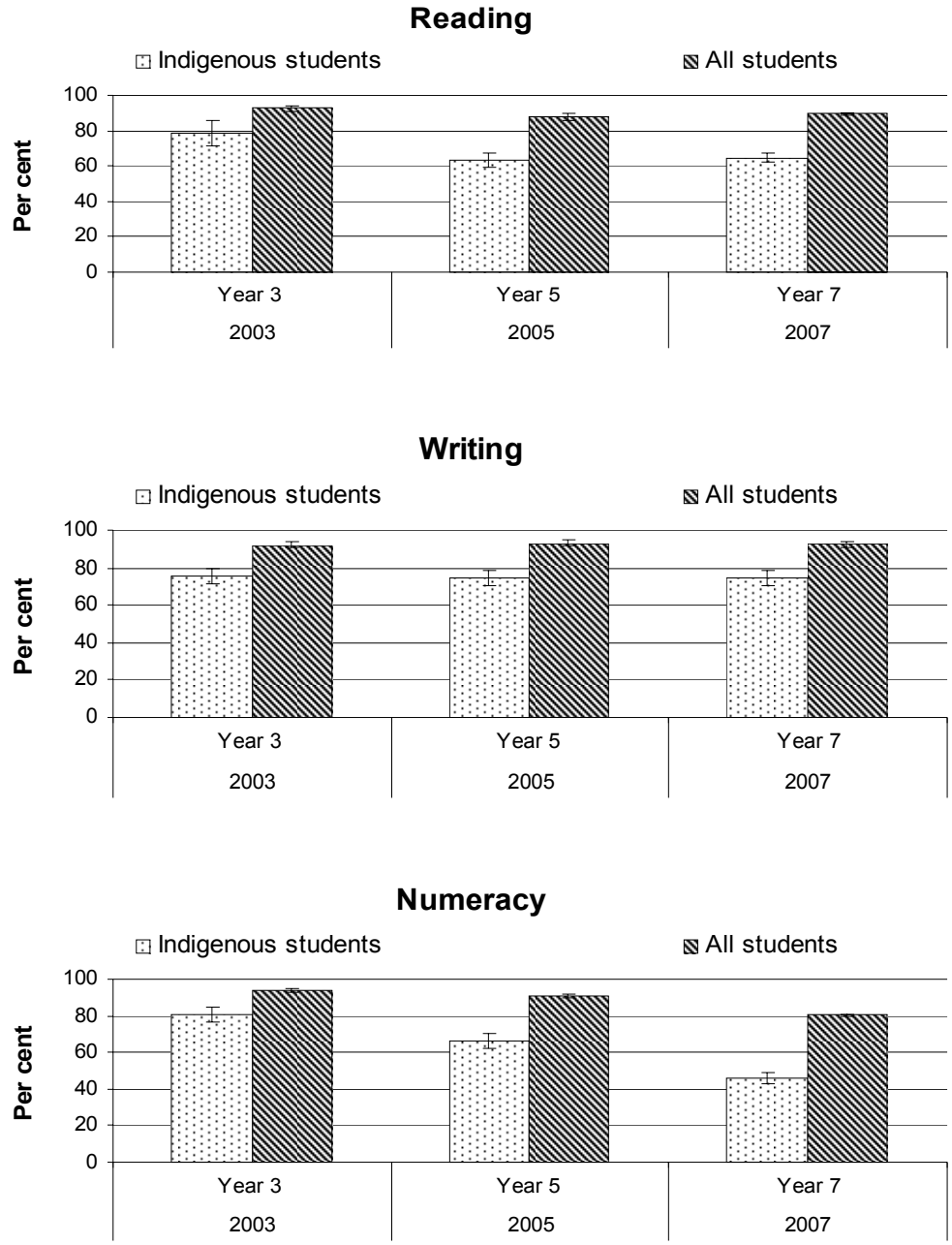
Research suggests that the disparity in academic performance between Indigenous and non-Indigenous students increases as they progress through the education system and that underperforming students are unable to catch up (Ou and Reynolds 2004; Reynolds et al. 2001; Schweinhart 2005; Zubrick et al. 2006).

National benchmarks data are not longitudinal in design or measurement and, therefore, there is no certainty that the same cohort of year 3 students in 2003 are tested again in year 5 in 2005 or in year 7 in 2007. However, the normal progression through school would mean a large proportion of year 3 students in 2003 would progress through to year 5 in 2005 and then year 7 in 2007, and be tested at those year levels.

Data for year 9 students were collected for the first time as part of the 2008 NAPLAN. Results from the 2008 NAPLAN are not included in the figures below as the NAPLAN is not comparable to previous tests.

The data presented in the next section provide some indication of how students are faring as they progress through the middle school years.

Figure 4.4.8 **Proportion of year 3 students in 2003, year 5 students in 2005 and year 7 students in 2007 who achieved the national benchmarks by learning domain[a, b, c, d]**



a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent. **b** Students who were absent or withdrawn from testing are not classified as assessed students and are not included in the benchmark calculations. The proportion of absent and withdrawn students varied across jurisdictions. Readers are urged to be cautious when comparing results. **c** Some movements in the results over time might have occurred because of the State/Territory equating processes, and may not reflect actual changes in student performance. **d** The methods used to identify Indigenous students varied across jurisdictions.

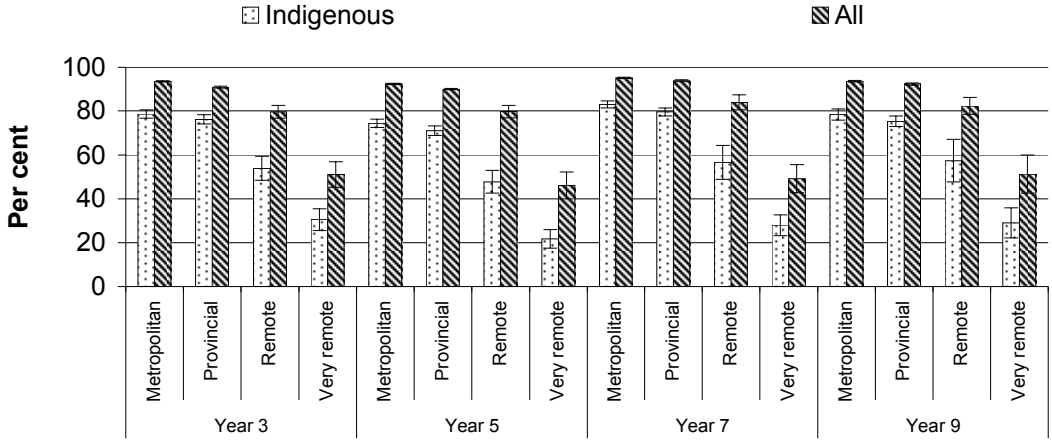
Source: MCEETYA (various years); tables 4A.3.49–57.

As Indigenous students progressed through school from year 3 (2003) to year 7 (2007):

- the proportion who achieved the national minimum reading benchmark significantly decreased from year 3 to year 5, but there was no significant difference between the proportion who achieved the reading benchmark from year 5 to year 7 (figure 4.4.8) — there was no difference in the proportion of all students who achieved the reading benchmark at each year level (figure 4.4.8)
- there was no statistically significant difference in the proportion of Indigenous students who achieved the writing benchmark, or the proportion of all students (figure 4.4.8)
- the proportion of Indigenous students who achieved the numeracy benchmark decreased significantly from year 3 to year 5, and year 5 to year 7 (figure 4.4.8) — there was also a significant decrease in the proportion of all students who achieved the numeracy benchmark between year 5 and year 7 (figure 4.4.8).

Comparison of Indigenous learning outcomes by geographic region

Figure 4.4.9 **Proportion of years 3, 5, 7 and 9 students achieving the national minimum standard for reading, by Indigenous status and geolocation, 2008[a, b]**



a The achievement percentages reported in this figure include 95 per cent confidence intervals, for example, 80 per cent ± 2.7 per cent. **b** Exempt students were not assessed and were deemed not to have met the national minimum standard.

Source: MCEETYA (2008); tables 4A.4.2, 4A.4.14, 4A.4.26 and 4A.4.38.

Nationally in 2008:

- for all categories of remoteness across years 3, 5, 7 and 9, the reading outcomes for Indigenous students were lower than those for all students. As with all students, outcomes for Indigenous students declined as remoteness increased — with significant differences between metropolitan and provincial areas and remote areas, and between very remote areas and all other areas (figure 4.4.9)
- the gap in learning outcomes between Indigenous students and all students increased as the degree of remoteness increased (for example, the gap in year 3 reading outcomes between Indigenous students and all students in metropolitan areas is 15.0 percentage points, compared to a gap of 20.6 percentage points for the same group in very remote areas) (figure 4.4.9)

Results for writing and numeracy are similar to those outlined above for reading (tables 4A.4.4, 4A.4.16, 4A.4.28, 4A.4.40, 4A.4.10, 4A.4.22, 4A.4.34 and 4A.4.46).

Historical data on Indigenous learning outcomes by geolocation by State/Territory are available for 2006 and 2007 (national data are available for 2005) (SCRGSP 2009).

Indigenous student participation rates in the NAPLAN

Students who do not participate in the NAPLAN (either because they are absent or withdrawn) are not included in the results, and therefore their level of performance is unknown. 'Exempt' students are counted as part of the cohort of assessed students, and are therefore included in the participation rates. Students may qualify for exemption because of their lack of proficiency in the English language (important for Indigenous students) or because of significant intellectual and/or functional disability.

Data on participation rates for Indigenous students in the 2008 NAPLAN are available by:

- State/Territory
- years 3, 5, 7 and 9
- reading, writing, language conventions (spelling, punctuation and grammar) and numeracy (see attachment tables).

Nationally in 2008, the Indigenous student participation rate in the NAPLAN was lower than the participation rate for all students, for reading, writing and numeracy, by around:

- 6 percentage points for year 3 students (for reading, 90.2 per cent compared to 96.6 per cent; for writing, 89.9 per cent compared to 96.4 per cent; and for numeracy, 89.4 per cent compared to 96.3 per cent)
- 6 percentage points for year 5 students (for reading, 90.1 per cent compared to 96.8 per cent; for writing, 90.0 per cent compared to 96.7 per cent; and for numeracy, 89.3 per cent compared to 96.6 per cent)
- 8 percentage points for year 7 students (for reading, 87.9 per cent compared to 96.3 per cent; for writing, 87.7 per cent compared to 96.2 per cent; and for numeracy, 87.4 per cent compared to 96.1 per cent)
- 14 percentage points for year 9 students (for reading, 79.7 per cent compared to 93.5 per cent; for writing, 79.7 compared to 93.6 per cent; and for numeracy, 79.3 per cent compared to 93.3 per cent).

Furthermore, the student participation rate for all students is stable between 96 and 97 per cent for reading, writing and numeracy tests for years 3, 5 and 7, before decreasing to around 93 per cent for year 9 students. For Indigenous students, participation rates are above 89 per cent for reading, writing and numeracy for years 3 and 5, before decreasing in year 7 (to around 87 per cent) and again in year 9 (to around 79 per cent).

Participation rates for spelling and grammar and punctuation are available in the attachment tables (tables 4A.4.11, 4A.4.23, 4A.4.35 and 4A.4.47). Participation rates are not currently available by geolocation.

4.5 Year 12 attainment

Box 4.5.1 **Key messages**

- The proportion of Indigenous 19 year olds who had completed year 12 or equivalent (35.7 per cent) was half that of non-Indigenous 19 year olds (73.5 per cent) in 2006 (table 4.5.1).
- Apparent retention rates for Indigenous students from the beginning of secondary school to year 12 increased from 39.8 per cent in 2004 to 46.5 per cent in 2008, while the non-Indigenous rate remained steady around 76 per cent) (figure 4.5.1).

'Halving the gap for Indigenous students in year 12 attainment or equivalent attainment rates by 2020' is one of six closing the gap targets announced by COAG (COAG 2009b). This indicator reports on the proportion of 19 year olds who are no longer at school and who have completed year 12 and/or equivalent (certificate level II), and year 12 retention rates. At its April 2009 meeting, COAG decided that in future this target would be measured for people aged 20–24 years rather than 19 years (COAG 2009a).

Evidence from a range of sources indicates that successful completion of year 12 is necessary if young people are to have access to the full range of further education, training, employment and life chances consistent with their abilities (ACER 2004; OECD 2005). Examples of initiatives that have been successful in increasing Indigenous secondary school participation and attainment can be found in box 4.5.2.

There is growing evidence showing the importance of continuing school after the period of compulsory schooling ends (Dusseldorp Skills Forum 2006). Young people who do not complete year 12 are less likely to be fully engaged in study or work than young people who do complete year 12 (Long 2006). In 2006, Indigenous people who attained a year 12 certificate were more likely to be employed than those who finished schooling only to year 10 (68.2 per cent compared to 52.8 per cent, respectively) and were more likely to have higher incomes (table 4A.5.19).

A large body of research emphasises the pivotal role of education in reducing long term disadvantage of Indigenous peoples (ACER 2003, 2004; Buckskin 2000; OECD 2004; WHO 1986). School completion is linked to economic and social wellbeing (and other positive health behaviours) and can also reduce the need for remedial education and social welfare services (Barnett 1993; Reynolds et al. 2002).

Evidence suggests a connection between educational disadvantage and involvement in crime. An examination of the link between education and crime by Mackenzie (2002) concluded that improving school performance and retention reduced the risk of juvenile involvement in crime. A study on correlations between Indigenous contact with the justice system and social factors found that failure to complete year 12 has only a small effect on the risk of imprisonment but a significant effect on the likelihood of being charged (Weatherburn, Snowball and Hunter 2006). The authors of the study noted that their findings were consistent with empirical research but acknowledged that it is unclear whether the relationship between poor school performance and offending is actually causal or a reflection of some other factors.

Box 4.5.2 'Things that work' — increasing secondary school participation and attainment

Deadly Vibe is a magazine for Indigenous students published by Vibe Australia (an Aboriginal media agency) with funding from the Australian Government. The magazine promotes positive self-image and healthy lifestyle messages through articles focusing on the achievements of Indigenous people in sport, music, the arts and education. The target audience for the magazine is school aged children (6 to 18 years old).

The magazine has been evaluated three times since 2002, most recently in 2006 by the Cultural and Indigenous Research Centre Australia (CIRCA). A survey of young people and readers of the magazine showed that:

- Deadly Vibe was the most popular magazine/newspaper they read
- 83 per cent had read the magazine, with 23 per cent of respondents reading it regularly
- 75 per cent of readers of Deadly Vibe assessed it as 'deadly'
- 85 per cent agreed that Deadly Vibe magazine made them feel proud to be Indigenous
- 83 per cent agreed that the magazine teaches them about being healthy (Australian Government unpublished).

The **Cape York Institute's Higher Expectations Program (HEP)** and **St Joseph's Indigenous fund** are examples of non-government sponsorship of programs for children to board at private schools. The HEP provides Indigenous children living in the Cape York region with access to secondary education at Queensland's most academically successful boarding schools. The HEP provides both financial assistance and ongoing support from a program administrator and student support officer, who maintain regular contact with students, school staff, parents/guardians and home communities, and assist students and their families with transition and communication issues.

The HEP has expanded from six scholarships in 2005, to 24 in 2006, 25 in 2007, 33 in 2008 and 38 from 15 communities enrolled in 2009. There are currently nine partner schools located in Brisbane, Rockhampton, Townsville, Charters Towers and Cairns. The Australian Government contributed funding for 9 students in 2008 and 29 students in 2009 and funding from Macquarie Group Foundation has been approved for 2009–2011.

(Continued next page)

Box 4.5.2 (continued)

The HEP program's success is partly due to the individual case management of students and the extra activities to increase motivation, develop life skills and leadership. Though only a fraction of Cape York students will participate in the HEP, their success (completion of secondary school and enrolment in tertiary studies) will greatly influence Cape York educational statistics and provide Cape communities with a pool of talented and educated future leaders. In 2007, four students finished year 12 and three of those students enrolled in university and, in 2008 two students graduated from year 12 and enrolled in university.

The St Joseph's Indigenous fund offers scholarships to Indigenous boys to attend St Joseph's College at Hunters Hill in Sydney. Started in 1998 with one year 7 student from Walgett, the program has more than 40 Indigenous children whose fees are paid through assistance from the Australian Government, parents, the school and other donors. Six boys have already completed their higher school certificate (Queensland Government unpublished).

Information on **remote schooling in the NT** has been included in previous reports. The focus has been on increasing access to secondary education for students in remote and very remote communities in the NT. Across the NT, the number of Indigenous students completing the Northern Territory Certificate of Education (NTCE) increased from 126 in 2007 to 157 in 2008. In 2008, 45 students achieved the NTCE in their home communities. The individual schools that are producing graduates are increasing in number and support structures include a dedicated NTCE implementation officer to work with remote schools that offer NTCE, and professional development opportunities for senior years teachers including a remote schools conference held annually (NT Government unpublished).

Student attainment

Data on the proportion of 19 year olds who are no longer at school and who have completed year 12 and/or certificate level II have been derived from the ABS 2001 and 2006 Censuses. Census data rely on self-reporting — people may say they have completed a particular year of school or post-school qualification but may not have actually been awarded a certificate.

Table 4.5.1 **Proportion of 19 year olds who have completed year 12 and/or certificate level II, 2001 and 2006[a, b, c, d]**

	2001			*2006*		
	Indigenous[e]	*Non-Indigenous*		*Indigenous[e]*	*Non-Indigenous*	
	(%)	*(%)*	*Rate ratio[f]*	*(%)*	*(%)*	*Rate ratio[f]*
NSW	33.1	67.4	2.0	35.7	71.9	2.0
Vic	35.6	68.5	1.9	37.1	76.2	2.1
QLD	44.2	72.9	1.6	48.0	76.7	1.6
WA	25.0	65.1	2.6	31.6	70.9	2.2
SA	26.3	62.8	2.4	33.9	67.8	2.0
Tas	36.5	56.8	1.6	37.1	62.3	1.7
ACT	52.4	81.4	1.6	50.0	84.8	1.7
NT	7.3	52.4	7.2	12.0	62.2	5.2
Australia	31.3	68.1	2.2	35.7	73.5	2.1

a Excluding people still attending secondary school. **b** Based on place of usual residence. **c** Equivalent means attainment of certificate level II and does not include other certificate levels. **d** Excludes 19 year olds for whom level of schooling and certificate level was not known. **e** Includes Aboriginal and Torres Strait Islander people who identify as both Aboriginal and Torres Strait Islander. **f** The rate ratio is calculated by dividing the non-Indigenous rate by the Indigenous rate.

Source: ABS (unpublished), derived *from 2006 Census of Population and Housing* and *2001 Census of Population and Housing;* tables 4A.5.2 and 4A.5.6.

In 2006, excluding those still attending school:

- nationally, the proportion of Indigenous 19 year olds who had completed year 12 and/or a year 12 equivalent (certificate II) was half that of non-Indigenous 19 year olds (35.7 per cent compared with 73.5 per cent, respectively) (table 4.5.1)
- the proportion of Indigenous 19 year olds who had completed year 12 and/or equivalent was higher in major cities (44.4 per cent) than in very remote areas (19.2 per cent). Among non-Indigenous 19 year olds, 77.1 per cent of those in major cities had completed year 12 and/or an equivalent certificate compared with 58.4 per cent of those in very remote areas (table 4A.5.8).

Between 2001 and 2006, excluding those still attending school:

- nationally, the proportion of Indigenous and non-Indigenous 19 year olds who had completed year 12 and/or equivalent increased (from 31.3 to 35.7 per cent for Indigenous 19 year olds and from 68.1 to 73.5 per cent for non-Indigenous 19 year olds) (table 4.5.1)
- the proportion of Indigenous 19 years olds completing year 12 and/or equivalent increased in all states and territories (except the ACT) (table 4.5.1)

- the proportion of Indigenous 19 year olds who had completed year 12 and/or equivalent increased in each remoteness area with the largest increase in remote and very remote areas (from 20.2 to 28.0 per cent and from 13.7 to 19.2 per cent, respectively). However, the gap between Indigenous and non-Indigenous year 12 attainment increased in each region, except in remote areas where it fell slightly (tables 4A.5.4 and 4A.5.8).

More data on the proportion of 19 year olds who have completed year 12 and/or certificate level II in 2001 and 2006, by jurisdiction and remoteness area are available in tables 4A.5.1–8.

Year 12 completion rate

State and Territory education authorities issue year 12 certificates to students who have completed year 12. A year 12 completion rate is the number of students who meet the requirements of a year 12 certificate expressed as a percentage of the estimated potential year 12 population. The estimated potential year 12 population is an estimate of a single year age group which could have attended year 12 that year, calculated as the estimated resident population aged 15–19 years divided by five. Completion rates are not comparable to data derived from the Census. Completion rates may not include equivalent qualifications such as the certificate level II.

Nationally, the year 12 completion rate for Indigenous students was 24.0 per cent compared with 57.8 per cent for non-Indigenous students (tables 4A.5.14 and 4A.5.15). Between 2001 and 2007, the completion rate for Indigenous students increased from 19.5 to 24.0 per cent while the rate for non-Indigenous students increased from 56.6 to 57.8 per cent. Over this period, the gap between Indigenous and non-Indigenous year 12 certificate completion fell from 37.1 percentage points to 33.7 percentage points (tables 4A.5.14 and 4A.5.15).

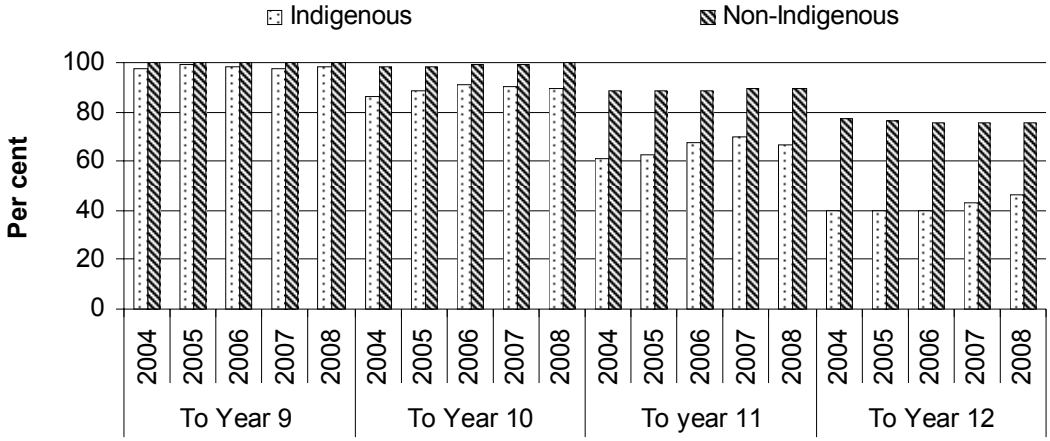
More data on completion rates by jurisdiction are available in tables 4A.5.14 and 4A.5.15.

Student retention

Apparent retention rates estimate the percentage of full time students who progress through secondary school. These measures are under examination because apparent retention rates do not reflect the increasing number of students who enrol in school part time or choose to pursue their senior secondary studies or an equivalent vocational education and training qualification at TAFE. The method of calculation for apparent retention rates does not take into account impacts of migration and

overseas students, and students repeating a year level or moving interstate (ABS 2009). Apparent retention rates do not reflect students who do not make the transition from primary to secondary school.

Figure 4.5.1 **Apparent retention rates of full time secondary students, all schools**[a, b, c]



[a] The apparent retention rate is the percentage of full time students who continued to years 9, 10, 11, and 12 from respective cohort groups at the commencement of their secondary schooling (year 7/8). See notes to tables 4A.5.26–30 for more detail. [b] The exclusion of part time students from standard apparent retention rate calculations has implications for the interpretation of results for all jurisdictions, but particularly for SA, Tasmania and the NT where there is a high proportion of part time students. [c] Ungraded students are not included in the calculation of apparent retention rates. This exclusion has particular implications for the NT and as a result, Indigenous apparent retention rates may misrepresent the retention of students in secondary schooling in the NT.

Source: ABS (2009); table 4A.5.23.

- Apparent retention rates for Indigenous students from the beginning of secondary school to year 12 increased from 39.8 per cent in 2004 to 46.5 per cent in 2008 (figure 4.5.1).
- Nationally, in 2008, the retention rate to year 12 for Indigenous students was significantly lower than the rate for non-Indigenous students (46.5 per cent compared with 75.6 per cent, respectively) (figure 4.5.1).
- The most significant differences between Indigenous and non-Indigenous retention rates were at the post compulsory years 11 and 12.
- Table 4A.5.35 shows apparent retention rates of full time students who continued to year 12 from year 10. Nationally, Indigenous students' retention from year 10 to year 12 in 2008 was 51.0 per cent compared with 76.5 per cent for non-Indigenous students. Apparent retention rates from year 10 to year 12 from 2004 to 2008 by State and Territory are included in tables 4A.5.31–4A.5.35.

Section 6.4 and 6.5 include retention rates to year 9 and year 10, respectively. More data on apparent retention rates from 2002 to 2008, by jurisdiction and gender are included in tables 4A.5.24–4A.5.30.

4.6 Employment

Box 4.6.1 **Key messages**

- Between 2001 and 2006, for those aged 15–64 years:
  - the employment to population ratio increased for Indigenous people from 43.2 per cent to 48.0 per cent, and for non-Indigenous people from 68.0 per cent to 71.7 per cent. The gap remained around 24 percentage points (figure 4.6.1)
  - labour force participation increased for Indigenous people from 54.1 per cent to 56.8 per cent and for non-Indigenous people from 73.3 per cent to 75.5 per cent (figure 4.6.3)
  - the unemployment rate decreased for Indigenous people from 20.0 per cent to 15.6 per cent and for non-Indigenous people from 7.3 per cent to 5.1 per cent (figure 4.6.6).
- The Indigenous labour force participation rate was lower, and the unemployment rate was higher, than for non-Indigenous people in all remoteness areas, states and territories and age groups (figures 4.6.3–9).

The Council of Australian Governments (COAG) has committed to 'halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade' (COAG 2008).

This section includes information about the key indicator 'employment to population ratio', and additional information on labour force participation, unemployment and Community Development Employment Projects (CDEP).

Labour market outcomes are directly related to people's living standard and many aspects of their wellbeing. Being employed leads to improved income for families and communities (which in turn has a positive influence on health and the education of children). It also enhances self-esteem, increases opportunities for self development, influences interaction at the family and community levels and reduces social alienation. Employment by part time/full time status and skill level is discussed in more detail in section 8.1. The focus of this section is the extent to which people are participating in the labour force or are unemployed.

The labour force is the most widely used measure of the economically active population or the formal supply of labour.

The labour force is a measure of the number of people contributing to, or willing to contribute to, the supply of labour and, as defined by the ABS, comprises two mutually exclusive groups within the population:

- the employed (people who have worked for at least one hour in the reference week, including those who have received wages for participating in CDEP
- the unemployed (people who are without work, but are actively looking for work and available to start work within four weeks).

The remainder of the population are not in the labour force. There are many reasons why people may not be in the labour force. They may not wish or be able to work because they are in education, retired, caring for family members, have a disability or poor health or have some other means of financial support. Alternatively, they could be discouraged jobseekers who would like work but are not actively looking for work. People may become discouraged jobseekers because they believe that there are no suitable jobs in their area, the costs of searching are too great, or they believe that they do not have the appropriate skills or qualifications (Hunter and Gray 1999). It is likely that the extent of unemployment, particularly long term unemployment, is underestimated because of discouraged jobseekers. After people have been unemployed for long periods of time they are more likely to drop out of the labour force. Indigenous people may also be engaged in activities outside of the labour force, through participation in traditional or customary activities, or occupied with activities that often generate income, such as the production of Indigenous art, but which are not always recorded as employment (Altman et al. 2006).

Data for employment to population ratios, labour force participation and unemployment in this section are from the ABS 2006 Census and ABS 2001 Census. Data are reported for the population aged 15 to 64 years. The age of 15 years is the lowest practical limit above the compulsory schooling age for measuring the participation of young people in economic activity. The age of 65 years is when most people have retired from the workforce.

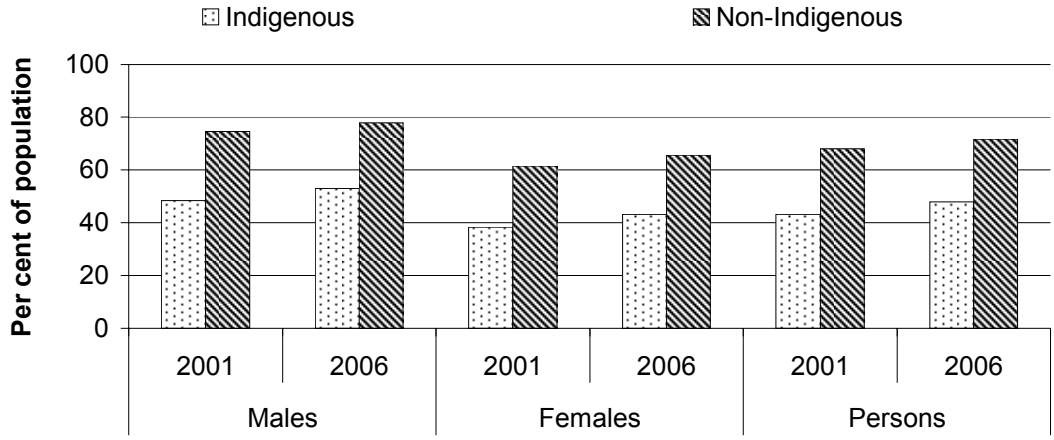
The Indigenous labour force participation and unemployment data reported in this section are influenced by the CDEP program. The CDEP program is funded by the Australian Government and provides activities for unemployed Indigenous people to develop work skills and move into employment. More information on CDEP is included later in this section.

Employment to population ratio

The National Indigenous Reform Agreement (NIRA) (COAG 2009) identifies the employment to population ratio as the primary performance measure for this COAG

target. Employment to population ratios measure the employed as a proportion of the working age population and are complemented by labour force participation rates presented later in this section. Labour force participation measures those in the labour force (the employed and the unemployed) as a proportion of the working age population.

Figure 4.6.1 **Employment to population ratio, 2001 and 2006[a]**



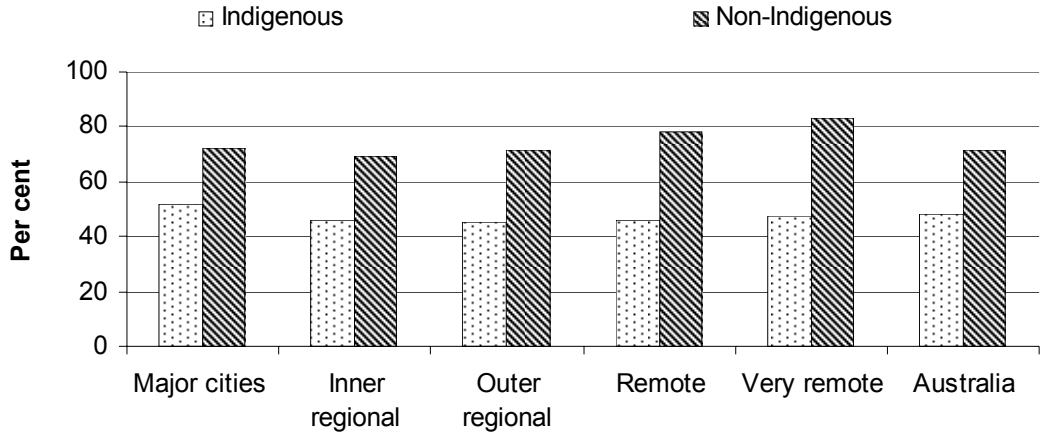
a Employment to population ratio is calculated for those aged 15–64 years.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; ABS (unpublished) derived from the *2001 Census of Population and Housing*; tables 4A.6.5–6.

Between 2001 and 2006:

- the employment to population ratio for Indigenous people increased from 43.2 per cent to 48.0 per cent. This ratio also increased for non-Indigenous people (from 68.0 per cent to 71.7 per cent). Overall, the gap remained relatively unchanged (24.8 percentage points to 23.7) (figure 4.6.1)
- the employment to population ratio for Indigenous women increased from 38.3 per cent to 43.2 per cent. This ratio also increased for non-Indigenous women (from 61.5 per cent to 65.6 per cent) (figure 4.6.1)
- the employment to population ratio for Indigenous men increased from 48.5 per cent to 53.0 per cent. This ratio also increased for non-Indigenous men (from 74.5 per cent to 77.8 per cent) (figure 4.6.1)
- employment to population ratios for Indigenous and non-Indigenous women were lower than those for Indigenous and non-Indigenous men, respectively (figure 4.6.1).

Figure 4.6.2 **Employment to population ratio, by remoteness, 2006**[a]



[a] Employment to population ratio is calculated for those aged 15–64 years.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.6.18.

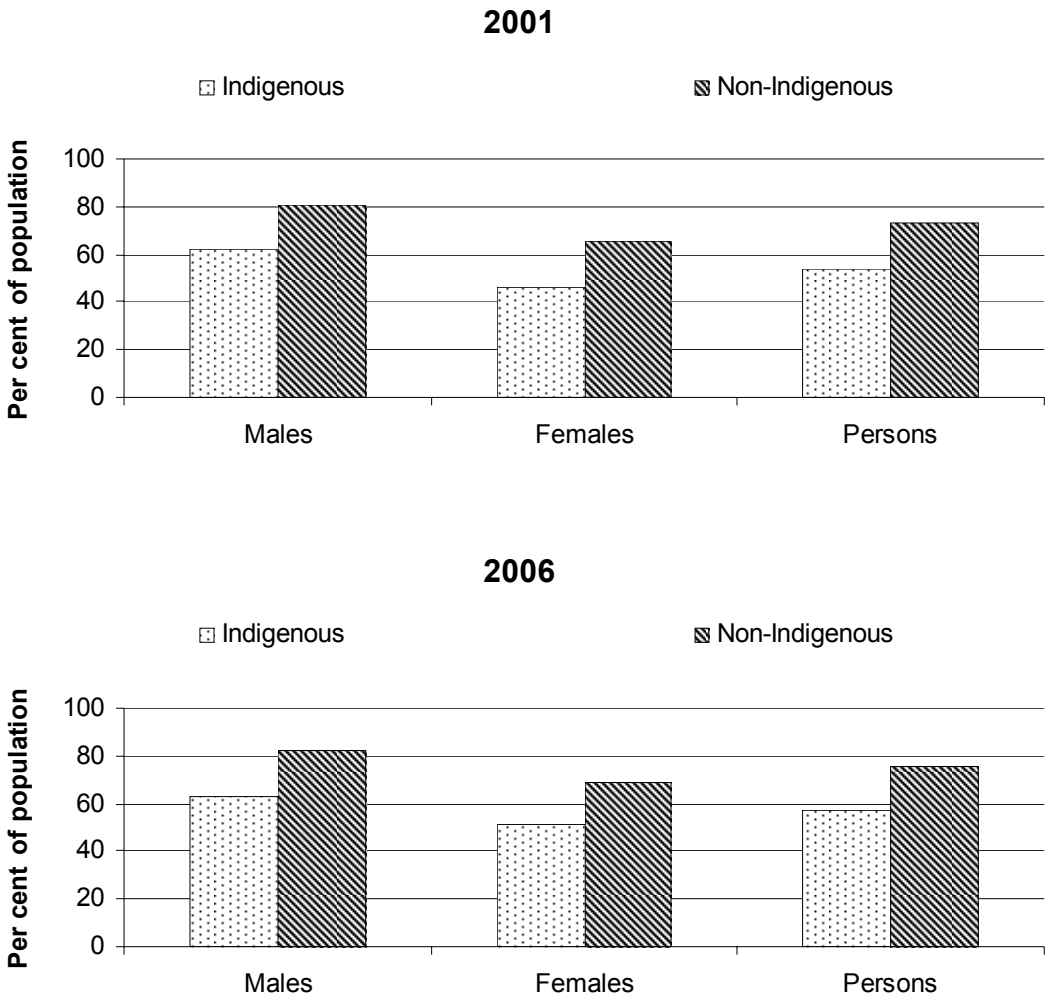
In 2006:

- employment to population ratios for Indigenous people were lower than for non-Indigenous people in all remoteness areas (figure 4.6.2)
- employment to population ratios varied across remoteness areas for both Indigenous and non-Indigenous people (figure 4.6.2)
- employment to population ratios for Indigenous people were highest in major cities (51.8 per cent) and lowest in outer regional areas (45.5 per cent) (figure 4.6.2)
- in contrast, employment to population ratios for non-Indigenous people were highest in very remote areas (83.4 per cent) and lowest in inner regional areas (69.2 per cent) (figure 4.6.2).

Labour force participation

The labour force participation rates used in this section are calculated as the number of people aged 15 to 64 years who are employed or are available for work (the labour force), divided by the population in that age group.

Figure 4.6.3 **Labour force participation, 2001 and 2006**[a, b]



a Labour force participation is the number of employed plus those who were unemployed and available for work expressed as a percentage of people aged 15–64 years. **b** Data are not age standardised.

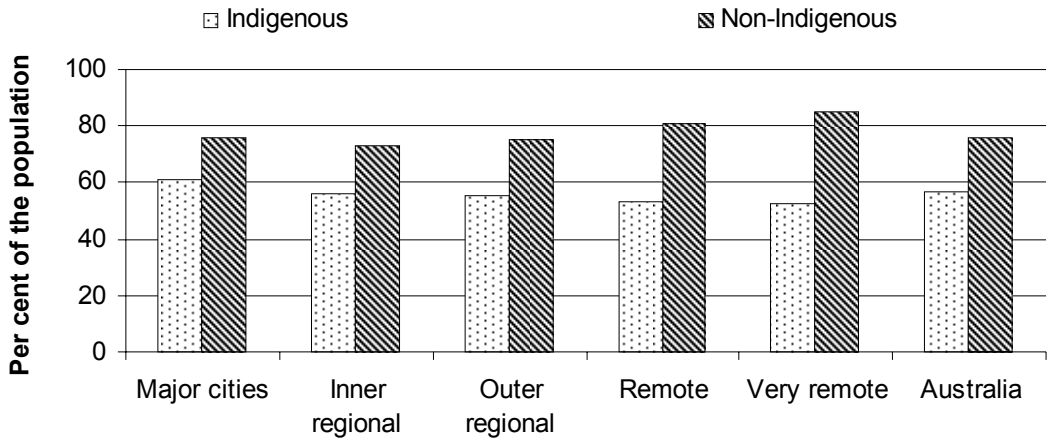
Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; ABS (unpublished) derived from the *2001 Census of Population and Housing*; tables 4A.6.3–4.

Between 2001 and 2006:

- labour force participation increased for Indigenous people (from 54.1 per cent to 56.8 per cent) and for non-Indigenous people (from 73.3 per cent to 75.5 per cent). Overall, the gap remained relatively unchanged (from 19.3 percentage points to 18.7 percentage points) (figure 4.6.3)
- labour force participation increased for Indigenous women (from 46.5 per cent to 51.1 per cent) and for non-Indigenous women (from 65.8 per cent to 69.2 per cent) (figure 4.6.3)

- labour force participation increased slightly for Indigenous men (from 62.1 per cent to 63.0 per cent) and for non-Indigenous men (from 80.9 per cent to 82.0 per cent) (figure 4.6.3)
- Indigenous and non-Indigenous women both participated in the labour force at a lower rate than Indigenous and non-Indigenous men, respectively (figure 4.6.3).

Figure 4.6.4 **Labour force participation, by remoteness, 2006**[a, b, c]



[a] Labour force participation is the number of employed plus those who are unemployed and available for work expressed as a percentage of people aged 15–64 years. [b] Data are not age standardised. [c] CDEP participation was counted as employment by the ABS and varied with remoteness. Indigenous people living in remote and very remote areas of Australia were much more likely to participate in CDEP.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.6.4.

Across remoteness areas, in 2006:

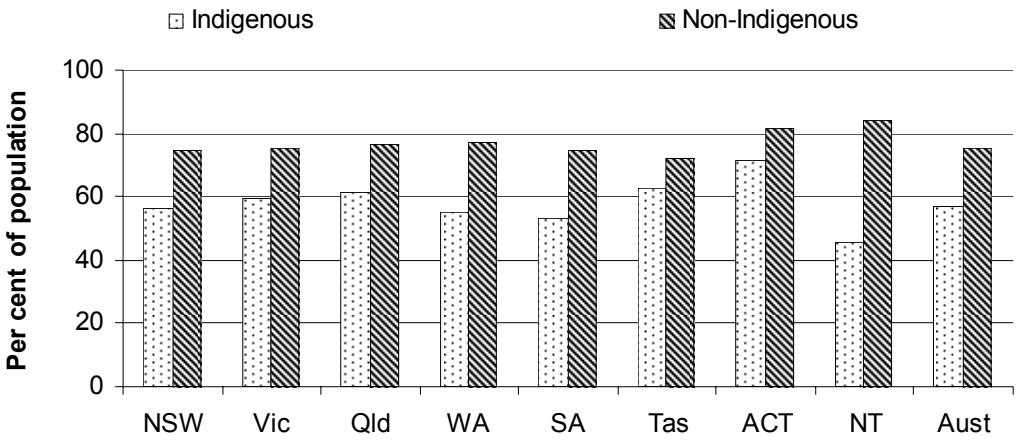
- labour force participation for Indigenous people was lower than for non-Indigenous people in all remoteness areas (figure 4.6.4)
- labour force participation for Indigenous people was lower in more remote areas. In contrast, labour force participation was higher for non-Indigenous people in more remote areas (figure 4.6.4)
- labour force participation for Indigenous people was highest in major cities (61.0 per cent) and lowest in very remote areas (52.7 per cent). In contrast, labour force participation for non-Indigenous people was very similar in major cities, inner regional areas and outer regional areas, (76.0 per cent, 73.4 per cent and 75.3 per cent respectively), was higher in remote areas (80.8 per cent) and highest in very remote areas (85.4 per cent) (figure 4.6.4).

For both Indigenous and non-Indigenous people, labour force participation rates vary through life cycle stages, initially increasing with age as young people move

from education and training (often combined with part-time work) into full-time jobs, remaining relatively high during prime working ages, and then declining towards retirement.

Across age groups, in 2006, labour force participation for Indigenous people was lower than for non-Indigenous people in all age groups (table 4A.6.4). A breakdown of labour force participation by sex is available in table 4A.6.4.

Figure 4.6.5 **Labour force participation, by State/Territory 2006**[a, b, c, d]



[a] Labour force participation is the number of employed plus those who are unemployed and available for work expressed as a percentage of people aged 15–64 years. [b] Data are not age standardised. [c] Australia includes 'other territories'. [d] CDEP participation varies across states and territories. Indigenous people living in the NT and other states with a large proportion of Indigenous people living in remote or very remote areas have a much higher proportion of Indigenous people participating in CDEP.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.6.6.

Across jurisdictions, in 2006:

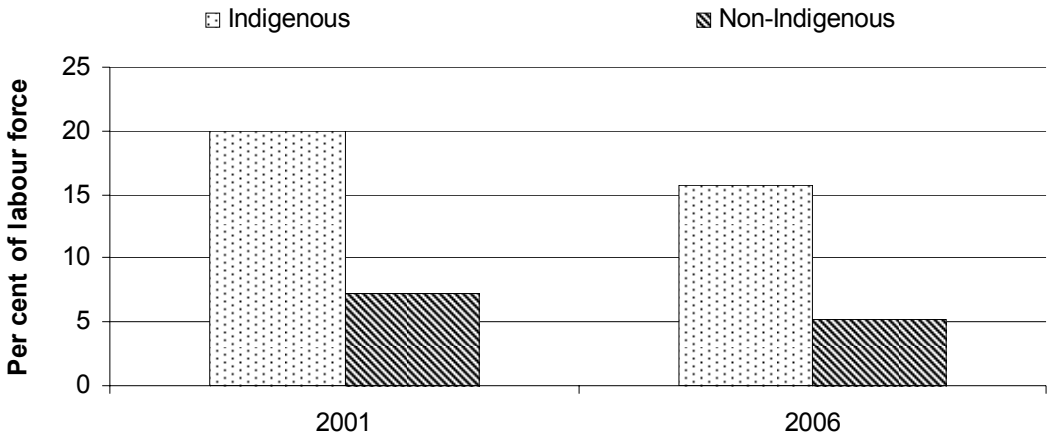
- labour force participation for Indigenous people was lower than for non-Indigenous people in all states and territories (figure 4.6.5)
- Indigenous labour force participation was highest in the ACT (71.6 per cent) and lowest in the NT (45.5 per cent). In contrast non-Indigenous labour force participation was highest in the NT (84.2 per cent) and lowest in Tasmania (72.3 per cent) (figure 4.6.5).

Unemployment

The unemployment rate, which is the number of unemployed people expressed as a percentage of the labour force (employed plus unemployed people), is a widely used measure of potentially underutilised labour resources in the economy.

Data on unemployment need to be considered alongside data on CDEP participation and people who are not in the labour force, especially for Indigenous people in remote areas. In 2001 and 2006 (the years from which Census data are drawn upon in this section), known CDEP participants were counted as employed, as distinct from unemployed or not in the labour force in ABS statistics. This accounts for a relatively large number of Indigenous people, particularly in remote areas.

Figure 4.6.6 **Unemployment, 2001 and 2006**[a, b]



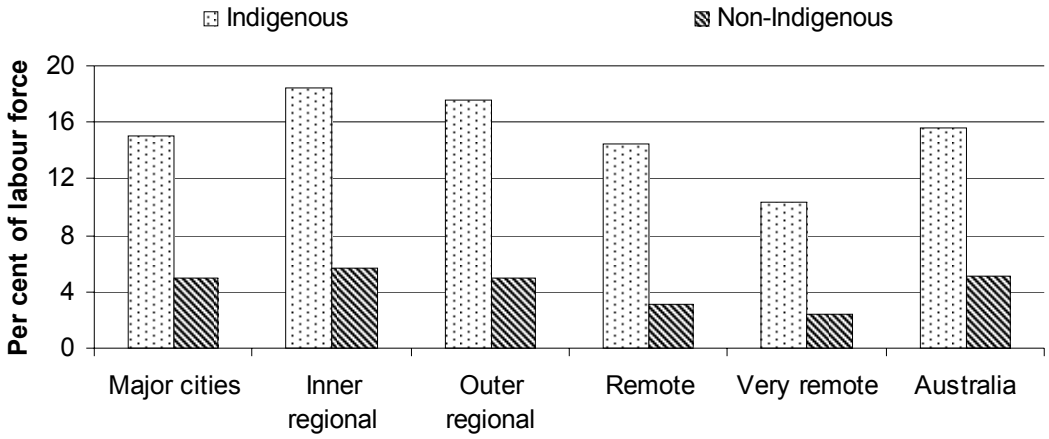
[a] The unemployment rate is the number of unemployed people expressed as a percentage of people in the labour force (the employed plus the unemployed) aged 15–64 years. [b] Data are not age standardised.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; ABS (unpublished) derived from the *2001 Census of Population and Housing*; tables 4A.6.21 and 4A.6.22.

Between 2001 and 2006:

- unemployment decreased for both Indigenous people (from 20.0 per cent to 15.6 per cent) and for non-Indigenous people (from 7.3 per cent to 5.1 per cent). Overall, the gap narrowed from 12.7 percentage points to 10.5 percentage points (figure 4.6.6)
- unemployment decreased for Indigenous women (from 17.6 per cent to 15.4 per cent) and for non-Indigenous women (from 6.5 per cent to 5.2 per cent) (tables 4A.6.21 and 4A.6.22)
- unemployment decreased for Indigenous men (from 21.9 per cent to 15.8 per cent) and for non-Indigenous men (from 7.9 per cent to 5.1 per cent) (tables 4A.6.21 and 4A.6.22).

Figure 4.6.7 **Unemployment by remoteness, 2006**[a, b]



[a] The unemployment rate is the number of unemployed people expressed as a percentage of people in the labour force (the employed plus the unemployed) aged 15–64 years. [b] Data are not age standardised

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.6.22.

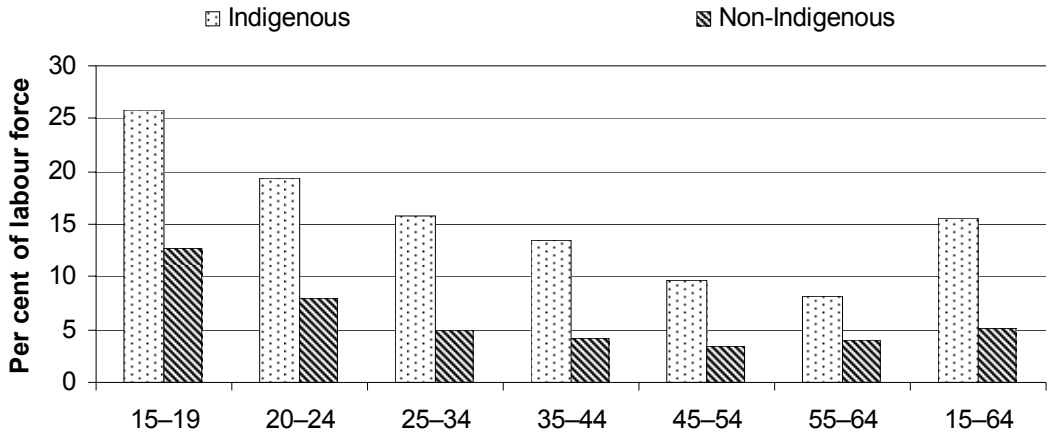
Across remoteness areas, in 2006:

- the unemployment rate for Indigenous people was much higher than for non-Indigenous people in all remoteness areas (figure 4.6.7)
- the unemployment rate for Indigenous people was highest in inner regional areas (18.5 per cent) and lowest in very remote areas (10.3 per cent). The unemployment rate for non-Indigenous people was also highest in inner regional areas (5.7 per cent) and lowest in very remote areas (2.4 per cent) (figure 4.6.7).

Unemployment rates for Indigenous people in remote and very remote areas are affected by participation in CDEP. Readers are encouraged to refer to tables 4A.6.23–26 when interpreting unemployment data.

Regardless of Indigenous status, the likelihood of being unemployed is related to life cycle stages. The unemployment rate for both Indigenous and non-Indigenous people tends to be highest among young people. Young people typically have less developed work-related skills and are more likely to be entering the labour force for the first time than older people, which contributes to higher unemployment for this group.

Figure 4.6.8 **Unemployment by age group, 2006**[a, b]



[a] The unemployment rate is the number of unemployed people expressed as a percentage of people in the labour force (the employed plus the unemployed) aged 15–64 years [b] Data are not age standardised.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.6.22.

Across age groups, in 2006:

- for both Indigenous and non-Indigenous people, unemployment rates were highest for young people (figure 4.6.8)
- Indigenous unemployment was higher than non-Indigenous unemployment in all age groups (figure 4.6.8)
- Indigenous unemployment was lowest for those aged 55 to 64 years (8.1 per cent) and for non-Indigenous people, unemployment was lowest for those aged 45 to 54 years (3.5 per cent) (figure 4.6.8).

Figure 4.6.9 **Unemployment by State/Territory, 2006**[a, b, c]

[a] The unemployment rate is the number of unemployed people expressed as a percentage of people in the labour force (the employed plus the unemployed) aged 15–64 years. [b] Data are not age standardised. [c] Australia includes 'Other territories'.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.6.6.

Across jurisdictions, in 2006:

- unemployment rates for Indigenous people were much higher than for non-Indigenous people in all states and territories (figure 4.6.9)
- Indigenous unemployment was highest in NSW (19.4 per cent) and lowest in the ACT (11.2 per cent). In contrast, non-Indigenous unemployment was highest in Tasmania (6.5 per cent) and lowest in the NT (2.7 per cent) (figure 4.6.9).

The long term unemployed are defined as unemployed people who have been without work for a year or more. People who have been unemployed for long periods may experience greater financial hardship, and may have more difficulties in finding employment because of the loss of relevant skills and employers' perceptions of their 'employability'. The socioeconomic costs of unemployment become greater for those who have been unemployed long term.

Data on long term unemployment are not available from the Census. The most recent available data are from the 2004-05 National Aboriginal and Torres Strait Islander Health Survey, which found, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- Indigenous people were five times as likely as non-Indigenous people to have been unemployed long term (4.7 per cent of the labour force compared to 0.9 per cent) (table 4A.6.27)

- long term unemployment as a proportion of total unemployment was higher for Indigenous people than for non-Indigenous people (41.6 per cent compared to 27.4 per cent) (table 4A.6.27).

Over the period from 1994 to 2004-05, there was a large fall in the Indigenous long term unemployment rate from 14.2 per cent to 5.1 per cent.

Community Development Employment Projects (CDEP)

The original aim of the CDEP scheme, when introduced in 1977, was to create local employment opportunities in remote Indigenous communities where the labour market might not otherwise offer employment. The scheme was later extended to all areas, but most CDEP organisations continue to be located in regional and remote areas of Australia.

Since July 2004, the Australian Government has made changes to CDEP to increase the transition of participants into other (mainstream) employment. Changes since 1 July 2006 include introduction of a youth participant wage rate to encourage young Indigenous people to complete education. Other changes limit the duration of entitlement to CDEP for new participants in urban and regional centres and require participants in these areas to register as job seekers with an employment service provider. Where no Job Network service is available (in many remote areas), CDEP participants need to develop a 'participation plan' to move into other employment. More changes from 1 July 2007 included the removal of funding for CDEP programs in urban and major regional centres with strong employment opportunities. Former CDEP funding has been directed to additional Structured Training and Employment Project (STEP) programs to assist job seekers move into work (DEWR 2006).

The Australian Government also had a policy of phasing out the CDEP program in prescribed Indigenous communities under the Northern Territory Emergency Response (NTER). This process was placed on hold in December 2007, after the election of the current Australian Government. In April 2008 the Australian Government announced that CDEP would be restored from 1 July 2008 in those NT communities where it had ceased.

Since 2007, the Australian Government has been working with State and Territory governments to identify CDEP positions that support the provision of government services, in order to convert these positions into mainstream jobs.

In October 2008, further changes to Indigenous employment programs were outlined. In non-remote areas with established economies, CDEP would cease and Indigenous job seekers would be supported by the reformed employment services

arrangements (Job Services Australia to commence 1 July 2009) and the reformed Indigenous Employment Program (IEP). A new community support program is to be established in urban and regional locations with significant Indigenous populations to assist Indigenous people to better access the employment programs and other services in those areas (Macklin and O'Connor 2008b). In remote areas with emerging and limited economies, CDEP would be re-structured (Macklin and O'Connor 2008a).

Further changes to CDEP were announced in December 2008. From 1 July 2009, new CDEP participants will be paid income support, with existing CDEP participants continuing to access CDEP wages until 30 June 2011 before transferring to income support. Support will be available to assist local Indigenous CDEP providers expand their businesses or take up employment and other service provision opportunities. The Australian Government and state governments will fund this program over five years under the COAG National Partnership on Indigenous Economic Participation (Macklin and O'Connor 2008b).

For statistical purposes, in both 2001 and 2006, the ABS classified known participants in CDEP as employed rather than as unemployed or not in the labour force. Consequently the employment rate for Indigenous people appears higher than it would be if participants in the CDEP program were classified as unemployed. It is important to consider CDEP when analysing the labour force and unemployment data because:

- CDEP participant payments are received in place of an income support payment such as NewStart Allowance, for which recipients are considered unemployed
- CDEP has elements of both unemployment and employment, especially in remote and very remote areas. Some CDEP activities are similar to those undertaken by participants in Work for the Dole, while other activities are essential roles in municipal services, health care, community services, education and other sectors that would be considered employment in mainstream communities and organisations.

Historical numbers of CDEP participants (from administrative data) are as follows:

- 24 098 participants in 1993-94 (ATSIC 1994)
- 35 182 participants in 2002-03 (ATSIC 2003)
- 34 775 participants as at 30 June 2005 (DEWR 2005)
- 32 782 participants as at 8 August 2006 (table 4A.6.26)
- 26 421 participants as at 30 June 2007 (FaHCSIA unpublished)
- 18 800 participants as at 30 June 2008 (FaHCSIA unpublished).

Table 4A.6.26 reports administrative data on CDEP from the Department of Families, Housing, Community Services and Indigenous Affairs. These data, provide the number of CDEP participants by State and Territory, sex and age on 8 August 2006, the night of the 2006 Census.

Nationally, in 2006, 32 782 people participated in CDEP. WA and the NT had the most CDEP participants (9023 and 8422, respectively), and NSW, Queensland and SA also had large numbers of CDEP participants (table 4A.6.26). Data are not available by remoteness area, but State/Territory data reflect the location of CDEP programs in (mainly) remote areas.

In 2006, among Indigenous people aged 15 years and over:

- 10.2 per cent participated in CDEP (table 4A.6.26)
- nationally, a higher proportion of males than females participated in CDEP (12.6 per cent and 8.0 per cent, respectively) (table 4A.6.26)
- CDEP participation for males and females was highest in the NT and WA and lowest in Tasmania and Victoria (table 4A.6.26).

Attachment table 4A.6.25 contains data on CDEP participation in 2001. These data correspond with timing of the 2001 Census.

Additional data are available from the Census 'Interviewer household form'[6] used in discrete Indigenous communities. Data from the Census can give information on the characteristics of CDEP participants but is not an accurate count of CDEP participants.

Among the 28 600 employed Indigenous people in remote and very remote areas, who were counted on the interviewer household form in 2006:

- 44.5 per cent were participating in CDEP (table 4.6.23)
- the proportion who participated in CDEP was highest in younger age groups (table 4.6.23)
- Indigenous males were more likely to participate in CDEP than Indigenous females (table 4A.6.24).

The National Indigenous Reform Agreement (NIRA) includes progress measures for the Closing the Gap targets. Two of these relate to CDEP:

- CDEP participation and off-CDEP job placements

6 The Interviewer household form is used in nominated discrete communities (communities of Indigenous people in which language differences or other factors make use of the standard self-enumeration forms impractical).

- 3 month employment outcomes (post program monitoring).

The Department of Education, Employment and Workplace Relations (DEEWR) collected post-program outcomes information from former CDEP participants through its Post-Program Monitoring survey between March 2006 and September 2007. However, the survey was terminated due to the low response rate achieved (approximately 10 per cent) and the transfer of responsibility for CDEP from DEEWR to the Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA). While outcomes data for CDEP are no longer collected, DEEWR collects outcomes information for a range of employment assistance programs and services it delivers. Comparisons of the outcomes of Indigenous and non-Indigenous people for all or some of these programs/services could measure progress against this COAG target (DEEWR, unpublished).

Under the Indigenous Economic Participation National Partnership (NP) COAG has agreed to a national target of at least 2.6 per cent of public sector employment for Indigenous people across all classifications by 2015, to reflect the expected national Indigenous working age population share.

4.7 Post secondary education — participation and attainment

Box 4.7.1 **Key messages**

- Indigenous people had significantly lower rates of post secondary attainment to certificate level III or above compared with their non-Indigenous counterparts across all ages, jurisdictions and remoteness areas in 2006 (tables 4A.7.18 and 4A.7.24).
- Post secondary attainment to certificate level III or above increased for both Indigenous and non-Indigenous people between 2001 and 2006 (figure 4.7.5).
- Indigenous people aged 20–24 years attended university at about one-fifth the rate of non-Indigenous people (4.9 and 23.9 per cent, respectively) and attended Technical and Further Education (TAFE) at two-thirds the rate of non-Indigenous people (5.2 and 7.9 per cent, respectively) in 2006 (figure 4.7.1). Between 2001 and 2006, Indigenous participation at university and TAFE decreased across all age groups (figures 4.7.2 and 4.7.3).

Post secondary education may lead to more than just better employment prospects and higher incomes. As discussed in section 6.6, people with a skilled vocational qualification or higher qualifications are more likely to be employed than those without such qualifications. There are also many potential benefits that flow from a person's higher education:

- the schooling of their children — parental education is a positive influence on student performance (OECD 2004; Wolfe and Haveman 2001; Zubrick et al. 2006)
- efficiency of their choices — making the most of the opportunities on offer throughout life (Wolfe and Haveman 2001; Zubrick et al. 2006)
- their health outcomes and their children's health outcomes — accessing health care as required assists in ensuring healthy successive generations (Wolfe and Haveman 2001; Zubrick et al. 2006).

Post secondary education includes both vocational education and training (VET) at institutions such as TAFE colleges, and higher education at universities. Research suggests that young people who are not participating full time in education, training, work or some combination of these activities are more likely to have difficulty in making a transition to full time employment by their mid-20s (Dusseldorp Skills Forum 2006; Marks 2006). Section 6.6 contains more information on young people's transition from school to work.

Research undertaken by the Dusseldorp Skills Forum (2006) found that almost as many school leavers were studying at TAFE as at university. TAFE is a particularly important destination for early school leavers (Dusseldorp Skills Forum 2006). Indigenous people participate in VET at rates above those for non-Indigenous people (Saunders et al. 2003). Young Indigenous people may be more likely to participate in VET because year 12 Indigenous students are less likely than non-Indigenous students to attain a sufficiently high score to enable admission to university (see section 4.5).[7]

VET provides an opportunity for Indigenous people to attain post-school qualifications and improve their employment prospects. In addition, participation in VET may improve self esteem, literacy and confidence (Gelade and Stehlik 2004; O'Callaghan 2005; NCVER 2005). However, Indigenous VET students do not achieve similar outcomes to their non-Indigenous counterparts. Indigenous VET students tend to study lower level and shorter courses compared with non-Indigenous students (ANTA 2005; Buckskin 2001; Saunders et al. 2003). In 2007, the proportion of Indigenous students in diploma or higher courses was 3.5 per cent compared with 35.1 per cent for other full-time students (NCVER 2007).

[7] Eligibility for admission to a public university in Australia on the basis of merit is determined in each State and Territory through the use of a score – the Universities Admissions Index (UAI). Calculating the UAI varies between State and Territories.

Employment outcomes from VET remain lower for Indigenous students compared with other students (ANTA 2005; Buckskin 2001; NCVER 2006; O'Callaghan 2005; Saunders et al. 2003). In 2007, 72.4 per cent of Indigenous students were employed after VET training compared with 81.1 per cent of non-Indigenous students (NCVER 2007).

Locality can influence Indigenous people's participation in post secondary education (ACER 2002). There is evidence that Indigenous people in regional and remote areas are substantially less likely to participate in higher education than Indigenous people in major cities.

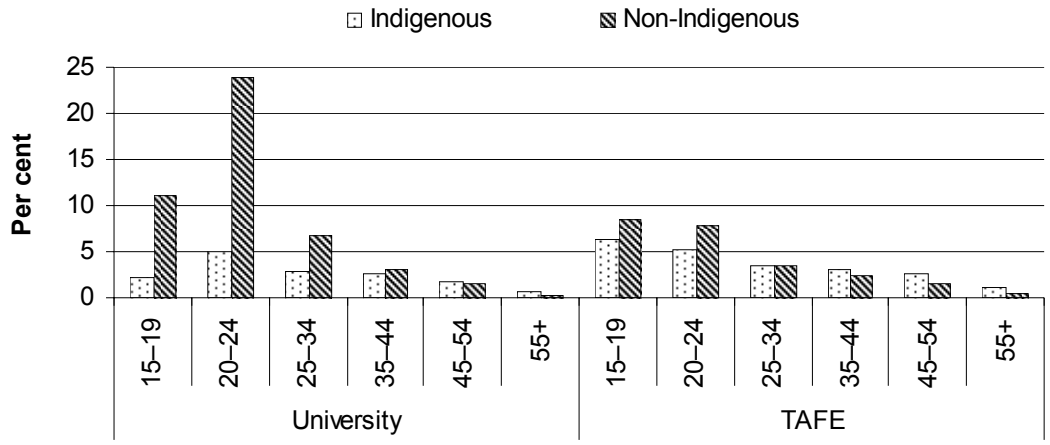
Although participation in post secondary education may have some benefits, the major impact on improved outcomes for Indigenous people results from attainment of a qualification or completion of a course of study. This indicator uses ABS 2006 Census data to examine the extent to which people (1) participate in post secondary education and (2) have attained a particular level of qualification.

The broad types of courses Indigenous people are undertaking at higher education institutions along with load pass rates for VET courses and success rates for higher education are also examined.

Post secondary participation

Post secondary participation rates provide information on the proportion of people who had left school and were attending a technical or further educational institution (including TAFE colleges, business colleges and industry skills centres), or university or other higher educational institution.

Figure 4.7.1 **Post secondary participation by people aged 15 years and over, 2006**[a, b, c, d, e]



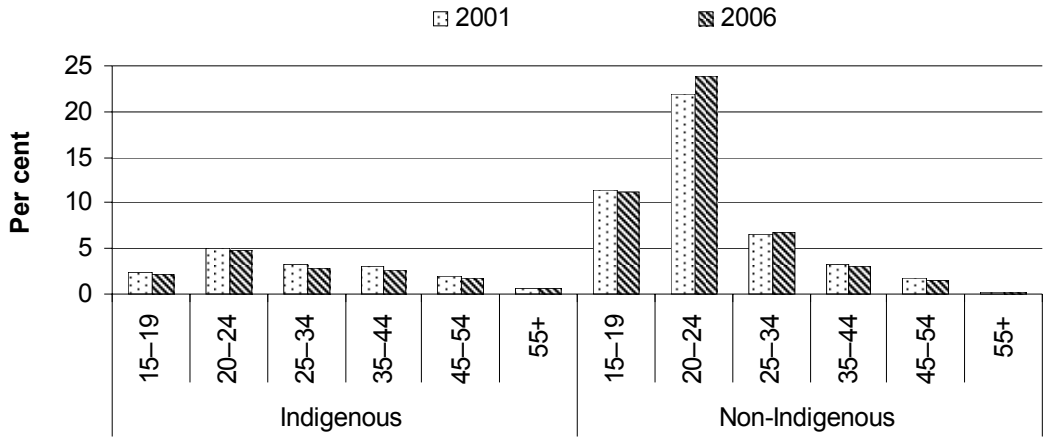
[a] The ABS 2006 Census asked what type of educational institution a respondent was attending. [b] University refers to the ABS 2006 Census category of university or other higher educational institution, TAFE refers to the ABS 2006 Census category of technical or further educational institution (including TAFE colleges). [c] Data does not include the 'Other educational institutions' category from the ABS 2006 Census. [d] Age adjusted national totals were not available. [e] Denominators include people who did not state their post secondary participation.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing*; table 4A.7.1.

In 2006:

- university participation was highest for both Indigenous and non-Indigenous 20–24 year olds. However, Indigenous people in this age group attended university at about one fifth the rate of non-Indigenous people (figure 4.7.1)
- TAFE participation was highest amongst 15–19 and 20–25 year old Indigenous and non-Indigenous people. However, Indigenous people aged 15–19 years attended TAFE at three-quarters the rate of non-Indigenous people, and Indigenous people aged 20–24 years attended TAFE at two-thirds the rate of non-Indigenous people (figure 4.7.1)
- across all age groups Indigenous people were more likely to attend TAFE than university (figure 4.7.1).

Figure 4.7.2 **University participation, 2001 and 2006**[a, b, c, d]



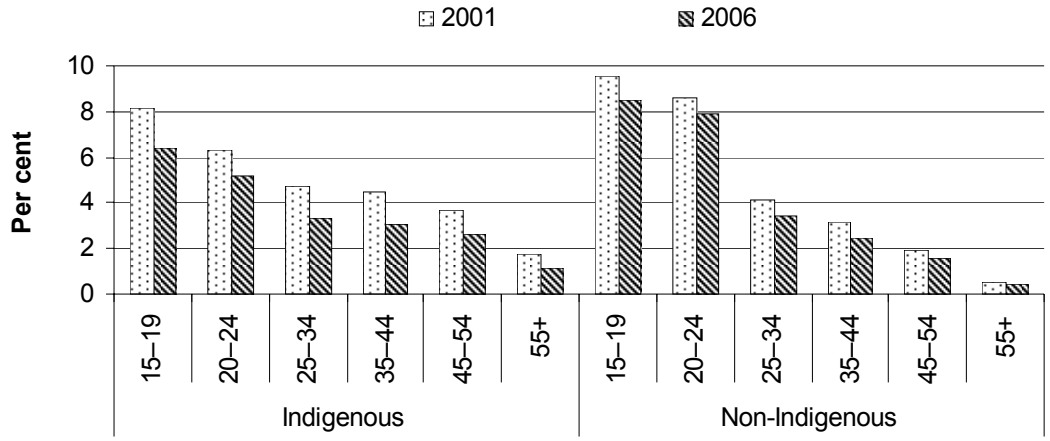
[a] Participation in university education by persons aged 15 years and over (excluding overseas visitors) by age, 2001, 2006. [b] University refers to the ABS 2006 Census category of university or other higher educational institution. [c] Age adjusted national totals were not available. [d] Denominators include people who did not state their post secondary participation.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing* and *2001 Census of Population and Housing*; tables 4A.7.1 and 4A.7.4.

Between 2001 and 2006:

- Indigenous participation at university decreased across all age groups. Amongst 25–34 year olds the participation rate decreased from 3.4 to 2.8 per cent. Over the same period, non-Indigenous university participation in the 20–24 and 25–34 age groups increased, while falling slightly in all other age groups (figure 4.7.2)
- the gap between Indigenous and non-Indigenous university participation increased slightly for people aged 20–44 years (figure 4.7.2).

Figure 4.7.3 **TAFE participation, 2001 and 2006**[a, b, c, d]



[a] Participation in TAFE education by persons aged 15 years and over (excluding overseas visitors) by age, 2001, 2006. [b] TAFE refers to the ABS 2006 Census category of technical or further educational institution (including TAFE colleges). [c] Age adjusted national totals were not available. [d] Denominators include people who did not state their post secondary participation.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing* and *2001 Census of Population and Housing*; tables 4A.7.1 and 4A.7.4.

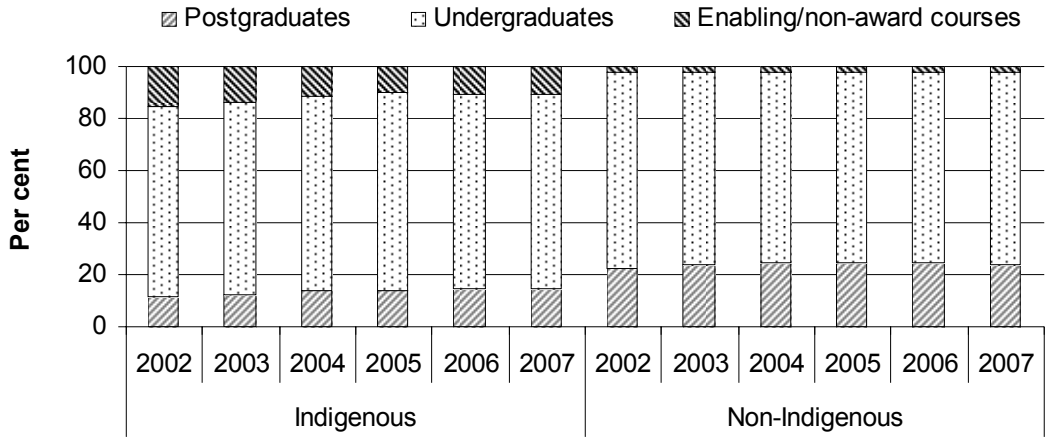
Between 2001 and 2006:

- TAFE participation decreased for both Indigenous and non-Indigenous people across all age groups (figure 4.7.3)
- the decrease in TAFE participation across all age groups was greater for Indigenous people than for non-Indigenous people (figure 4.7.3)
- the largest decrease in TAFE participation was for Indigenous people aged 15–19 years (8.2 per cent in 2001 to 6.4 per cent in 2006) (figure 4.7.3)
- there was an increase in the TAFE participation gap between Indigenous and non-Indigenous people aged 15–34 years (figure 4.7.3).

More data on post secondary participation by Indigenous students by state and territory and remoteness areas can be found in tables 4A.7.2, 4A.7.3, 4A.7.5 and 4A.7.6.

The *Report on Government Services* (SCRGSP 2009) contains further data on Indigenous participation in the VET system. Chapter five of the report contains data on the number of government funded participants in the VET system who self-identified as Indigenous, as a proportion of the total number of Indigenous people aged 15–64 years, compared with that of the general population.

Figure 4.7.4 **Post secondary participation at higher education institutions, by course level, 2002–07**



Source: DEST higher education statistics collection (unpublished); tables 4A.7.7–12.

Between 2002 and 2007:

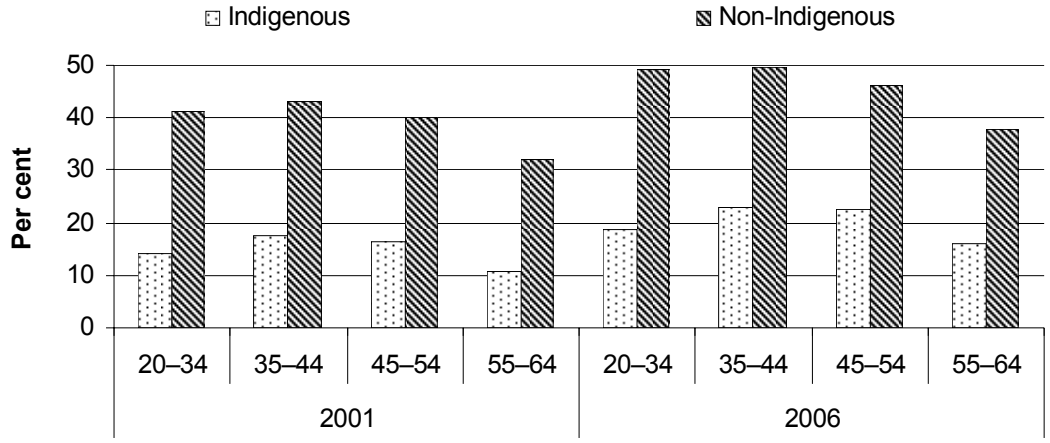
- Indigenous students were more likely to be enrolled in enabling and non-award courses, and less likely to be enrolled in postgraduate courses, than non-Indigenous students (figure 4.7.4)
- the proportion of Indigenous students enrolled in enabling or non-award courses decreased from 15.2 per cent to 10.5 per cent (figure 4.7.4)
- the proportions of Indigenous students enrolled in undergraduate and postgraduate courses increased (from 73.2 per cent to 74.7 per cent, and 11.6 per cent to 14.8 per cent, respectively) (figure 4.7.4).

More data on the types of courses Indigenous people were undertaking by State and Territory can be found in tables 4A.7.7–12.

Post secondary attainment

One measure of post secondary attainment is the proportion of the population that has completed a particular level of qualification. This section includes data from the ABS 2001 and 2006 Censuses showing the proportion of people aged 20–64 years, whose highest level of qualification completed was a certificate III or above. Certificate level III is considered the minimum qualification needed to improve a person's employability. The ABS Australian Standard Classification of Education defines certificate III or above to include postgraduate degrees, graduate diplomas or certificates, bachelor degrees, advanced diplomas, diplomas, and certificate levels III and IV (ABS 2006).

Figure 4.7.5 **Post secondary attainment of certificate level III or above by age, 2001 and 2006**[a, b, c, d]



[a] The ABS 2001 and 2006 Census question asked respondents for the highest educational qualification they had completed. [b] Post secondary attainment is measured as a proportion of the population aged 20–64 years (excluding overseas visitors). [c] Age adjusted national totals were not available. [d] Denominators include people who did not state their educational attainment.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing* and *2001 Census of Population and Housing*; tables 4A.7.18 and 4A.7.24.

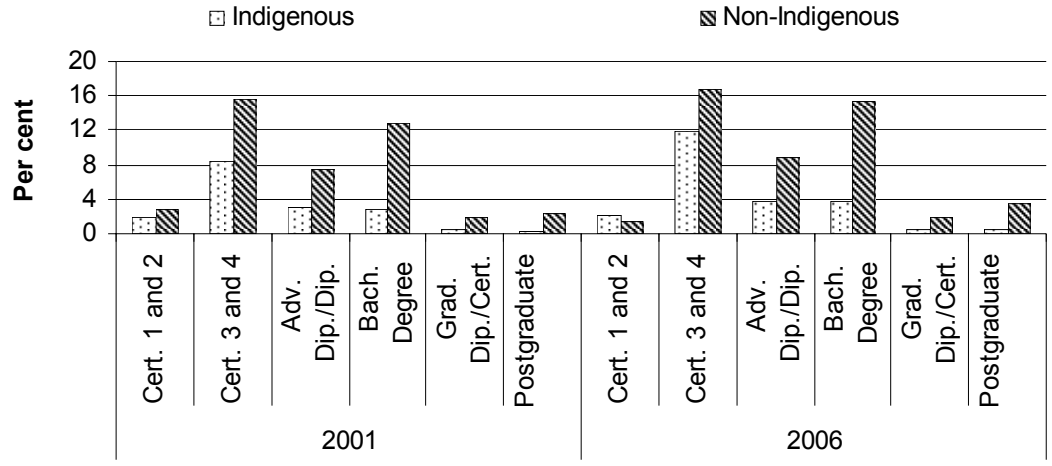
Between 2001 and 2006, post secondary attainment increased for both Indigenous and non-Indigenous people across all age groups (figure 4.7.5).

In 2006:

- Indigenous people had significantly lower rates of post secondary attainment than their non-Indigenous counterparts across all age groups, jurisdictions and remoteness areas (figure 4.7.5)
- the greatest gap in post secondary attainment was for people aged 20–34 years (18.8 per cent of Indigenous people attained certificate level III or above compared to 49.1 per cent of non-Indigenous people). The gap declined as age increased (figure 4.7.5)
- Indigenous females had slightly lower post secondary attainment rates across all age groups than Indigenous males (tables 4A.7.14 and 4A.7.16)
- post secondary attainment for Indigenous people decreased with remoteness, whereas for non-Indigenous people attainment varied with remoteness, but with no clear trend (table 4A.7.18).

More data on post secondary attainment by remoteness areas and by states and territories can be found in tables 4A.7.13–24.

Figure 4.7.6 **Post secondary attainment by course level, people 20–64 years old, 2001 and 2006**[a, b, c, d]



[a] The ABS 2001 and 2006 Census question asked respondents for the highest educational qualification they had completed. [b] Post secondary attainment for each course level is measured as a proportion of the population aged 20–64 years (excluding overseas visitors). [c] Age adjusted national totals were not available. [d] Denominators include people who did not state their educational attainment.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing* and *2001 Census of Population and Housing*; tables 4A.7.18 and 4A.7.24.

In both 2001 and 2006, Indigenous people (20–64 years old) had lower rates of post secondary attainment at each course level than non-Indigenous people (except for certificate I and II courses in 2006) (figure 4.7.6).

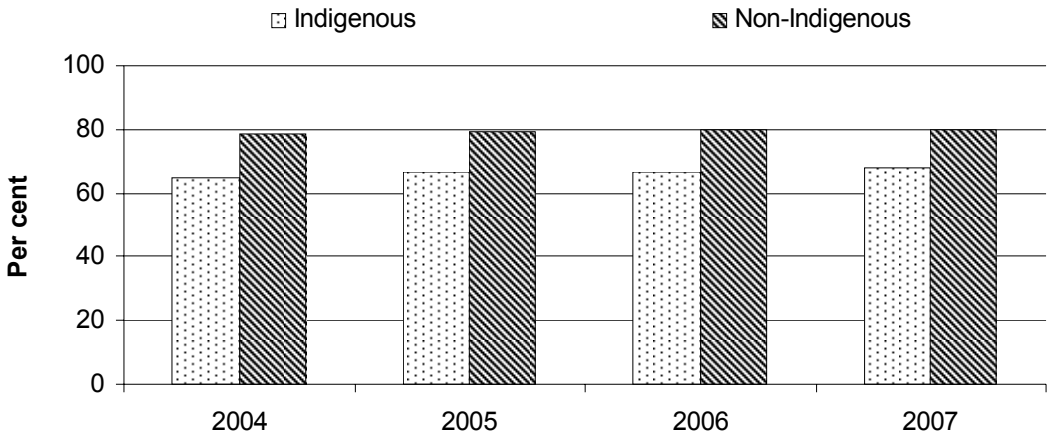
Between 2001 and 2006, for people aged 20–64 years:

- Indigenous attainment at all course levels increased. The proportion of Indigenous people who had attained a certificate III and IV increased from 8.4 per cent in 2001 to 11.8 per cent in 2006. Indigenous people who had attained bachelor degrees, and advanced diplomas and diplomas also increased slightly (2.8 per cent in 2001 to 3.6 per cent in 2006, and 3.1 per cent in 2001 to 3.8 per cent in 2006, respectively) (figure 4.7.6)
- post secondary attainment by non-Indigenous people in all course levels increased, except for certificate I and II courses, where it fell slightly. Among non-Indigenous people attainment of bachelor degrees rose from 12.7 to 15.4 per cent of the population. Attainment of advanced diplomas and diplomas, certificate III and IV, and postgraduate courses also rose (figure 4.7.6)
- the gap between Indigenous and non-Indigenous attainment of certificate III and IV courses decreased. However, the gap between Indigenous and non-Indigenous attainment of bachelor degrees, and advanced diplomas and diplomas, increased (figure 4.7.6).

Another measure of post secondary attainment is the extent to which people complete or pass the course they are undertaking. This is known in the VET system as the load pass rate and in the higher education system as the success rate. There is a consistent and marked difference in VET load pass rates by age, with younger Indigenous students (15−19 years) having the lowest load pass rates and older Indigenous students the highest (ANTA 2005).

The VET load pass rate indicates the extent to which students pass assessment in an assessable module or unit of competency. Load pass rates are calculated as the ratio of hours attributed to students who passed assessment in an assessable module or unit of competency to all students who were assessed and either passed, failed or withdrew. The calculation is based on the nominal hours supervised for each assessable module or unit of competency. Care needs to be taken in comparing data because average module durations and standards of competencies achieved by students vary across jurisdictions.

Figure 4.7.7 **VET national load pass rate, 2004–07**[a]



[a] Excludes students participating in VET programs in schools. Not adjusted for recognition of prior learning, credit transfer and student enrolment no participation.

Source: National 2004–2007 VET provider collections (unpublished); table 4A.7.25.

From 2004 to 2007:

- the national load pass rate for Indigenous students was lower than the national load pass rate for non-Indigenous students in all years (figure 4.7.7)
- the national load pass rate for Indigenous students increased from 64.5 per cent in 2004 to 67.8 per cent in 2007. Over the same period, the load pass rate for non-Indigenous students also increased, from 78.8 per cent to 80.0 per cent (figure 4.7.7)

- the gap between the national load pass rate for Indigenous students and the national load pass rate for non-Indigenous students fell from 14.3 percentage points to 12.2 percentage points (figure 4.7.7).

The load pass rates for Indigenous and non-Indigenous students by State and Territory, remoteness areas and course level can be found in tables 4A.7.25–27.

Table 4.7.1 **VET load pass rates, by course level, 2004–07**[a]

	Indigenous				*Non-Indigenous*			
	2004	*2005*	*2006*	*2007*	*2004*	*2005*	*2006*	*2007*
Diploma or higher	68.9	73.4	71.6	73.8	79.2	79.3	79.4	79.6
Certificate IV	69.3	69.8	67.5	69.1	76.5	77.0	76.9	77.4
Certificate III	70.2	72.5	71.4	73.5	83.1	84.2	84.4	84.3
Certificate II	61.8	65.2	64.7	63.7	75.8	76.4	77.4	77.6
Certificate I	52.2	52.2	55.8	57.8	65.2	66.4	67.6	67.5
Other[a]	57.0	60.6	60.6	60.8	74.5	74.2	74.7	75.4

[a] Includes senior secondary education and other education (bridging and enabling courses).

Source: National 2004–2007 VET provider collections (unpublished); table 4A.7.26.

In 2007, the highest national load pass rates achieved by Indigenous students were at diploma level or higher (73.8 per cent) and certificate level III (73.5 per cent) (table 4.7.1).

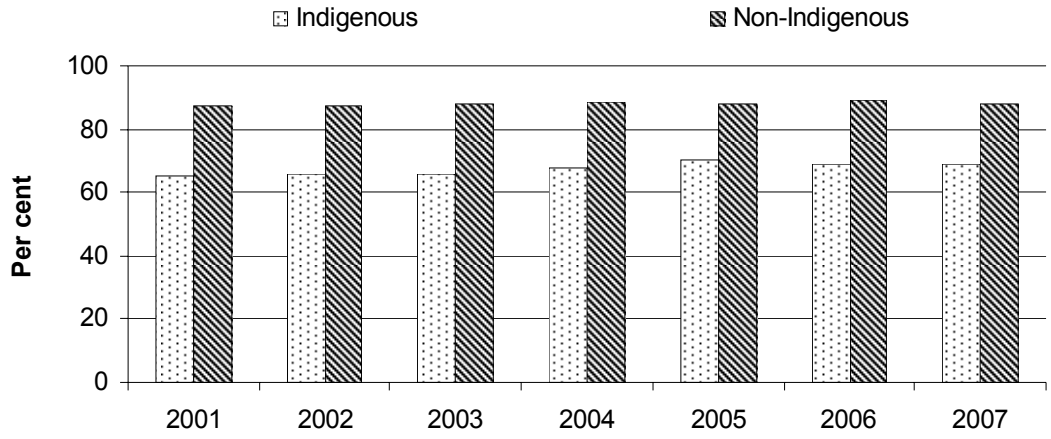
Between 2004 and 2007:

- there was an increase in load pass rates for all course levels for both Indigenous and non-Indigenous students, except for load pass rates for Indigenous students undertaking certificate IV courses, which were stable (table 4.7.1)
- the gap in load pass rates for all course levels for Indigenous and non-Indigenous students decreased (except for certificate IV courses, where it increased slightly). Over this period, the gap in load pass rates for Indigenous and non-Indigenous students undertaking courses at diploma level or higher almost halved (10.3 percentage points in 2004 to 5.9 percentage points in 2007) (table 4.7.1).

The *Report on Government Services* (SCRGSP 2009) contains further data on Indigenous outcomes in the VET system. Chapter five reports on the number and proportion of qualifications completed, and units of competency and modules (outside training packages) achieved/passed in a given year by Indigenous students.

Although the measures are based on different calculations, the success rate for higher educational institutions shows similar results to the load pass rate for VET. The success rate is the proportion of units passed within a year compared with the total units enrolled.

Figure 4.7.8 **Higher education success rate, 2001–07**[a, b]



[a] Success is defined as the student progress rate, which is the proportion of units passed within a year compared with the total units enrolled. [b] The non–Indigenous category for 2001 includes 'Indigenous status unknown'.

Source: DEST higher education statistics collection (unpublished); tables 4A.7.28–34.

From 2001 to 2007:

- the higher education success rate was lower for Indigenous students than non-Indigenous students in all years (figure 4.7.8)
- the success rate for Indigenous students increased from 65.1 per cent to 69.0 per cent (figure 4.7.8). Over the same period, the success rate for non-Indigenous students increased from 87.3 per cent to 88.0 per cent (figure 4.7.8)
- the gap between the success rate for Indigenous students and non-Indigenous students fell from 22.2 percentage points to 19.0 percentage points (figure 4.7.8).

4.8 Disability and chronic disease

Box 4.8.1 **Key messages**

- Nationally, in 2006:
  - Indigenous people were almost twice as likely as non-Indigenous people to need assistance with one or more core activities. Indigenous people aged 45–64 years were 2.7 times as likely as non-Indigenous people in that age group to need assistance with core activities (figure 4.8.1)
  - among those with a need for assistance with core activities, Indigenous people were less likely than non-Indigenous people to have attained year 12 (13.3 per cent compared with 26.0 per cent), to have completed a bachelor degree or higher qualification (2.9 per cent compared with 6.3 per cent) (tables 4A.8.11 and 4A.8.16), or to be in the labour force (17.5 per cent compared with 23.2 per cent) (figure 4.8.2)
  - Indigenous 15–24 year olds were 1.7 times as likely as non-Indigenous 15–24 year olds to have provided unpaid assistance to a person with disability, long term illness or problems related to old age (figure 4.8.3).

Indigenous Australians experience significantly higher rates of disability and chronic disease than non-Indigenous Australians. People with disability have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. Many people with a chronic disease will have impairments that hinder their ability to effectively participate in society on an equal basis with others. Because disability is context dependent a significant physical, mental, intellectual or sensory impairment may not be severely disabling if there is a sufficiently supportive and enabling environment, for example, from informal carers or formal support services.

The Aboriginal Disability Network of NSW (2007) consulted 300 Aboriginal people with disability across NSW in 2004 and 2005 and found that disability was a major barrier to social interactions and access to health services, employment and education. It found that many Indigenous people in rural and remote areas experienced greater difficulty in accessing disability support services and disability aids and appliances. Many were housebound because their houses did not have ramps or other aids for access or because of lack of transport. For many people, family and other kin were their only form of support. Those with intellectual disabilities, mental illnesses and acquired brain injuries had a range of negative experiences with the justice system including police, courts and correctional services.

Chronic disease limits the extent to which people can effectively participate in the social and economic life of their communities. An Australian Institute of Health and Welfare report found people with chronic disease were 60 per cent more likely to not participate in the labour force, were less likely to be employed full-time, and were more likely to be unemployed, than those without chronic disease. Employed people with a chronic disease had a rate of absenteeism almost double the rate for those without a chronic disease (AIHW 2009).

Health risk factors affect the onset and progression of a variety of chronic diseases. A wide body of research has demonstrated connections between biomedical and behavioural factors and major chronic diseases and conditions. A family history of poor health and chronic disease may also influence whether an individual has a genetic predisposition to certain long term health conditions (AIHW 2006).

An ABS and AIHW (2008) report found that Indigenous Australians were twice as likely as non-Indigenous Australians to be subject to health risk factors, including: smoking, binge drinking, using illicit drugs, and being victims of violence. Indigenous Australians were also more likely to be physically inactive and subject to more than one of these risk factors. This high exposure is linked to the disadvantage Indigenous people experience across a range of socio-economic and environmental factors. For example in 2004–05, Indigenous people with low levels of educational attainment were more likely than those who had completed Year 12 to regularly smoke, to consume alcohol at risky/high risk levels, and to engage in low levels of exercise, and were less likely to eat fruit or vegetables on a daily basis (ABS and AIHW 2008).

Carson et al. (2007) argued that a range of socioeconomic and environmental conditions contribute to poor health among Indigenous people. They presented a framework for Indigenous health which takes into account social determinants including poverty, social class, social capital, education, employment, welfare and housing.

Indigenous people also have high exposure to a range of 'personal stressors' that may contribute to the development of long term health conditions. Most prevalent among these stressors are death of a family member or close friend, alcohol and drug problems, family member(s) having been sent to prison or currently in prison, overcrowding at home, and not being able to get a job (ABS and AIHW 2005). Table 4A.8.51 presents the proportions of Indigenous people with selected long term health conditions disaggregated by the types of personal stressors experienced by the individual, their family or friends.

The 2007 report included data on the incidence of disability and the degree and type of core activity limitation among Indigenous people, sourced from the ABS 2002 NATSISS. This section of the 2009 report includes:

- age standardised data from the ABS 2006 Census on the prevalence of need for assistance with one or more core activities, and two measures of participation in society by disabled people with these needs;
  - the labour force participation rate (and employment and unemployment rates)
  - the level of secondary and post secondary educational attainment
- data on informal and formal support provided for people with disability;
  - age standardised data from the ABS 2006 Census on carers who provide unpaid assistance to people with disability, long term illness, or problems related to old age
  - use by people with disability of Commonwealth State and Territory Disability Agreement (CSTDA) funded disability services
- proxies for the prevalence of long term health conditions amongst Indigenous people;
  - age standardised hospitalisation rates by principal diagnosis and chronic disease for Indigenous people from the AIHW National Hospital Morbidity Database
  - data on the burden of disease and injury for Aboriginal and Torres Strait Islander peoples.

Some successful programs aimed at preventing the development of chronic diseases among Indigenous people through education, primary health care and disease management have been implemented across Australia. Examples of successful programs are provided in box 4.8.2.

Box 4.8.2 'Things that work' — disease prevention programs for Indigenous people in NSW

The Chronic Care for Aboriginal People (**Walgan Tilly**) Clinical Services Redesign project was developed from established NSW Health initiatives in an attempt to address the disparities in health care and improve access to, and utilisation of, chronic care services for Aboriginal people in NSW.

The project developed six state-wide solutions and associated implementation plans:

- models of Care for Aboriginal People
- integration of Aboriginal Health and mainstream chronic care
- greater Aboriginal cultural awareness and cultural sensitivity of services
- Justice Health linkages
- improved access to primary care
- improved data quality.

Twenty three proposed Area Health Service and Justice Health-specific solutions and implementation plans were developed for implementation from 2008-09, which will be evaluated over time (NSW Government, unpublished).

Disability (need for assistance with core activities)

Data on 'core activity need for assistance' are available from the ABS 2006 Census. The ABS defines a core activity need for assistance as a profound or severe disability, that is, a need for help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because of a disability (lasting six months or more), long term health condition (lasting six months or more) or old age (ABS 2006).

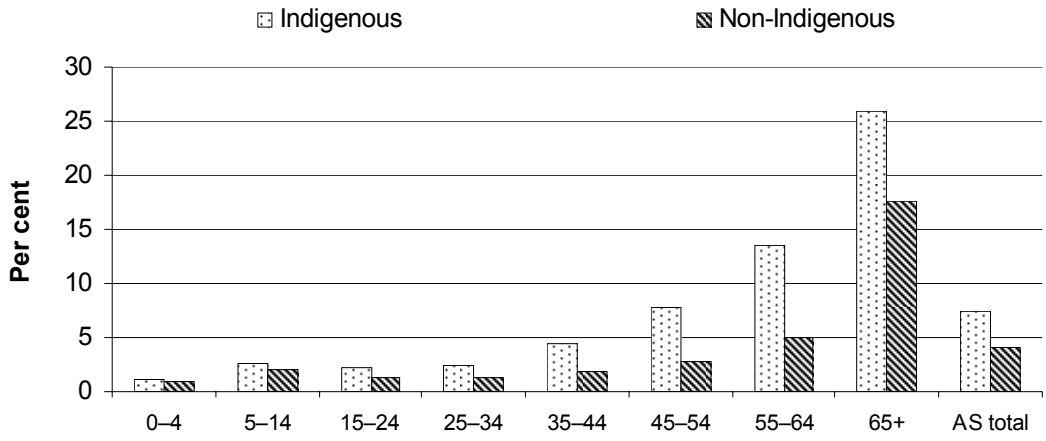
Core activity need for assistance data derived from the ABS 2006 Census should be interpreted with caution. For the Indigenous population, core activity need for assistance rates were lower than expected and lower than rates derived from the ABS 2002 NATSISS. The data were affected by high non-response levels, particularly in remote areas, and anecdotal evidence suggests that interpretation of the questions may have been an issue (ABS 2006).

The 2006 Census collected data on people needing assistance with core activities. The 2002 NATSISS collected data on profound/severe core activity limitation, defined as a limitation in the performance of one or more core activities of self-care, mobility or communication (ABS and AIHW 2008). Results from the 2002 NATSISS and 2006 Census are based on relatable concepts, but are not suitable for

direct comparison and can not provide an indication of change in the prevalence of disability over time due to differences in the questions asked, and the methods of data collection.

In addition, definitions of, 'disability', 'long term health condition', 'unpaid care, help or assistance' and 'voluntary work' used by health professionals might not be the same as definitions used by Indigenous and non-Indigenous people. Furthermore, research has shown that a person's perception of their own disability/long term condition is dependent on their knowledge of available aids and services. This may have a substantial impact on reporting rates of disability/long term health conditions, particularly when the methodology depends on self reporting (AIHW and DHFS 1998).

Figure 4.8.1 **People with a need for assistance with core activities, by age group, 2006[a]**



AS = age standardised. **a** Excludes overseas visitors.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing*; table 4A.8.1–4.

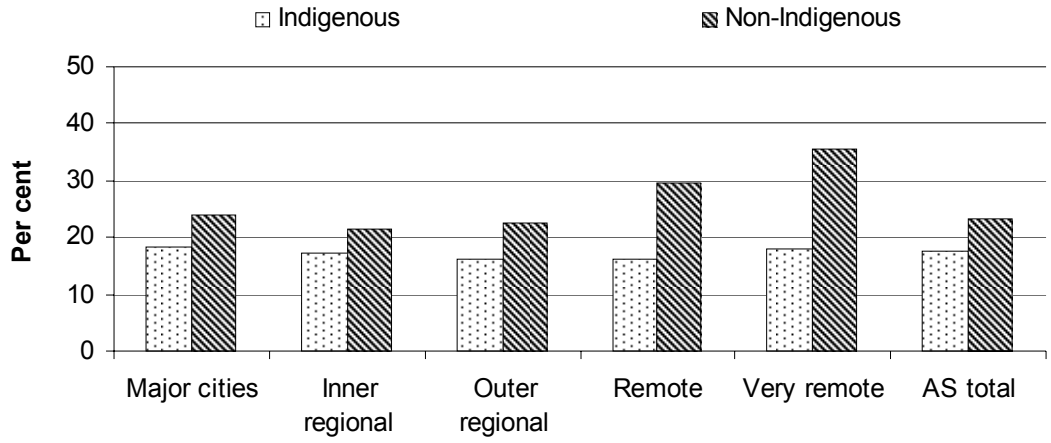
Across age groups in 2006:

- the disparity between Indigenous and non-Indigenous people reporting a core activity need for assistance increased with age. The gaps were highest in the 45–54 and 55–64 years age groups. In these age groups, Indigenous people were 2.7 times as likely as non-Indigenous people to need assistance with core activities (figure 4.8.1).

After taking into account the different age structures of the Indigenous and non-Indigenous populations:

- nationally, the level of need for assistance with core activities among Indigenous people was almost twice as high as that among non-Indigenous people (figure 4.8.1)
- across all states and territories and remoteness areas, a higher proportion of Indigenous people needed assistance with core activities compared with non-Indigenous people (table 4A.8.1–4)
- the disparity between Indigenous and non-Indigenous people reporting a disability was greatest in the NT (7.2 per cent compared with 3.3 per cent) and smallest in Queensland (6.7 per cent compared with 4.0 per cent) (table 4A.8.1–4)
- the largest gap between Indigenous and non-Indigenous people reporting a disability was in remote and very remote areas. Indigenous people living in remote areas reported significantly higher rates of disability (7.3 per cent) compared with non-Indigenous people (3.2 per cent). In very remote areas, 6.7 per cent of Indigenous people reported a disability compared with 2.7 per cent of non-Indigenous people (table 4A.8.1–4).

Figure 4.8.2 **Labour force participation of people aged 15–64 who had a need for assistance with core activities, age standardised, 2006**[a, b, c]



AS = age standardised· [a] Based on place of usual residence. [b] Labour force participation includes employed and unemployed people. [c] The labour force participation rate is the number of people aged 15-64 years who were in the labour force and who reported a core activity need for assistance expressed as a percentage of people aged 15-64 years who reported a core activity need for assistance.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing*; table 4A.8.5.

In relation to labour force participation outcomes in 2006, after taking account of the age differences between the Indigenous and non-Indigenous populations:

- nationally, 17.5 per cent of Indigenous people with disability were participating in the labour force compared with 23.2 per cent for non-Indigenous people with disability (figure 4.8.2)
- among those who needed assistance with core activities, Indigenous people experienced lower labour force participation rates than non-Indigenous people across all states and territories and remoteness areas (figure 4.8.2 and table 4.A.2.3)
- the disparity in labour force participation rates between Indigenous and non-Indigenous people who needed assistance with core activities was smallest in Victoria and Tasmania. The largest gap between Indigenous and non-Indigenous people was in the NT (table 4A.2.3).

More data on employment, unemployment and volunteering rates for people with disability can be found in tables 4A.8.2–7 For data on labour force participation, employment and unemployment rates for the general Indigenous population, refer to section 8.1.

Nationally, in 2006, in relation to secondary educational attainment by people with disability aged 15 years and older, after taking account of the age differences between the Indigenous and non-Indigenous populations:

- almost half (48.8 per cent) of the Indigenous people with disability had completed schooling only to year 9 or below compared with a one-third (33.8 per cent) of non-Indigenous people with disability (table 4A.8.11 and 4A.8.16)
- Indigenous people with disability attained year 12 at half the rate of non-Indigenous people with disability (13.3 per cent compared with 26.0 per cent) (table 4A.8.11 and 4A.8.16).

Nationally, in 2006, in relation to post secondary educational attainment by people with disability aged 25 to 64 years, after taking account of the age differences between the Indigenous and non-Indigenous populations:

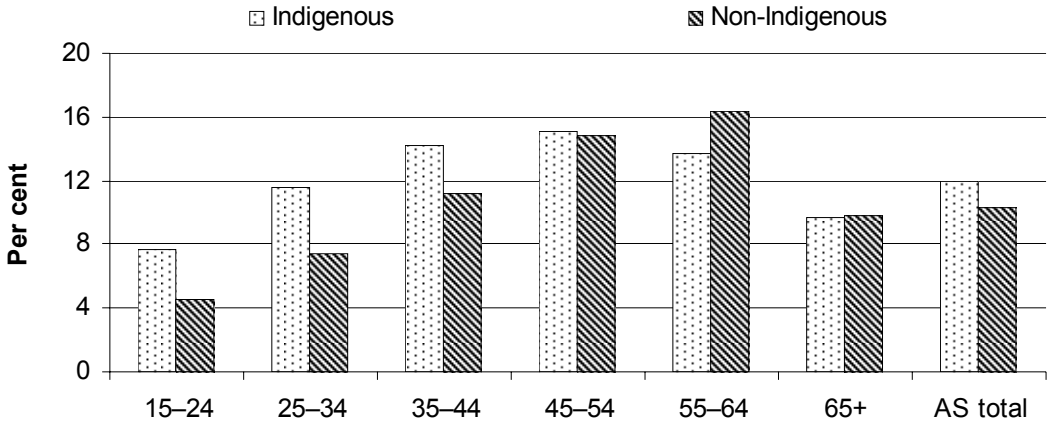
- fewer Indigenous people with disability had attained a certificate or diploma level qualification compared with non-Indigenous people with disability (13.6 per cent compared with 19.4 per cent, respectively) (table 4A.8.11 and 4A.8.16)
- Indigenous people with disability had completed a bachelor degree or higher qualification at half the rate of non-Indigenous people (2.9 per cent compared with 6.3 per cent respectively) (table 4A.8.11 and 4A.8.16).

Additional data on educational attainment by people with disability by age cohort, states and territories and remoteness areas can be found in the attachment tables (for secondary school attainment refer to tables 4A.8.11–15, for post secondary attainment refer to tables 4A.8.16–20). For data on secondary attainment by the general Indigenous population, refer to sections 4.5, 6.4 and 6.5. For data on post secondary attainment by the general Indigenous population, refer to section 4.7.

Carers of people with disability, long term illness or problems related to old age

Family and friends provide significant assistance, in terms of help or supervision, to people with disability, long term illness or problems related to old age. The provision of informal care allows people with disability to participate more fully and effectively in society. Providing informal care for people with disability also affects the ability of carers to participate fully in the labour force.

Figure 4.8.3 **People aged 15 years and older who provided unpaid care to a person with disability, long term illness or problems related to old age, by age group, 2006[a, b]**



AS = age standardised· **a** Excludes overseas visitors. **b** A carer is defined as a person aged 15 years or over who provided unpaid care, help or assistance to family members or others who have a disability, long term illness or problems related to old age.

Source: ABS (unpublished), derived from *2006 Census of Population and Housing*; table 4A.8.21–24.

In 2006, younger Indigenous people (aged 15–44 years old) were more likely to provide unpaid care than non-Indigenous people of the same ages. In particular, 15–24 year old Indigenous people were 1.7 times as likely as non-Indigenous people to be unpaid carers (figure 4.8.3).

In 2006, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- nationally, Indigenous people were 1.2 times as likely as non-Indigenous people to care for a person with disability (figure 4.8.3)
- in very remote areas, Indigenous people were almost twice as likely as non-Indigenous people to provide unpaid care to a person with disability (table 4A.8.21–24)
- the proportion of Indigenous people providing unpaid assistance to people with disability, long term illness or problems related to old age was highest in the ACT (15.4 per cent for Indigenous people and 10.4 per cent for non-Indigenous people). Queensland had the lowest proportion of Indigenous people providing unpaid assistance to people with disability (10.6 per cent for Indigenous people and 9.7 per cent for non-Indigenous people) (table 4A.8.21–24).

ABS 2006 Census data have been used to calculate the labour force participation rate of carers of people with disability — the number of carers of people with disability, long term illness or problems related to old age in the labour force expressed as a percentage of all carers aged 15 to 64 years. This measure of labour force participation of carers should be interpreted carefully as carer status was not stated for 12.8 per cent of Indigenous people and 3.9 per cent of non-Indigenous people.

In 2006, after taking into account the different age structures of the Indigenous and non-Indigenous populations:

- nationally, 55.3 per cent of Indigenous carers were participating in the labour force compared with 69.4 per cent of non-Indigenous carers (table 4A.8.25)
- Indigenous carers had lower labour force participation rates than non-Indigenous carers across remoteness areas and in all states and territories (table 4A.8.26).

Disability service use

The provision of supportive and enabling government services can assist people with disability to participate more fully and effectively in society. The COAG measure of service use by people with disability is the number of people with disability receiving disability services as a proportion of the Indigenous potential population requiring services.

It is difficult to compare rates of service use for populations with different prevalences of disability. If a population has a higher underlying prevalence, all else being equal, service use per 1000 population is likely to be higher. Therefore, a rate per 1000 potential population is used to compare rates of service use across

populations. The potential population is an estimate of the number of people with the potential to require disability support services (that is, those who are eligible for services, whether or not they actually use them).

A detailed description of how the potential population is estimated is available in the *Report on Government Services 2009* (SCRGSP 2009).

This section estimates use of Commonwealth, State and Territory Disability Agreement (CSTDA) funded services using two measures:

- the rate of service use by Indigenous and non-Indigenous people with disability, per 1000 people
- the rate of service use by Indigenous and non-Indigenous people with disability per 1000 potential population.

The CSTDA funded services reported are accommodation support, employment, community access, and community support services.

For both measures, while a markedly lower proportion may indicate reduced access for a special needs group, it may also represent strong alternative support networks (and thus a lower level of need), or a lower tendency of people with disability in a group to choose to access CSTDA funded services. Similarly, a higher proportion may suggest poor service targeting, the lack of alternative support networks or a greater tendency on the part of some people with disability to choose to access CSTDA funded services. In addition, this indicator does not provide information on whether the services are appropriate for the needs of the people receiving them, or accessed by those most in need.

For CSTDA funded accommodation support services in 2006–07:

- the rate of service use in the total Indigenous population (2.8 service users per 1000 people aged under 65 years) was higher than the proportion of the total non-Indigenous potential population who used the services (1.6 service users per 1000 people aged under 65 years) (table 4A.8.27)
- in contrast, the rate of service use in the Indigenous potential population (32.3 service users per 1000 potential population) was lower than the corresponding rate for the non-Indigenous potential population (42.4 service users per 1000 potential population) (table 4A.8.27).

For CSTDA funded community support services in 2006–07:

- the rate of service use in the Indigenous population (9.9 service users per 1000 people aged under 65 years) was higher than the proportion of the

non-Indigenous population who used the services (5.0 service users per 1000 non-Indigenous people aged under 65 years) (table 4A.8.28)

- in contrast, the rate of service use in the Indigenous potential population who used these services in 2006-07 (114.6 service users per 1000 potential population) was lower than the proportion of the non-Indigenous potential population who used the services (129.7 service users per 1000 potential population) (table 4A.8.28).

For CSTDA funded community access services in 2006–07:

- the rate of service use in the Indigenous population (3.0 service users per 1000 people aged under 65 years) was higher than the proportion of the non-Indigenous population who used the services (2.3 service users per 1000 people aged under 65 years) (table 4A.8.29)
- in contrast, the rate of service use in the Indigenous potential population (34.8 service users per 1000 potential population) was lower than the proportion of the non-Indigenous population who used the services (59.1 service users per 1000 potential population) (table 4A.8.29).

For CSTDA funded employment services in 2006–07:

- the rate of service use in the Indigenous population (6.8 service users per 1000 people aged 15–64 years) was higher than the proportion of the non-Indigenous population who used the services (5.7 service users per 1000 people aged 15–64 years) (table 4A.8.30)
- in contrast, the rate of service use in the Indigenous potential population (133.0 service users per 1000 potential population) was lower than the proportion of the non-Indigenous population who used the services (229.5 service users per 1000 potential population) (table 4A.8.30).

Hospitalisation rates by principal diagnosis and chronic disease

Data on the most common principal diagnoses for hospitalisations of Indigenous and non-Indigenous people, including chronic disease, are presented in this section. While hospitalisation rates by principal diagnosis are not a measure of the prevalence of a condition in the community, they do provide an indication of the extent to which serious illnesses are being treated in hospitals. A hospitalisation is an episode of care, so the same patient may be represented more than once in annual data. The principal diagnosis is the diagnosis established to be the problem that was chiefly responsible for the patient's episode of care in hospital.

Generally chronic diseases persist over long periods of time and are the result of numerous risk factors acting in combination, such as:

- biomedical factors (for example, obesity, high blood pressure and high cholesterol levels)
- genetics (for example, genetic makeup and family history)
- risk behaviours (for example, smoking, excessive alcohol consumption, physical inactivity and poor diet)
- environment (for example, poor living conditions)
- psychological factors (for example, neglect, violence and death of family members)
- socioeconomic factors (for example, poverty, unemployment, low educational attainment, limited access to social services and discrimination/racism) (AIHW 2006).

More information on risk factors such as obesity (see section 7.5) and smoking (see section 7.4) can be found elsewhere in this report. More information on chronic diseases in the Indigenous population can be found in section 7.2 of this report, which presents hospitalisation rates for 'potentially preventable chronic conditions' as part of the 'Access to primary health care' strategic change indicator.

The age standardised hospitalisation ratios presented in tables 4.8.2 and 4.8.3 are calculated by dividing the Indigenous hospitalisation rate by the non-Indigenous hospitalisation rate. A ratio of one means the underlying rates are the same. A rate of more than one means the Indigenous rate is higher than the non-Indigenous rate.

Table 4.8.1 **Hospitalisations rates by principal diagnosis, NSW, Victoria, Queensland, WA, SA and public hospitals in NT, 2006-07**[a, b, c]

	Indigenous	*Non-Indigenous*[d]	
Principal diagnosis	Rate per 1000[e]	Rate per 1000[e]	Ratio[f]
Certain infectious and parasitic diseases	9.8	4.6	2.1
Neoplasms	16.0	24.6	0.6
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	4.9	4.5	1.1
Endocrine, nutritional and metabolic diseases	21.2	6.4	3.3
Mental and behavioural disorders	26.4	14.2	1.9
Diseases of the nervous system	10.1	8.2	1.2
Diseases of the eye and adnexa	6.7	9.8	0.7
Diseases of the ear and mastoid process	2.9	2.5	1.2
Diseases of the circulatory system	36.4	21.5	1.7
Diseases of the respiratory system	43.3	15.4	2.8
Diseases of the digestive system	39.1	40.2	1.0
Diseases of the skin and subcutaneous tissue	13.8	5.7	2.4
Diseases of the musculoskeletal system and connective tissue	14.1	18.9	0.7
Diseases of the genitourinary system	20.2	17.3	1.2
Pregnancy, childbirth and the puerperium	34.0	23.7	1.4
Certain conditions originating in the perinatal period	3.1	2.8	1.1
Congenital malformations, deformations and chromosomal abnormalities	1.2	1.7	0.7
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	34.9	23.2	1.5
Injury, poisoning and certain other consequences of external causes	46.5	23.6	2.0
Factors influencing health status and contact with health services[g]	483.7	83.3	5.8
Care involving dialysis	451.6	39.0	11.6
Other	32.1	44.3	0.7
Not reported	0.2	0.3	0.5
Total (excluding care involving dialysis)	416.5	313.3	1.3
Total (including care involving dialysis)	868.3	352.6	2.5

[a] Hospitalisations for which the care type was reported as newborn with no qualified days, and records for hospital boarders and posthumous organ procurement have been excluded. [b] Identification of Indigenous patients is not considered to be complete and completeness varies among the jurisdictions. [c] This table includes data for NSW, Victoria, Queensland, WA, SA and public hospitals in the NT. Caution should be used in the interpretation of these data due to jurisdictional differences in data quality. [d] Non-Indigenous includes Indigenous status not reported. [e] Hospitalisation rates by Indigenous status were directly age-standardised, using the projected Indigenous population (low series) as at 30 June 2006 and the estimated resident populations as at 30 June 2006. [f] The rate ratio is equal to the separation rate for Indigenous Australians divided by the separation rate for non-Indigenous Australians. [g] Factors influencing health status and contact with health services includes health examinations and screening of people who may or may not be sick, immunisation, and discussion of problems that are not injuries or diseases.

Source: AIHW National Hospital Morbidity Database (unpublished); table 4A.8.31.

For 2006-07:

- Indigenous people were hospitalised at 2.5 times the rate of non-Indigenous people. Excluding dialysis, Indigenous people were hospitalised at 1.3 times the rate of non-Indigenous people (table 4.8.1)
- Indigenous people were hospitalised at higher rates than non-Indigenous people for all causes listed in table 4.8.1, except for the categories of neoplasms (cancers), diseases of the eye and adnexa, diseases of the musculoskeletal system and connective tissue, congenital malformations, and deformations and chromosomal abnormalities
- the greatest differences between the Indigenous and non-Indigenous hospitalisation rates were for care involving dialysis (11.6 times the rate of non-Indigenous people), factors influencing health status and contact with health services (5.8 times the rate of non-Indigenous people), endocrine, nutritional and metabolic diseases (3.3 times the rate of non-Indigenous people), diseases of the respiratory system (2.8 times the rate of non-Indigenous people), and diseases of the skin and subcutaneous tissue (2.4 times the rate of non-Indigenous people) (table 4.8.1).

The AIHW National Hospital Morbidity Database has assessed four jurisdictions (Queensland, WA, SA and the NT) as having adequate identification of Indigenous people in hospitalisations data for all years from 1998–99 to 2005–06. Attachment tables 4A.8.25-36 compare hospitalisation rates by principal diagnosis for Indigenous and non-Indigenous people for the period 1998–2000 to 2004–06.

Between 1998–2000 and 2004–06:

- hospitalisation rates of Indigenous people increased for care involving dialysis (from 296.9 per 1000 to 550.1 per 1000); symptoms, signs and abnormal clinical findings (from 20.3 per 1000 to 34.1 per 1000); and endocrine, nutritional and metabolic diseases (from 15.8 per 1000 to 23.5 per 1000) (table 4A.8.32)
- hospitalisation rates of Indigenous people for mental and behavioural disorders declined (from 27.1 per 1000 to 21.8 per 1000) (table 4A.8.32)
- Indigenous hospitalisation rates relative to non-Indigenous hospitalisation rates increased for total principal diagnosis (from 2.4 to 2.9), for care involving dialysis (from 13.3 to 15.5) and for diseases of the circulatory system (from 1.6 to 1.9) (table 4A.8.32)
- Indigenous hospitalisation rates relative to non-Indigenous hospitalisation rates decreased for endocrine, nutritional and metabolic diseases (from 4.7 to 4.0), for diseases of the skin and subcutaneous tissue (from 3.2 to 2.8) (table 4A.8.34).

Table 4.8.2 **Hospitalisation rate ratios of Indigenous to non-Indigenous people, by type of chronic disease and sex, age standardised, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, 2006-07**[a, b, c, d]

Type of long term health condition	*Male*	*Female*
Cancer (C00–C96)	0.6	0.8
Lung cancer (C33–C34)	1.3	2.3
Cervical cancer (C53)	..	4.7
Mental and behavioural disorders (F00–F99)	2.3	1.4
Circulatory diseases (I00–I99)	1.5	1.9
Ischaemic heart diseases (I20–I25)	1.7	2.8
Stroke (I60–I69)	1.7	1.9
Hypertension (I10–I15)	3.0	2.7
Rheumatic heart diseases (I05–I09)	3.0	6.6
Other		
Diabetes (E10–E14)	3.6	5.4
End stage renal diseases (N18–N19, Z49)	8.4	15.3
Chronic obstructive pulmonary diseases (J41–J44)	3.9	5.5

.. Not applicable. [a] Hospitalisations were based on ICD-10-AM classifications. Principal diagnosis was used to select diseases. [b] Rate ratios were age standardised using 2001 Australian population data. [c] The rate ratio is calculated by dividing the Indigenous age-standardised rate by the 'Other' age standardised rate. 'Other' includes 'Non-Indigenous' and 'Not stated' categories. [d] Indigenous hospitalisations data are reported for NSW, Victoria, Queensland, WA, SA and the NT only.

Source: AIHW National Hospital Morbidity Database (unpublished), tables 4A.8.47 and 4A.8.50.

In 2006–07:

- age standardised hospitalisation rates were higher for Indigenous males and females than non-Indigenous males and females for all chronic diseases listed in table 4.8.2, except for cancer
- for all chronic diseases listed in table 4.8.2, except for mental and behavioural disorders, and hypertension, Indigenous to non-Indigenous rate ratios for females were higher than the corresponding ratios for males (table 4.8.2)
- Indigenous and non-Indigenous hospitalisation rates were highest for end stage renal diseases. The rates for Indigenous males and females were 8.4 and 15.3 times as high as the rates for non-Indigenous males and females, respectively (table 4.8.2).

Data on hospitalisation rates for Indigenous and non-Indigenous people from six jurisdictions (NSW, Victoria, Queensland, WA, SA and the NT) are only available for the three years from 2004–05 to 2006–07 (tables 4A.8.37–42). Due to the short time period, it is difficult to identify trends in these rates for long term health conditions. However, hospitalisation rate ratios for Indigenous and non-Indigenous people from four jurisdictions (Queensland, WA, SA and the NT) are available for

the six years from 2001-02 to 2006-07 (tables 4A.8.25 to 4A.8.36). Between 2001-02 and 2006-07:

- the ratio of Indigenous to non-Indigenous hospitalisation rates for males increased for end stage renal disease (9.6 to 12.3) and stroke (1.5 to 2.1). Hospitalisation rate ratios for males decreased for hypertension (5.4 to 3.4) and rheumatic heart disease (4.5 to 4.0) (tables 4A.8.25 to 4A.8.30)
- the ratio of Indigenous to non-Indigenous hospitalisation rates for females decreased for hypertension (4.7 to 3.6), and increased for cervical cancer (3.6 to 5.8), end stage renal diseases (18.8 to 21.3) and ischaemic heart diseases (2.5 to 3.0) (tables 4A.8.39–44.).

Burden of disease and injury

Vos et al. (2007) quantified the total disease burden for Indigenous people in 2003, and the relative contribution of specific diseases and key health risk factors to the total disease burden. The study also measured the difference in health burdens between Indigenous people and the total Australian population, and identified the health risk factors that most likely contribute to the health gap between the Indigenous population and the total Australian population (the total Australian population includes the Indigenous population).

The total burden of disease was measured by disability-adjusted life years (DALYs). A DALY is equivalent to one lost year of 'healthy' life due to death and/or disability. The measure incorporated both fatal and non-fatal health data from hospital records, death registrations, surveys and other sources. Diseases (including acute and chronic diseases, and mental illness) and injuries were classified into more than 170 mutually exclusive categories and 11 common risk factors were assessed.[8] The key findings of the study were, that in 2003:

- the Indigenous population had an overall age standardised rate of disease burden (measured in DALYs/1000 people) two and a half times greater than the general Australian population
- the Indigenous population had higher DALY rates than the total Australian population for each of the seven leading contributors to total disease burden. Indigenous people had DALY rates attributable to:
  - diabetes at 5.1 times the rate of the Australian population

[8] The 11 health risk factors included in the study were tobacco, alcohol, illicit drugs, high body mass, inadequate physical activity, low intake of fruit and vegetables, high blood pressure, high cholesterol, unsafe sex, child sexual abuse and intimate partner violence.

  - cardiovascular disease at 4.6 times the rate of the Australian population
  - intentional injuries at 4.1 times the rate of the Australian population
  - unintentional injuries at 2.5 times the rate of the Australian population
  - chronic respiratory disease at 2.5 times the rate of the Australian population
  - cancers at 1.7 times the rate of the Australian population
  - mental disorders at 1.6 times the rate of the Australian population
- non-communicable diseases explained 70 per cent of the disease burden gap between Indigenous people and the total Australian population, with cardiovascular disease the leading cause (23 per cent of the gap) followed by diabetes (12 per cent of the gap), mental disorders (12 per cent of the gap) and chronic respiratory diseases (9 per cent of the gap)
- the 11 risk factors identified in the study accounted for half of the gap in disease burden between the Indigenous population and the total Australian population, with tobacco the leading risk factor (17 per cent of the gap) followed by obesity (16 per cent of the gap), physical inactivity (12 per cent of the gap), high blood pressure (7 per cent of the gap) and alcohol (4 per cent of the gap) (Vos et al. 2007).

Chapters 5 (Early child development) and 7 (Healthy lives) provide more information on prevention of disease and ways to improve health outcomes for Indigenous people.

4.9 Household and individual income

Box 4.9.1 **Key messages**

- Indigenous households' gross weekly equivalised (adjusted) incomes ($398) were 65.0 per cent of those of non-Indigenous households ($612) in 2006. After adjusting for inflation, median incomes increased by 8.9 per cent for Indigenous households and 8.5 per cent for non-Indigenous households between 2001 and 2006 (figure 4.9.1).
- Median weekly incomes for Indigenous people aged 15 years and over ($278) were 58.8 per cent of those of non-Indigenous people aged 15 years and over in 2006 ($473) (figure 4.9.4).

The economic wellbeing of people is largely determined by their income and wealth. Capacity to own a home or accumulate other assets will depend upon whether people have sufficient disposable income. In the absence of data on wealth,

the extent to which income for Indigenous people is lower than for non-Indigenous people is a major indicator of material disadvantage.

This section contains information on household and individual income. Income is an important determinant of socioeconomic status. It is widely acknowledged that health status is affected by the availability of material resources and the income to buy them. People who have low incomes, or are socially disadvantaged in other ways, tend to live shorter lives and suffer more illness than those who are financially well off. In Australia, men and women with lower socioeconomic status, including many Indigenous people, bear a higher burden of disease (AIHW 2004). Higher incomes can enable the purchase of health-related goods and services such as better food, housing, recreation and health care, and may provide psychological benefits such as a greater sense of security and control. Increasingly, it is also suggested that less favourable social and economic circumstances can cause anxiety, low self-esteem and social isolation, which in turn can influence health-related behaviours and health itself (AIHW 2004).

Chapter 13 of this report discusses in more detail the association between low incomes and poor education outcomes, labour force participation and employment. The 2007 report also examined associations with health risk behaviour (including smoking, risky to high risk alcohol consumption and illicit drug use).

Higher incomes may help to improve individual and family health and other outcomes. However, higher incomes alone will not improve these outcomes unless individuals and families are financially literate. Many people, both Indigenous and non-Indigenous, have poor financial management skills which limit their capacity to improve their own and their family's circumstances. A recent study by the Cape York Institute (CYI 2007) found that several artists in Aurukun earned between $30 000 and $50 000 per year (including between $5000 and $10 000 in commissions every three to four months, and an average of $230 per week from Community Development Employment Projects (CDEP). The study noted that, although these artists had relatively high incomes, they had often spent the commissions within a month. The study contended that poor financial management skills meant that these people were unable to use their incomes to improve their circumstances.

Box 4.9.2 provides examples of some programs that have been successful in improving financial management skills for Indigenous people.

Income management of certain welfare and family payments was introduced in the latter half of 2007, as part of the Northern Territory Emergency Response (NTER). Under the NTER, 50 per cent of certain welfare and family payments are directed towards priority needs such as food, utilities and clothing. Income management in

the NT, along with trials in WA (section 4.10) and Cape York (section 11.1) have led to more money being spent on essentials such as food and clothing, less money being spent on alcohol and cigarettes, less incidence of harassment for money and women in communities report feeling safer. In addition, communities have reported that male family members now have an increased role in the family shopping.

The NTER Review Board (2008) recommended that the compulsory income management program be replaced with a voluntary program. Although the Commonwealth Government accepted the review's overarching recommendations, it did not accept this recommendation and decided that compulsory income management would continue as part of the NTER (Macklin 2008). However, the Government has undertaken to legislate in the first half of 2009 to ensure people in the Northern Territory subject to income management have access to a full range of appeal rights, including through the Social Security Appeals Tribunal and the Administrative Appeals Tribunal.

Box 4.9.2 'Things that work' — income management/financial literacy

The **Cape York Family Income Management (FIM) project** has been operating in the Cape York Welfare Reform communities of Aurukun, Mossman Gorge, Coen and Hope Vale since the commencement of the trial in 2008. Other Cape communities also have access to FIM.

The FIM project was designed by Indigenous people to build financial literacy and implement budgets, stabilise family functioning, improve living standards and reduce household and individual debt in a culturally sensitive and practical way.

The project is run by local people in each location and overseen by a working group comprising representatives from each community, Australian Government agencies, Westpac, and Cape York Partnerships. Westpac employees work alongside local financial management workers for one month every quarter. Local facilitators and resource workers in each site assist families and individuals to negotiate budget and savings agreements, set up direct deductions from accounts and provide bill-paying and purchasing assistance.

Outcomes include debt reduction and debt management, better coverage of essential living costs, increased spending on food and reduced spending on alcohol and gambling, better access to medication, reduction in stress and conflict, and the ability to purchase whitegoods, furniture, televisions, videos and other household items. Some participants have also purchased cars and boats, and set up small businesses. Arrangements with local stores, schools and pharmacies facilitate payment for food, education costs and medications (Queensland Government, unpublished).

(Continued next page)

Box 4.9.2 (continued)

MoneyBusiness, provides Indigenous people and families with money management information and supports them to become self reliant and improve individual, family and community wellbeing in a culturally sensitive and practical way (Australian Government, unpublished).

MoneyBusiness was implemented in partnership with the ANZ Banking Corporation, with input from local workers and community members. It is currently delivered in six sites: Galiwinku, Nguiu, Tennant Creek and Katherine in the NT, and Kununurra and Geraldton in WA. The MoneyBusiness Community Education Workshop Kit was also developed through this partnership.

The majority of MoneyBusiness workers have successfully completed a Certificate III in Financial Services. All sites are running around 12 community education workshops a year to assist in increasing the financial literacy of people within the communities and to promote the assistance of the MoneyBusiness workers. In 2007-08 MoneyBusiness sites supported 1650 clients.

MoneyBusiness has been well received in communities with many clients developing budgets, paying off debts and putting arrangements in place to better manage their money over the pay period to allow for the purchase of essential goods and household furniture; using the internet to pay bills; using education opportunities to learn how to make good choices and obtain better value when receiving one-off payments.

MoneyBusiness is supporting Welfare Payment Reform initiatives in the NT and WA (Australian Government, unpublished).

My Moola is a financial literacy course for Indigenous Australians developed by First Nations Foundation and ANZ in conjunction with the Indigenous community in Shepparton, Victoria. It was piloted in Shepparton throughout 2007 with a view to a national rollout starting in 2008. During the first phase, 30 Indigenous people participated in workshops on topics such as goal setting, budgeting, dealing with credit, internet and telephone banking, and being financially prepared for the future.

The program addresses cultural issues as well as providing technical training.

The course, delivered through local Indigenous community organisations, aims to assist Indigenous people and families to get ahead financially by understanding how to manage money and by understanding the impact of their decisions on their financial goals (IEP 2007).

This indicator examines both household and individual income. While income is usually received by individuals, people living in families or group households generally contribute to the purchase of goods and services shared by other household members, particularly children. Therefore, household income measures the economic resources available to every person in a household, including dependent adults and children. It reflects directly the economic resources available for each household member to maintain his or her standard of living.

The main sources of income for both Indigenous and non-Indigenous people are employment, assets and welfare payments. Levels of income are closely related to paid work (through salaries and wages), though for many people government income support is their main source of income. Individual income directly reflects the earning capacity of adults in the work force, which in turn impacts on household income. In 2004-05, over half of Indigenous adults (51.6 per cent) received most of their individual income from government pensions and allowances (table 3A.6.8 from the 2007 report).

A significant proportion of Indigenous people are employed under CDEP. Many CDEP participants have low incomes. Biddle and Taylor (2008) found that the median weekly income for CDEP participants recorded in the Census was $210, only slightly higher than the median weekly income recorded for Indigenous adults who were not employed ($202).

Data for the household and individual income indicator in this report are from the ABS 2006 Census and the ABS 2001 Census. For most income analysis, disposable (after tax) income is the preferred basis of income measurement. However, no attempt is made to adjust for income taxes in the Census. Nor is any adjustment made for the cost of living. This is particularly relevant for people living in remote areas, where costs for some goods and services are high, and the costs for others are low. For example, the cost of fresh food can be high in remote areas, which has an impact on health outcomes. In contrast, rent in remote areas is, on average, less than half the rent levels in major cities.

The household income estimates in ABS Censuses are adjusted by equivalence factors (see box 4.9.3) to take into account household size and composition, and the economies of scale that arise from the sharing of a dwelling. Although equivalised household income refers to household income, it is not a measure of total income for each household. Rather, it is a measure of the income available for each member in a household taking into account the composition of that household. Box 4.9.3 provides more information about the income measures used in this report.

When compared with non-Indigenous people, a higher proportion of Indigenous people had low incomes, and a lower proportion had high incomes in 2006. Lower rates of mainstream (non-CDEP) employment among Indigenous people (see section 4.6), and higher rates of part time work and/or employment in lower skilled occupations (see section 8.1) are the main factors that contribute to the income disparity between Indigenous and non-Indigenous people.

Box 4.9.3 **Derivation of income measures**

Equivalised household income

The costs of maintaining households and families vary according to household size and composition, and other household characteristics such as the number of employed people in the household. Notwithstanding economies of scale, larger households normally require a greater level of income to maintain the same material standard of living as smaller households, and the needs of adults are normally greater than the needs of children.

The conventional technique for adjusting for the income needs of households with different characteristics is to apply an equivalence scale to the raw household income. The resulting measure of income is gross weekly equivalised household (GWEH) income, and is the measure used for household income in this report. Although GWEH income refers to household income, it is not a measure of total income for each household. Rather, it is a measure which has been adjusted for the size and composition of that household.

Mean versus median income

A mean income value is the average value of a set of income data. Median value is the mid point of a set of income data. If the values in a set of income data are arranged from largest to smallest, the one in the centre is the median income value (if the centre point lies between two numbers, the median value is the average value of the two numbers).

Median value is a better measure for income than the mean, because mean income values are influenced by extreme income values. This is particularly important when comparing incomes of Indigenous and non-Indigenous people, as income distributions within the two populations are very different (see Glossary for examples of how mean and median values are derived and the extent to which the two income measures differ).

Gross weekly equivalised household income

The measure used in this report for household income is gross weekly equivalised household (GWEH) income (box 4.9.3). Although GWEH income calculated for Indigenous people is adjusted for household size and composition may not adequately reflect the household circumstances of Indigenous people. Daly and Smith (1995), Gray (1990), and Hunter, Kennedy and Smith (2003) found substantial differences in family size and composition (structure) between Indigenous households and non-Indigenous households. Compared to non-Indigenous people and/or households:

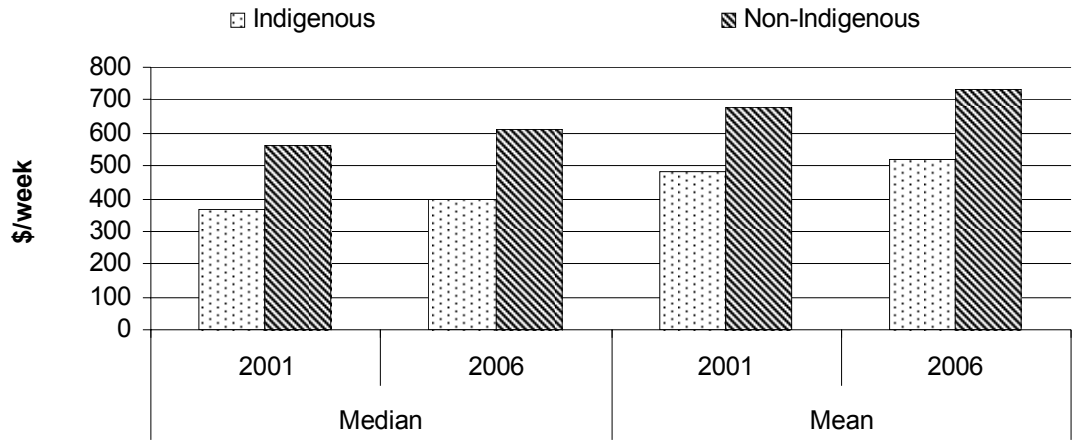
- Indigenous people are more likely to live in larger households with large numbers of dependants and smaller incomes
- Indigenous households are more likely to extend over generations
- high Indigenous adult mortality at younger ages can impact upon household living arrangements
- Indigenous people are substantially more likely to live in single parent households
- Indigenous people, especially those living outside the cities, may live in households with resource commitments to their extended families living elsewhere
- Indigenous households tend to have a large number of visitors, who may not be accounted for in a data collection that takes a snapshot on a particular day.

Section 9.1 (Overcrowding in housing) provides more information on the housing and living arrangements of Indigenous people and differences between Indigenous and non-Indigenous households.

The median value is the mid point of a set of income data. The difference in median income between Indigenous and non-Indigenous people is an indicator of the income gap between the two populations. A mean income value is the average value of a set of income data.

Figure 4.9.1 presents data on median and mean real gross weekly equivalised household income. Real income is adjusted for the effects of inflation, and allows for comparisons to be made between incomes in different years, by holding purchasing power constant. For more information on median and mean income measures, see box 4.9.3.

Figure 4.9.1 **Median and mean real gross weekly equivalised household income (2006 dollars)[a, b, c, d]**



a Excludes 'Visitor only' and 'Other not classifiable' households. **b** An Indigenous household is any household that had a least one person of any age as a resident at the time of the Census who identified as being of Aboriginal and/or Torres Strait Islander origin. **c** Non-Indigenous households include people who did not state their Indigenous status. **d** Real income is adjusted for the effects of inflation, and allows comparisons to made between incomes in different years, by holding purchasing power constant. The 2001 data are adjusted for inflation using the Consumer Price Index for the September quarter 2001 and the September quarter 2006.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; *2001 Census of Population and Housing*; ABS (2009); table 4A.9.1.

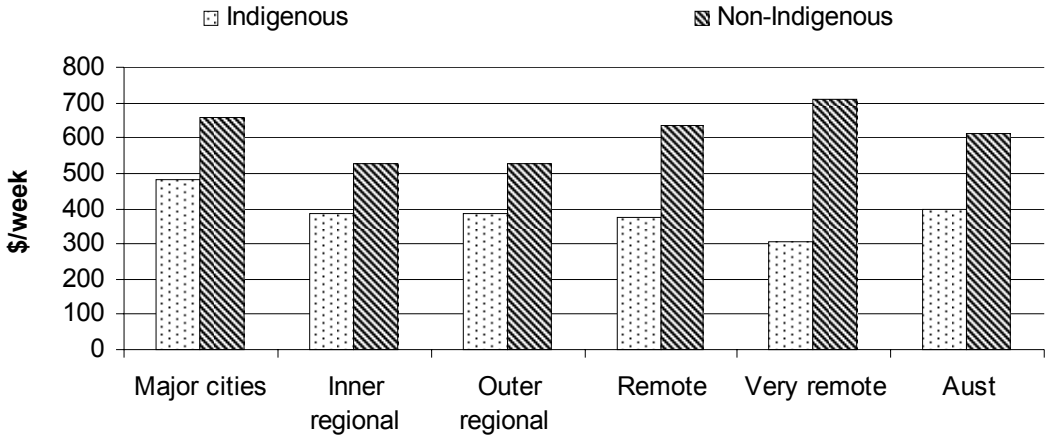
Between 2001 and 2006, after adjusting for inflation:

- there were increases in median gross weekly equivalised income for both Indigenous and non-Indigenous households. In this period, median incomes increased by $33 (8.9 per cent) for Indigenous households and $48 (8.5 per cent) for non-Indigenous households (figure 4.9.1)
- mean gross weekly equivalised income for both Indigenous and non-Indigenous households also increased. In this period mean incomes increased by 7.7 per cent for Indigenous households and 7.4 per cent for non-Indigenous households (figure 4.9.1).

In 2006:

- Indigenous household median gross weekly equivalised incomes were 65.0 per cent of non-Indigenous household median gross weekly equivalised incomes (figure 4.9.1)
- Indigenous household mean incomes were 71.4 per cent of non-Indigenous household mean incomes and in 2001 were 71.2 per cent of non-Indigenous household mean incomes (figure 4.9.1).

Figure 4.9.2 **Median gross weekly equivalised household income, by remoteness, 2006**[a, b, c]



[a] Excludes 'Visitor only' and 'Other not classifiable' households. [b] An Indigenous household is any household that had a least one person of any age as a resident at the time of the Census who identified as Indigenous. [c] Non-Indigenous households include people who did not state their Indigenous status.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.9.2.

Nationally in 2006:

- the median (mid point) gross weekly equivalised household income for Indigenous households was $398 compared with $612 for non-Indigenous households (figure 4.9.2)
- the median gross weekly equivalised household income for Indigenous households was lower than for non-Indigenous households in all remoteness areas (figure 4.9.2)
- the gap between median gross weekly equivalised household incomes for Indigenous and non-Indigenous households was greatest in very remote areas ($309 to $709) and smallest in inner regional areas ($386 to $525) (figure 4.9.2)
- Indigenous median gross weekly equivalised household incomes were highest in major cities and lowest in very remote areas, whereas non-Indigenous median gross weekly equivalised household incomes were highest in very remote areas and lowest in regional areas (figure 4.9.2)
- the median gross weekly equivalised income for Indigenous households was lower in all states and territories than for non-Indigenous households (table 4A.9.3)
- the gap between Indigenous and non-Indigenous median gross weekly equivalised household incomes was greatest in the NT ($332 to $848) and smallest in Tasmania ($420 to $512, respectively) (table 4A.9.3)

- Indigenous and non-Indigenous median gross weekly equivalised household incomes were both highest in the ACT ($714 and $927, respectively) (table 4A.9.3).

Box 4.9.4 **Income distribution measures**

Income ranges

The distribution of household income is another indicator of a population's economic wellbeing. The percentage of households or individuals with incomes in particular ranges is a measure of relative advantage or disadvantage. Income ranges are presented in this report for both Indigenous and non-Indigenous people as measures of both household and individual income distribution.

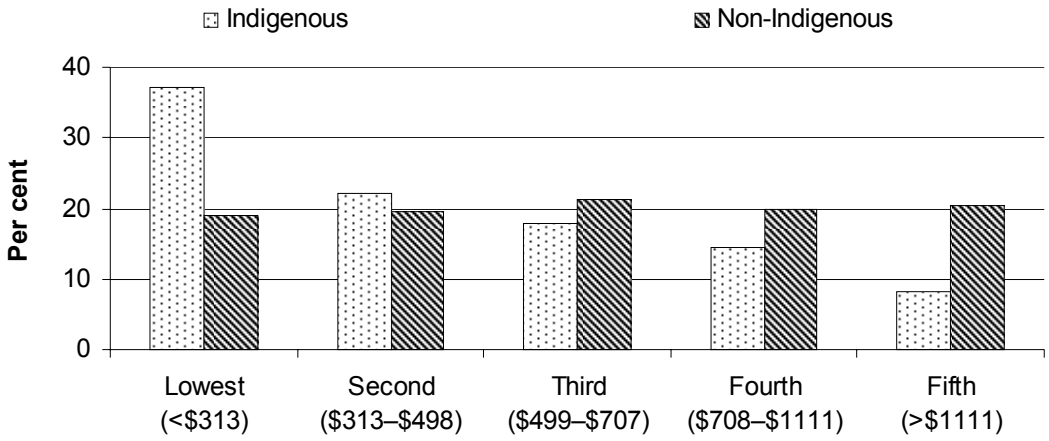
Income quintiles

Income quintiles are another measure of the distribution of income. The income quintiles are groupings that result from ranking all people in the population in ascending order (from lowest to highest) according to their incomes and then dividing the population into five equal groups, each comprising 20 per cent of the population.

The income quintile boundaries in this report are based on income distributions for the total Australian population at the time of the 2006 Census.

The distribution of household incomes is also an important indicator of a population's economic wellbeing, that is, a population with a relatively high proportion of households with low incomes may be disadvantaged. The percentage of households which have incomes that lie in particular ranges is a measure of relative advantage or disadvantage. Income quintiles as measures of income distribution are groupings that result from ranking all households in the population in ascending order according to their gross weekly equivalised household incomes and then dividing them into five equal groups, each comprising 20 per cent of the population. Box 4.9.4 explains how income ranges and quintiles are calculated and how they are used in this report.

Figure 4.9.3 **Distribution of gross weekly equivalised household incomes, 2006[a, b, c]**



[a] The income quintiles are groupings that result from ranking all households in the population in ascending order (from lowest to highest) according to their incomes and then dividing them into five equal groups, each comprising 20 per cent of the population. Box 4.9.4 provides details of income quintile boundaries used in this report. [b] An Indigenous household is any household that had a least one person of any age as a resident at the time of the Census who identified as Indigenous. [c] Non-Indigenous households include people who did not state their Indigenous status.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.9.8.

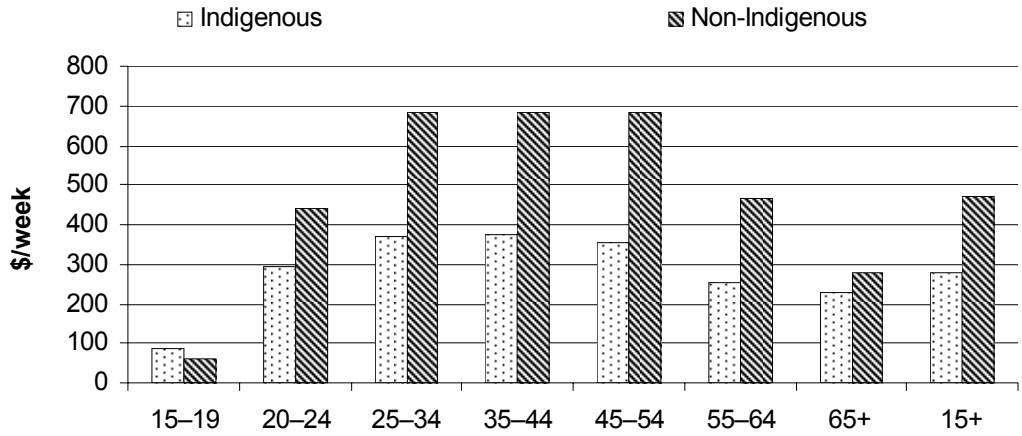
In 2006:

- Indigenous households (37.2 per cent) were almost twice as likely as non-Indigenous households (18.9 per cent) to have equivalised household incomes in the lowest range (quintile) (less than $313 per week) (figure 4.9.3)
- the proportion of households with an equivalised household income in the second lowest range ($313–$498) was also higher for Indigenous households than for non-Indigenous households (22.2 compared to 19.5 per cent) (figure 4.9.3)
- Indigenous households (8.3 per cent) were less than half as likely as non-Indigenous households (20.4 per cent) to have an equivalised household income in the highest range (greater than $1111 per week) (figure 4.9.3)
- the proportion of households with an equivalised household income in the fourth range ($708–$1111 per week) was also lower for Indigenous households than for non-Indigenous households (14.4 compared to 20.0 per cent) (figure 4.9.3).

More information on distributions of gross weekly equivalised household income by State and Territory and remoteness area is in tables 4A.9.8 and 4A.9.9.

Individual income

Figure 4.9.4 **Median gross weekly individual income, by age, 2006[a]**



a Weekly individual income is the gross amount usually received each week from all sources.

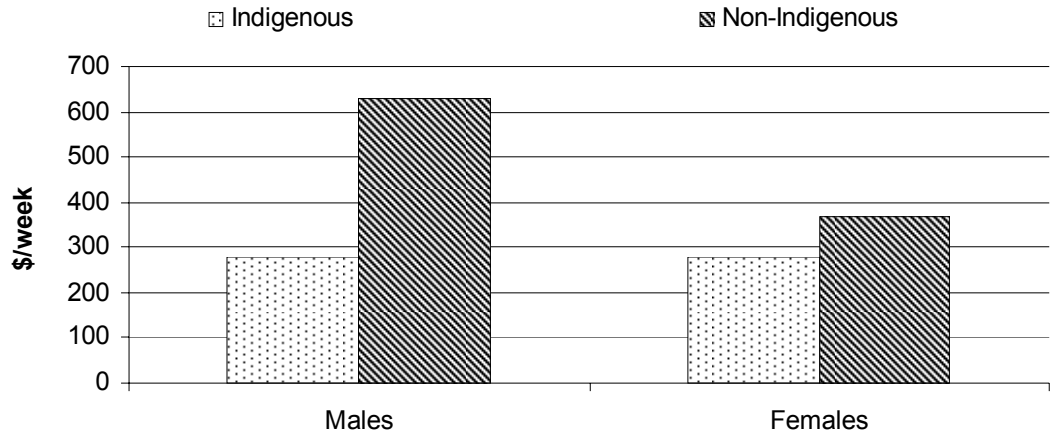
Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.9.6.

Data for median gross weekly individual income for 2006 show that:

- incomes for Indigenous people were lower than for non-Indigenous people across all age groups except for people aged 15 to 19 years (figure 4.9.4)
- among people aged 20–24 years, median incomes for Indigenous people were $142 lower than the median incomes for non-Indigenous people (figure 4.9.4)
- the gap between the median incomes for Indigenous and non-Indigenous people increased as people reached prime working years. Differences were greatest for those aged between 25 and 54 years of age. Indigenous people aged 25–34, 25–44 and 45–54 had median incomes that were $312, $307 and $328 lower than for non-Indigenous people of those ages (figure 4.9.4)
- differences between the median incomes for Indigenous and non-Indigenous people were smaller as people approached and reached retirement age. Indigenous people had incomes $213 lower and $52 lower than non-Indigenous people aged 55–64 and 65 years and over (figure 4.9.4). However, the gap between median incomes for Indigenous and non-Indigenous people aged 65 years and over may be understated because the average age of Indigenous people aged 65 years and over is lower due to higher adult mortality rates (see section 4.1 for more information on life expectancy)

- median individual incomes for Indigenous people aged 15 years and over were 58.8 per cent of the incomes of non-Indigenous people aged 15 years and over (figure 4.9.4).

Figure 4.9.5 **Median gross weekly individual income by sex, people aged 15 years and over, 2006**[a]



[a] Weekly individual income is the gross amount usually received each week from all sources.

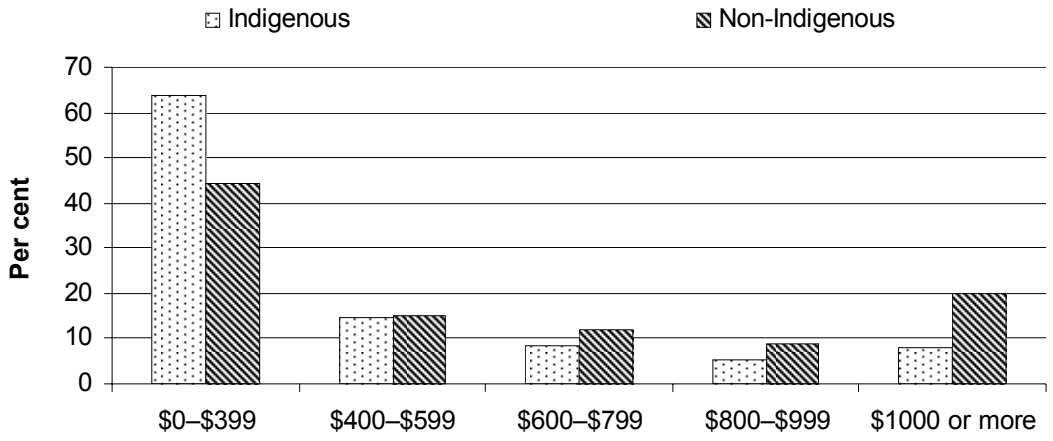
Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.9.6.

In 2006:

- there was little difference in median incomes reported for Indigenous males and females aged 15 years and over ($277 and $278, respectively) (figure 4.9.5)
- there was little difference in median incomes for non-Indigenous males and females aged 15 years and over ($627 and $367, respectively) (figure 4.9.5)
- median incomes for Indigenous males were 44.2 per cent of median incomes for non-Indigenous males (figure 4.9.5)
- median incomes for Indigenous females were 75.7 per cent of median incomes for non-Indigenous females (figure 4.9.5).

Incomes ranges (rather than quintiles, which were used to measure GWEH), are used in this report to measure the distribution of individual income (see box 4.9.4 for detailed definitions of income ranges). Because of the way individual income data are collected in ranges (rather than actual dollar amounts) in the census it is not possible to derive quintiles.

Figure 4.9.6 **Distribution of gross weekly individual income (ranges), people aged 15 years and over, 2006[a, b]**



a The income ranges are based on question 33 of the 2006 Census which asked "What is the total of all wages/salaries, government benefits, pensions, allowances and other income the person usually receives?". **b** The $0–$399 income range includes people with negative income.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.9.11.

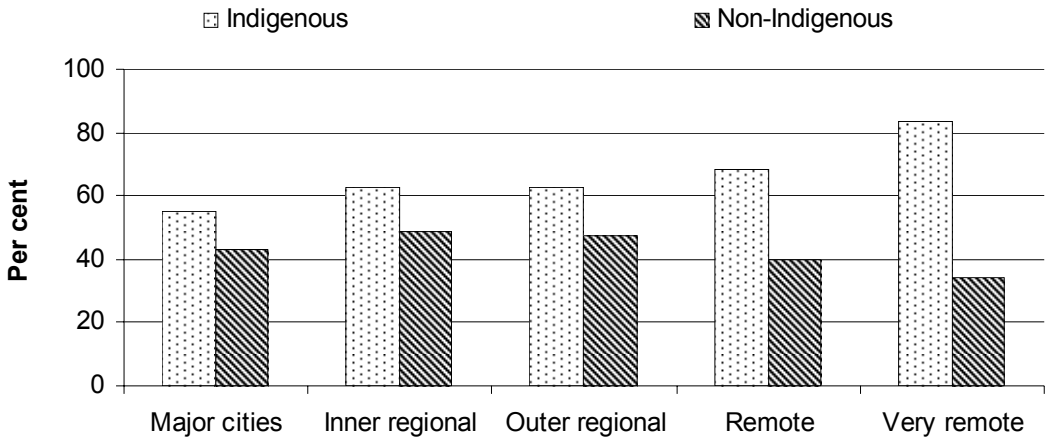
In 2006, data for gross weekly individual income show that:

- a higher proportion of Indigenous people (64.0 per cent) than non-Indigenous people (44.5 per cent) had an income in the lowest range (less than $400 per week) (figure 4.9.6)
- a lower proportion of Indigenous people (7.8 per cent) than non-Indigenous people (20.0 per cent) had an income in the highest range ($1000 or more per week) (figure 4.9.6).

Individual income ranges data for 2006 and 2001 are not directly comparable as they are both in nominal terms (2006 dollars and 2001 dollars) and are not easily converted into comparable constant (real) dollar ranges. Furthermore, the questions asked in each Census differ slightly in wording. However, it is clear from the data that Indigenous people were more likely to earn lower incomes and less likely to earn higher incomes than non-Indigenous people in both 2001 and 2006 (table 4A.9.11 and table 4A.9.17).

It is also important to note that the proportion of Indigenous people who did not state their income was significantly higher than for non-Indigenous people in both 2006 (11.6 and 4.4 per cent, respectively) and in 2001 (9.7 and 4.7 per cent, respectively).

Figure 4.9.7 **Proportion of people with gross weekly individual incomes of $399 or less, by remoteness, 2006[a]**



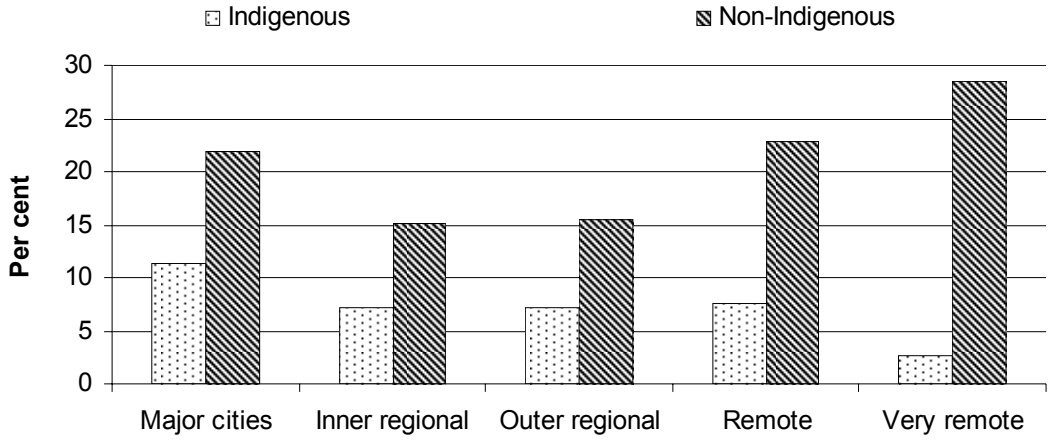
a The income ranges are based on question 33 of the 2006 Census which asked "What is the total of all wages/salaries, government benefits, pensions, allowances and other income the person usually receives?". **b** The $0-$399 income range includes people with negative income.

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.9.11.

In 2006, data for gross weekly individual income show that:

- Indigenous people were more likely than non-Indigenous people to have incomes of $399 or below across all remoteness areas (figure 4.9.7)
- Indigenous people were most likely to have incomes of $399 or below in very remote areas (83.8 per cent) and least likely to have incomes of $399 or below in major cities (54.8 per cent), whereas non-Indigenous people were most likely to have incomes of $399 or below in inner regional areas (49.0 per cent) and least likely to have incomes of $399 or below in very remote areas (34.2 per cent) (figure 4.9.7).

Figure 4.9.8 **Proportion of people with gross weekly individual incomes of $1000 or more, by remoteness, 2006[a]**



[a] The income ranges are based on question 33 of the 2006 Census which asked "What is the total of all wages/salaries, government benefits, pensions, allowances and other income the person usually receives?".

Source: ABS (unpublished) derived from the *2006 Census of Population and Housing*; table 4A.9.11.

In 2006 for gross weekly individual income:

- Indigenous people were less likely than non-Indigenous people to have gross weekly individual incomes of $1000 or more across all remoteness areas (figure 4.9.8)
- Indigenous people were most likely to have incomes of $1000 or more in major cities (11.3 per cent) and least likely to have incomes of $1000 or more in very remote areas (2.7 per cent), whereas non-Indigenous people were most likely to have incomes of $1000 or more in very remote areas (28.6 per cent) and least likely to have incomes of $1000 or more in inner regional areas (15.1 per cent) (figure 4.9.8).

Further information about the distribution of gross weekly individual income across remoteness areas can be found in table 4A.9.11 and table 4A.9.17. Further information about the distribution of gross weekly individual income by State and Territory can be found in table 4A.9.13 and table 4A.9.19.

4.10 Substantiated child abuse and neglect

Box 4.10.1 **Key messages**

- The rate of substantiated notifications for child abuse or neglect increased for both Indigenous and non-Indigenous children from 1999-2000 to 2007-08, with the rate for Indigenous children more than doubling over this period (figure 4.10.1):
  - the rate for Indigenous children increased from 16.4 to 35.3 per 1000 children
  - the rate for non-Indigenous children increased from 4.8 to 5.5 per 1000 children.
- Indigenous children were more than six times as likely as non-Indigenous children to be the subject of a substantiation of abuse or neglect in 2007-08 (figure 4.10.1).
- 41.0 out of every 1000 Indigenous children were on care and protection orders, compared to 5.3 per 1000 non-Indigenous children at 30 June 2008 (table 4.10.1).

Child abuse and neglect contribute to the severe social strain under which many Indigenous people live (Keel 2004; Stanley, Tomison and Pocock 2003). Ensuring that Indigenous children are safe, healthy and supported by their families will contribute to building functional and resilient communities. The need for intervention for protective reasons may also reflect the social and cultural stress in many Indigenous communities. In such conditions, the extended networks that could normally intervene in favour of the child may no longer exist. This indicator also includes data on placement of Indigenous children in out-of-home care in accordance with the *Aboriginal Child Placement Principle*. This legislative principle aims to ensure the safety and welfare of Indigenous children and, where possible, achieves this by giving priority to maintaining cultural ties by placing Indigenous children with family or other Indigenous people.

There are no reliable data on actual levels of child abuse and neglect. Substantiated child protection notifications are the primary source data for this indicator. Substantiated notifications record children who come into contact with community services for protective reasons. Information on sexually transmitted infection (STI) diagnoses in Indigenous children and police administrative data on child sexual assault victims have been provided to supplement the child protection data.

Reflecting the issues above, the measures for this headline indicator are:

- the representation of Indigenous children who were the subject of substantiated child protection notifications (compared with non-Indigenous children)
- the representation of Indigenous children on care and protection orders (compared with non-Indigenous children).

Additional information is provided on placement in accordance with the Aboriginal Child Placement Principle, and diagnoses of sexually transmitted infections (STIs) in children, that complements these measures.

Factors underlying child abuse and neglect are well documented (Clapham, Stevenson and Lo 2006; Gordon, Hallahan and Henry 2002; Robertson 2000; UN 2006; UNICEF Innocenti Research Centre 2004). Researchers agree that no single risk factor causes child abuse and neglect (Stanley 2005; Memmott et al. 2001; Gordon, Hallahan and Henry 2002). Acknowledging the shared causal pathways that contribute to child abuse and neglect increases the potential to devise preventative strategies (Stanley 2005; Libesman 2004). Factors acting in combination, include:

- behaviour (for example, domestic violence and alcohol and substance abuse)
- environment (for example, overcrowded home environment and poor living conditions)
- psychological factors (for example, high stress levels, lack of family and community resilience and mental health issues)
- socioeconomic factors (for example, economic deprivation, poverty, unemployment, poor education, limited access to social services and discrimination/racism).

For Indigenous people, these factors sit within a broader context of social and historic issues, such as loss of lifestyle, loss of culture, deterioration of traditional social controls and marginalisation from society (Matthews 1997; Stanley 2005).

In many situations family support, primary prevention and early intervention programs are more successful and cost effective in supporting Indigenous families than statutory interventions. While it is appropriate for government departments to maintain a strong role in statutory intervention where child protection measures are required, there is wide recognition of the positive work of Indigenous community organisations which are more effective in providing early-prevention and out-of-home care services (HREOC 2008).

Substantiated child protection notifications

Care should be taken in interpreting the substantiation data. No data exist on actual levels of child abuse or neglect. The number and rate of substantiations are collected by departments with responsibility for child protection and may under-estimate the true extent of abuse or neglect occurring within the community, because not all cases are reported. Furthermore, each State and Territory has its own

legislation, policies and practices in relation to child protection, so there are differences across jurisdictions in the data provided.

Children who come into contact with community services for protective reasons include those:

- who are suspected of being, have been or are being abused, neglected or otherwise harmed
- whose parents are unable to provide adequate care or protection (AIHW 2009).

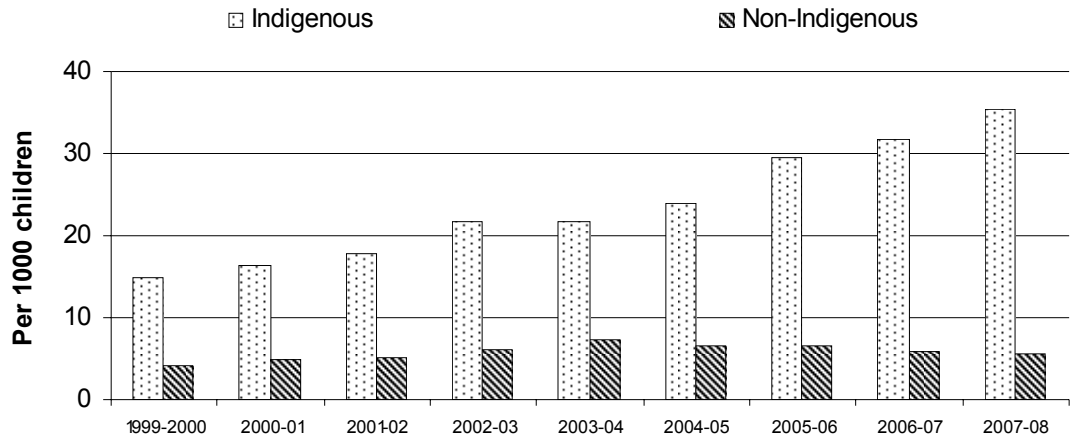
Before a matter is considered 'substantiated' by authorities, it must first be notified and investigated. A notification will be substantiated where it is concluded after investigation that the child has been, is being, or is likely to be abused, neglected or otherwise harmed. The criteria for substantiation vary across jurisdictions. All jurisdictions substantiate situations where children have experienced significant harm from abuse and neglect through the actions of parents. Some jurisdictions also substantiate on the basis of the occurrence of an incident of abuse or neglect, independent of whether the child was harmed, and others substantiate on the basis of the child being at risk of harm occurring (AIHW 2009).

In some instances, increases in notifications (and subsequent substantiations) may be a result of reduced tolerance in Indigenous families and the broader Indigenous community of abuse or neglect of children. An increased rate in these instances will signify increased awareness and identification of the problem — which is more desirable than abuse and neglect occurring but not being reported.

Increases in the rates of Indigenous children in the child protection system over time may also be due to a combination of improvements in the identification of Indigenous people as well as increases in the number of Indigenous children requiring protection (AIHW 2009).

Increased government expenditure on child protection may also affect notification and substantiation rates by improving access to services, and services' ability to respond. Nationally, annual real expenditure on child protection and out-of-home care services increased by $730.3 million from 2003-04 to 2007-08. This represents an average annual increase over the four year period of 12.3 per cent (SCRGSP 2009).

Figure 4.10.1 **Rate per 1000 children aged 0–16 years who were the subject of substantiations[a, b]**



a Non-Indigenous includes Indigenous status not stated. **b** Rates of children in substantiations were calculated as the number of children aged 0–16 years in each category (including those whose age was not stated) divided by the estimated population of children aged 0–16 years at 31 December, multiplied by 1000. For Indigenous children, the June projections for two years were averaged to obtain a population figure for December of the relevant year.

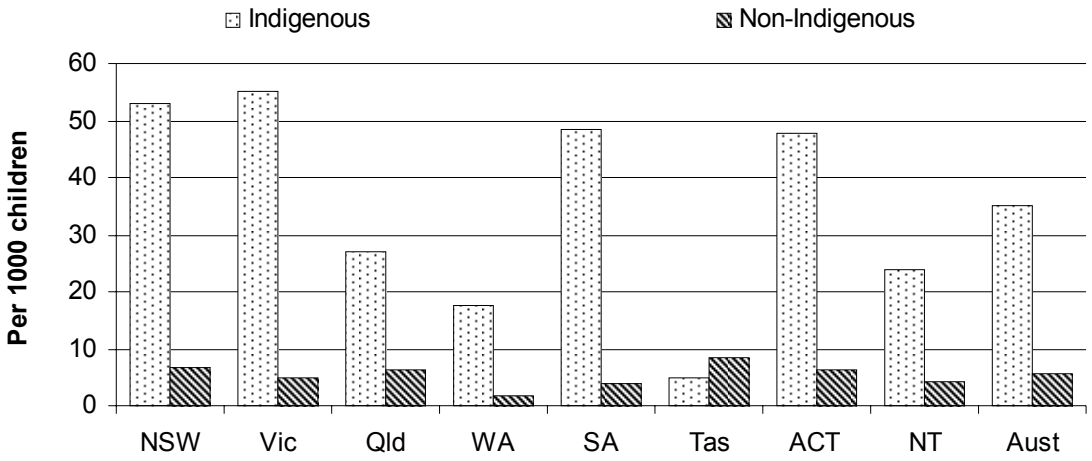
Source: AIHW, *Child Protection Notifications, Investigations and Substantiations, Australia* data collection (unpublished); table 4A.10.1.

From 1999-2000 to 2007-08:

- the substantiation rate for Indigenous children increased from 14.8 per 1000 children to 35.3 per 1000 children.
- the rate for non-Indigenous children increased from 4.2 per 1000 children to 5.5 per 1000 children.

Attachment table 4A.10.1 includes the number and rate per 1000 children aged 0–16 years in substantiations by State and Territory for 1999-2000 to 2007-08.

Figure 4.10.2 **Rate per 1000 children aged 0–16 years who were the subject of substantiations, 2007-08[a, b, c]**

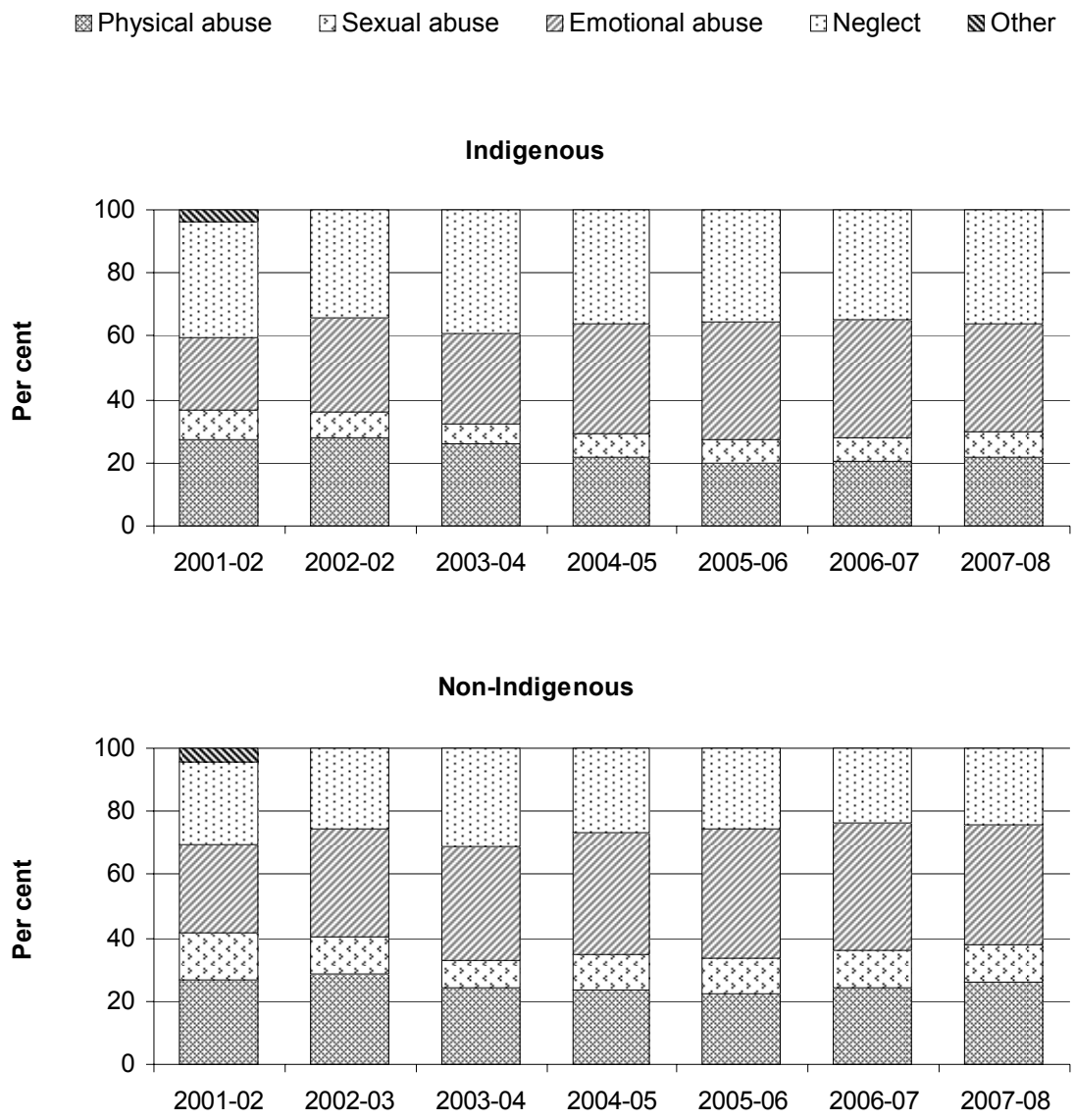


a Non-Indigenous includes Indigenous status not stated. **b** Rates of children in substantiations were calculated as the number of children aged 0–16 years in each category (including those whose age was not stated) divided by the estimated population of children aged 0–16 years at 31 December 2007, multiplied by 1000. For Indigenous children, the June 2007 and 2008 projections were averaged to obtain a population figure for December 2007. **c** The high number of children in substantiation with an unknown Indigenous status in Tasmania makes the counts for both Indigenous children and non-Indigenous children unreliable.

Source: AIHW (unpublished), derived from *Child Protection Notifications, Investigations and Substantiations, Australia* data collection; table 4A.10.1.

In 2007-08, the substantiation rate for Indigenous children was higher than the rate for non-Indigenous children in all jurisdictions (except Tasmania, where data should be interpreted with care as there were many children for whom Indigenous status was unknown) (figure 4.10.2).

Figure 4.10.3 **Children aged 0–16 years who were the subject of a substantiation: type of abuse or neglect[a, b, c, d]**



a Non-Indigenous includes Indigenous status not stated. **b** If a child was the subject of a substantiation for more than one type of abuse or neglect, then type of abuse and/or neglect is classified as the type most likely to be the most severe in the short term or most likely to place the child at risk in the short term, or if such an assessment is not possible, to the most obvious form of abuse. **c** In 2001-02 and 2002-03, the category 'other' was used in NSW and comprised of children identified as being at high risk but with no identifiable injury; Queensland data related to children aged 0–17 years; Tasmanian data are not included due to the very small Indigenous numbers. **d** NSW data are not included in 2003-04 because NSW was unable to provide data due to the implementation of a new data system.

Source: AIHW (unpublished), derived from *Child Protection Notifications, Investigations and Substantiations, Australia* data collection; tables 4A.10.2–8.

Variations in the distribution of types of abuse or neglect over time are likely to be the result of differences in the classification of substantiations by jurisdictions, as well as differences in the types of incidents that are substantiated (figure 4.10.3).

From 2001-02 to 2007-08, for both Indigenous and non-Indigenous children, the proportion of:

- physical abuse substantiations have decreased (27.5 per cent to 21.9 per cent and 27.0 per cent to 26.1 per cent, respectively) — though over the last two years the proportions have increased
- substantiations for sexual abuse decreased (9.5 per cent to 7.7 per cent and 14.6 per cent to 11.8 per cent, respectively) — though over the last two years the proportions have increased
- emotional abuse substantiations have increased (22.6 per cent to 34.5 per cent and 28.2 per cent to 38.0 per cent, respectively)
- neglect substantiations were relatively stable (36.7 per cent to 35.9 per cent and 25.8 per cent to 24.1 per cent (tables 4A.10.2–8).

Nationally in 2007-08, the substantiation rate was highest for neglect for Indigenous children (12.7 per 1000 children) and for emotional abuse for non-Indigenous children (2.1 per 1000 children) (table 4A.10.2).

Attachment tables 4A.10.2–8 include the number of children and the rate per 1000 children aged 0–16 years who were the subject of a substantiation, by type of abuse or neglect by State and Territory for the period 2001-02 to 2007-08.

Children on care and protection orders

The data on substantiations show those instances where authorities were notified, and subsequently decided, that a child was or could be at risk. Once a matter has been substantiated, the authorities have a number of options available to them:

- working with the family to address protective issues
- developing networks of support for the child
- monitoring and reviewing the safety of the child
- monitoring and reviewing family progress against case planning goals
- case conferences with agencies providing services to the child
- specialist child-focused therapeutic support
- a care and protection order (SCRCSSP 2003).

The Australian and WA governments are working in partnership to provide another avenue for child protection officers in WA to support families. Under the Income Management for Child Protection initiative, the WA Department for Child Protection can request Centrelink to manage a person's income support payments, where they consider a child is being neglected and that poor financial management has contributed to that neglect. Section 8.4 (Income support) has more information on this program.

A care and protection order involves a court order for protective reasons. A range of alternative services can be provided without a court order being granted, so not all substantiations will lead to a care and protection order. The use of court orders could be associated with:

- the speed of response required (that is, an emergency response)
- the family not engaging with the relevant agency over a period of time
- a change of circumstances that increases the risk to the child or young person (SCRCSSP 2003).

Some children are on care and protection orders for reasons other than abuse or neglect; for instance, where there is an irretrievable breakdown in the relationships in the family or where the parents are unwilling or unable to care for the child. However, given that legal intervention is usually a last resort, care and protection orders may provide some insight into the most serious and/or long-term instances of child abuse and neglect.

There are variations across states and territories in the types of care and protection orders that can be issued, but 'care and protection' orders include:

- *Guardianship or custody orders*: these orders involve the transfer of legal guardianship or custody to an authorised department or individual.
- *Third party parental responsibility orders:* these orders transfer all duties, powers, responsibilities and authority, that parents are entitled to by law, to a third party, which may be another individual such as a relative, or an officer of the state.
- *Supervision and other finalised orders:* these orders give the State or Territory department some responsibility for the child's welfare. This category may also include voluntary orders.
- *Interim and temporary orders*: these orders generally provide for a limited period of supervision and/or placement of a child.

- *Administrative arrangements:* these are agreements with the child protection departments, which have the same effect as a court order of transferring custody or guardianship.

Care should be taken in interpreting data on care and protection orders. It is a proxy indicator because no data exist on actual levels of child abuse or neglect. The data collected by state and territory departments may under-estimate the true extent of abuse or neglect occurring within both the Indigenous and non-Indigenous communities.

Table 4.10.1 **Children (0–17 years) on care and protection orders, 30 June 2008**[a]

	Number of children			*Rate per 1000 children*			*Ratio*
	Indigenous	*Non-Indigenous*	*Total*	*Indigenous*	*Non-Indigenous*	*Total*	*Indigenous to Non-Indigenous*
NSW	3 380	8 706	12 086	51.9	5.6	7.4	9.3
Victoria	977	6 899	7 876	74.1	5.8	6.5	12.9
Queensland	2 216	4 824	7 040	35.0	4.9	6.8	7.1
WA	1 279	1 815	3 094	41.0	3.7	6.0	11.0
SA	540	1 657	2 197	45.0	4.8	6.2	9.3
Tasmania	139	775	914	16.9	7.0	7.7	2.4
ACT	117	435	552	60.1	5.7	7.0	10.6
NT	363	157	520	14.6	4.2	8.4	3.5
Australia	9 011	25 268	34 279	41.0	5.3	6.9	7.7

[a] Non-Indigenous includes Indigenous status not stated.

Source: AIHW (unpublished), derived from *Children on Care and Protection Orders, Australia* data collection; table 4A.10.10.

As at 30 June 2008:

- the rate of children on care and protection orders was 41.0 per 1000 children for Indigenous children and 5.3 per 1000 children for non-Indigenous children (table 4.10.1).

From 1999-2000 to 2007-08:

- the rate of Indigenous children on care and protection orders increased from 19.9 per 1000 children to 41.0 per 1000 children — for non-Indigenous children the rate increased from 3.3 per 1000 children to 5.3 per 1000 children (table 4A.10.9).

Placement in accordance with the Aboriginal Child Placement Principle

The Aboriginal Child Placement Principle outlines a preference for placement when Indigenous children need to be placed in out-of-home care. Children who are in out-of-home care may or may not be subject to a care and protection order.

Subject to an over-riding concern for the safety and wellbeing of Indigenous children, the principle supports the maintenance of the Indigenous child's cultural ties and identity while in out-of-home care, by placing Indigenous children with family or other Indigenous people. According to the Aboriginal Child Placement Principle (NLRC 1997), the following hierarchy or placement preference should be pursued in protecting the safety and welfare of Indigenous children:

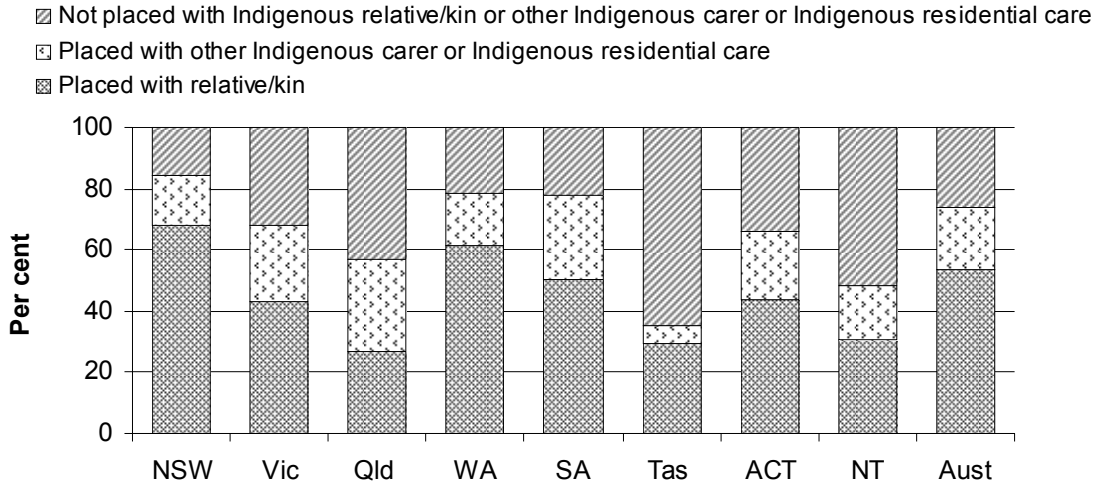
- placement with the child's extended family (which includes Indigenous and non-Indigenous relatives/kin)
- placement within the child's Indigenous community
- placement with other Indigenous people.

All jurisdictions have now adopted this principle in both legislation and policy.

Placing Indigenous children in circumstances consistent with the Aboriginal Child Placement Principle is generally considered to be in their best interests. While it is desirable that children be placed in accordance with the principle, this is one factor among many that must be considered in the placement decision. Consultations with Indigenous people have highlighted that the safety of the child needs to be paramount in applying this principle. This may mean that on occasions, placement with a non-Indigenous carer is warranted.

Data are reported separately for children placed (i) with relative/kin, (ii) with other Indigenous carer or in Indigenous residential care, and (iii) not placed with relative/kin, other Indigenous carer or in Indigenous residential care.

Figure 4.10.4 **Placement of Indigenous children in out-of-home care, 30 June 2008**[a, b, c, d, e]



[a] The denominator for calculating the percentage of children placed in accordance with the principle excludes Indigenous children living independently and those whose living arrangements were unknown. [b] In WA, a small number of children are placed with externally arranged foster carers who are also their relative and have been recorded in the foster care category. [c] SA can only provide the number of children in out-of-home care where the Department is making a financial contribution to the care of a child. [d] Tasmania is not able to adhere to the new AIHW definition of out-of-home care for 2007-08 to include children in care where a financial payment has been offered but has been declined by the carer. However, the number of carers declining a financial payment is likely to be very low. [e] In the NT, Indigenous children placed with family members have all been included in the 'Indigenous relative/kin' category.

Source: AIHW (unpublished), derived from *Children in Out-of-Home* Care*, Australia* data collection; table 4A.10.15.

As at 30 June 2008:

- the proportion of Indigenous children in out-of-home care who were placed with Indigenous or non-Indigenous relatives or kin or with another Indigenous carer or in Indigenous residential care varied across jurisdictions (figure 4.10.4).

Sexually transmitted infection diagnoses in children and child sexual assault victims

There is growing awareness of the prevalence of child sexual abuse in some Indigenous communities (ACSAT 2006; Coorey 2001; Dunne et al. 2006; Keel 2004; Lawrence 2006; Memmott et al. 2001; NT 2006; Robertson 2000; SNAICC 2004, 2005; Stanley 2003; Stanley et al. 2002; Stanley, Tomison and Pocock 2003). 'Little Children are Sacred', the final report of the Northern Territory Board of Inquiry into the Protection of Aboriginal Children from Sexual Abuse (2006), identified child sexual abuse as a significant issue for many of the remote NT Aboriginal communities consulted as part of the Inquiry.

A recent report (O'Brien 2008) has noted the increasing problem of Indigenous children engaging in problem sexual behaviour. The familial breakdown, poverty, educational difficulties, violence, prior victimisation, homelessness, isolation and child sexual abuse suffered by some Indigenous children provide the risk scenarios and pathways to both child sexual exploitation, and problem sexual behaviour in childhood. The fact that these precursors are both disproportionately evident and often normalised in Indigenous communities significantly increases the risk that Indigenous children will become involved in childhood problem sexual behaviour and/or sexual exploitation (O'Brien 2008).

Data on the rate of STIs in children is not a reliable measure of the rate of child sexual abuse. A greater rate of STIs in Indigenous children may be a result of the higher prevalence of STIs in the Indigenous adult population rather than a greater rate of abuse. However, as Abbott (2006) commented '…it's hard to see how sexually transmitted diseases in very young patients can be the result of anything other than abuse'.

New diagnoses of genital chlamydia, gonorrhoea and syphilis are notifiable conditions in all states and territories of Australia. However, data limitations mean that information on the number of diagnoses of chlamydia, gonorrhoea and syphilis by Indigenous status are only available for selected jurisdictions (see footnote for table 4.10.2).

Notifications are collated in the Australian National Notifiable Diseases Surveillance System (NNDSS), which records a unique record reference number, State or Territory identifier, disease code, date of onset, date of notification to the relevant health authority, sex, age, Indigenous status and postcode of residence.

Table 4.10.2 Number of diagnoses of chlamydia, gonorrhoea and syphilis in children by age group, 2003–07[a]

	Chlamydia[b]		*Gonorrhoea*[b]		*Syphilis*[b, c]		*Total STIs*	
	0–4	5–14	0–4	5–14	0–4	5–14	0–4	5–14
Indigenous	18	624	43	767	–	24	61	1415
Non-Indigenous[d]	61	455	7	103	1	9	69	567

[a] Data for children aged 0–4 may include children who acquired the infection through non-sexual contact (for example in-utero or at birth). [b] Only jurisdictions for whom greater than 50 per cent of diagnoses included information on Indigenous status are included in this table: chlamydia (Victoria, WA, SA, Tas and the NT); gonorrhoea (Victoria, Queensland, WA, SA and the NT); and, infectious syphilis (all jurisdictions except the ACT). [c] Data for infectious syphilis covers the years 2004–07 only. [d] Includes diagnoses in people whose Indigenous status was not reported. – Nil or rounded to zero.

Source: NNDSS published in NCHECR (2008).

For the period 2003–07:

- numbers of diagnoses of chlamydia, gonorrhoea and syphilis were higher for both Indigenous and non-Indigenous children aged 5 to 14 years than for children aged under four years
- the number of Indigenous children diagnosed with a STI was higher than the number of non-Indigenous children diagnosed, except for children aged under 4 years for diagnoses of chlamydia and syphilis. Given that Indigenous children comprise a small proportion of the total child population they are significantly over-represented in the numbers of children diagnosed with a STI.

Police administrative data on child sexual assault victims for NSW, Victoria, Queensland, WA and the NT are reported in attachment tables 4A.11.37–107. These data are not comparable across jurisdictions. See section 4.11 for more information on family and community violence.

4.11 Family and community violence

Box 4.11.1 **Key messages**

- Indigenous people were hospitalised as a result of spouse or partner violence at 33.9 times the rate of non-Indigenous people (table 4.11.1) Indigenous females and males were 35.1 and 21.4 times as likely to be hospitalised due to family violence related assaults as non-Indigenous females and males (table 4A.11.2).
- Indigenous females sought Supported Accommodation Assistance Program assistance in 2006-07 to escape family violence at the rate of 45.0 per 1000 population compared with 3.3 per 1000 population for non-Indigenous females (table 4A.11.32).
- Nationally, the Indigenous homicide death rate (5.9 per 100 000 population) was 7.4 times the non-Indigenous homicide death rate (0.8 per 100 000 population) between 2003–2007 (figure 4.11.2).

There is no nationally agreed definition of domestic violence or family violence. To many people, domestic violence implies violence by a partner, and may also be known as intimate partner violence, spousal violence, spousal abuse, wife abuse and personal violence or battering (AIHW 2006). Family violence is often regarded as a broader category, including violence by extended family or household members. The lack of a common definition means that accurately reporting and comparing data on family and community violence is difficult.

Definitions vary between jurisdictions, studies, organisations and cultures. The term 'family violence' is the preferred term to identify the experiences of Indigenous people, because it includes the broad range of marital and kin relationships in which violence may occur. Indigenous people may view family violence as occurring between members of their larger family network, including aunts, uncles, grandparents, cousins and others in the wider community, whereas non-Indigenous people may view family violence as violence within the immediate family only (HREOC 2008; Macdonald 2001).

Data on family and community violence in this section include:

- incidence and prevalence data (survey data)
- data on associated harm (deaths resulting from family and intimate partner violence and hospitalisations for family violence related assault)
- data on services for victims of violence (persons accessing the Supported Accommodation Assistance Program (SAAP) because of family violence)
- police data on victims of assault and other violence (including data on the relationship between victim and perpetrator).

These sources under-estimate the true extent of family and community violence as they only capture reported violence. Not all victims report violence or seek assistance.

There is a growing body of literature highlighting the extent of violence in Indigenous communities, particularly family violence (Clapham, Stevenson and Lo 2006; Gordon, Hallahan and Henry 2002; HREOC 2006; Memmott et al. 2001; Mouzos 2001). In the past few years, for example, several reports have been released — the *Little Children are Sacred* report (Anderson and Wild 2007), *Breaking the Silence: Creating the Future* (NSW ACSAT 2006), *Risk factors in Indigenous Violent Victimisation* (Bryant and Willis 2008) and the *Evaluation of the FaCSIA Family Violence Programs: Family Violence Regional Activities Program — Family Violence Partnership Program* (OEA 2007).

Family and community violence problems are complex. They are interrelated with other health issues, and socioeconomic and environmental conditions (Stanley 2005; Clapham, Stevenson and Lo 2006; Matthews 1997). Alcohol and substance use have also been identified as common contributing factors to violence in Indigenous communities (HREOC 2006; Gordon, Hallahan and Henry 2002; Memmott et al. 2001; Mouzos 2001; Weatherburn, Snowball and Hunter 2006). Sections 10.3 and 10.4 provide more information on the role of alcohol and drug and substance misuse in Indigenous homicides.

The presence of family violence is a strong predictor of child abuse (Goddard and Hiller 1992; Stanley and Goddard 2003; Taft, Hegarty and Feder 2006), and partner violence has a damaging effect on children's emotional, behavioural and cognitive development (ARACY 2008; Stanley and Goddard 2003; Taft, Hegarty and Feder 2006). Family violence is a reason for notification to State and Territory child protection authorities. In NSW and Tasmania, child protection legislation requires mandatory reporting of children affected by domestic violence. In all other states and territories, family violence is categorised as 'emotional abuse'. For more information on substantiated child abuse and neglect see section 4.10.

There is a lack of information about the extent of family and community violence across different geographic regions. A report on violence in rural and remote Australia acknowledged that, from the limited literature available, there are higher rates of family violence in rural and remote areas, particularly in Indigenous communities (NHMRC 2002). Mouzos (2001) found that, compared to non-Indigenous homicides, Indigenous homicides are more likely to occur in non-urban areas. However, this may be expected because there are proportionally more Indigenous than non-Indigenous people residing in non-urban areas.

Some initiatives that have been successful in reducing family and community violence are described in box 4.11.2. Programs that reduce alcohol misuse can help reduce violent behaviour in Indigenous communities — examples are included in section 10.3. Programs that reduce the involvement of Indigenous people in the criminal justice and corrections systems or that lower rates of reoffending can also contribute to reducing violent crime — for examples see sections 4.12, 10.5 and 10.6.

Prevalence of violence

Survey data provide the best estimates of the prevalence of violence, but available data are somewhat dated. A more detailed presentation of these data was included in the 2005 report. Data from the Australian Bureau of Statistics (ABS) 2002 National Aboriginal and Torres Strait Islander Social Survey found that:

- 18.3 per cent of Indigenous women experienced physical or threatened violence in the previous 12 months, compared with 7.0 per cent of non-Indigenous women (SCRGSP 2005)
- of the 24.3 per cent of Indigenous people aged 15 years or over who had been a victim of violence in the past 12 months, around one third were living in households with Indigenous children under five years of age (ABS 2004).

Box 4.11.2 **'Things that work' — reducing violence in Indigenous communities**

Rekindling Indigenous Family Relationships in Riverland (SA) is an early intervention project, assisting the Aboriginal community to resolve family violence and child abuse issues. A key component of the project is the delivery of the Family Wellbeing (FWB) Program. The FWB program focuses on understanding conflict, emotions and effective resolution, changing family violence patterns, self development and building healthy relationships. Since the program commenced in 2006, 64 Indigenous people have completed components of the program (most have completed the Certificate II and/or Certificate III in Family Wellbeing). Twelve Indigenous people have also completed a Certificate IV in Training and Assessment and are now qualified to run the program. Many of the participants have gained confidence and vocational skills that have helped them go on to employment and further education for the first time (SA Government unpublished).

The **Family and Community Healing Program (Adelaide, SA)** comprises inter-related group activities for Aboriginal women, men and youth built around community engagement. The focus of the program is to equip people with the skills for effective communication and conflict resolution. The program has been running for over 2 years and was formally evaluated in 2007-08 using participatory action research. Strengths of the program include evidence-based design, holistic approach, clinical focus, peer support, mentoring, and Indigenous cultural focus. Some of the findings from the evaluation were:

- clients reported increased self esteem, confidence and cultural connection. They also stated that the program equipped them with the skills and knowledge to move out of a life of violence and onto a journey of healing
- clients gained communication and conflict resolution skills through participation in the program, which enabled them to address the reasons for, and consequences of, family violence (Kowanko and Power 2008).

The **Kalparrin Spirited Men's Project (SA)** is a male perpetrator's program that aims to encourage positive parenting and educate Indigenous men about the detrimental effects of family violence. The program encourages Indigenous men to talk about family violence, and participate in anger management counselling, substance misuse education and cultural affirmation activities. Participants are referred to the program from the local Community Corrections Offices, the SA Parole Board, the Kalparrin Substance Rehabilitation facility as well as some participants being mandated by courts to attend. There were 15 initial participants in the program, with attendance at one-on-one and group counselling increasing to 27 men. The program has also been extended to 10 prisoners.

Associated harm data

Health records provide some information on instances of family violence that result in hospitalisation or death. These sources are likely to under-estimate the true extent of family and community violence because not all victims seek medical attention and not all hospitalisations resulting from family violence will be recorded as such.

Table 4.11.1 **Non-fatal hospitalisations for assault, by relationship of victim to perpetrator, NSW, Victoria, Queensland, WA, SA and public hospitals in the NT, per 1000 people, age standardised, 2006-07**[a, b]

	Indigenous	*Non-Indigenous*[c]	*Indigenous to Non-Indigenous ratio*[d]
Family violence assaults			
Spouse/domestic partner	3.3	0.1	33.9
Parent	0.3	–	12.0
Other family member	1.3	–	31.8
Total family violence assaults	4.8	0.2	30.3
Other assaults[e]	8.3	0.9	9.4
Total assaults[f]	13.1	1.0	12.5

[a] Non-fatal refers to records where the hospitalisation did not end in death. Separations were based on ICD-10-AM codes for assault X85–Y09. [b] Rate per 1000 population was directly age standardised using the 2001 Australian population. [c] Non-Indigenous includes hospitalisations where Indigenous status was unknown. [d] The ratio is equal to the hospitalisation rate for Indigenous people divided by the hospitalisation rate for non-Indigenous people. [e] 'Other assaults' includes assault by a carer, acquaintance or friend, official authorities, other specified person, person unknown to the victim, multiple persons unknown to the victim or an unspecified person. [f] More than one external cause can be reported for each hospitalisation. – Nil or rounded to zero.

Source: AIHW National Hospital Morbidity Database (unpublished); table 4A.11.2.

In 2006-07:

- Indigenous people were hospitalised as a result of spouse or partner violence at 33.9 times the rate of non-Indigenous people (table 4.11.1). Indigenous females and males were 35.1 and 21.4 times as likely to be hospitalised due to family violence related assaults as non-Indigenous females and males (table 4A.11.2).
- hospitalisation rates for family violence related assault were highest among Indigenous females aged 25–34 years (15.9 per 1000) (table 4A.11.1)
- for Indigenous and non-Indigenous females, approximately half of the hospitalisations for assault were related to family violence (table 4A.11.2).

More hospital data for total assaults by sex and age groups, for 2004-05 to 2006-07 in NSW, Victoria, Queensland, WA, SA and public hospitals in the NT can be found in tables 4A.11.3–4A.11.5.

- From 2004-05 to 2006-07 there was no change in hospitalisations rates for assault for Indigenous males, Indigenous females, non-Indigenous males, and non-Indigenous females.

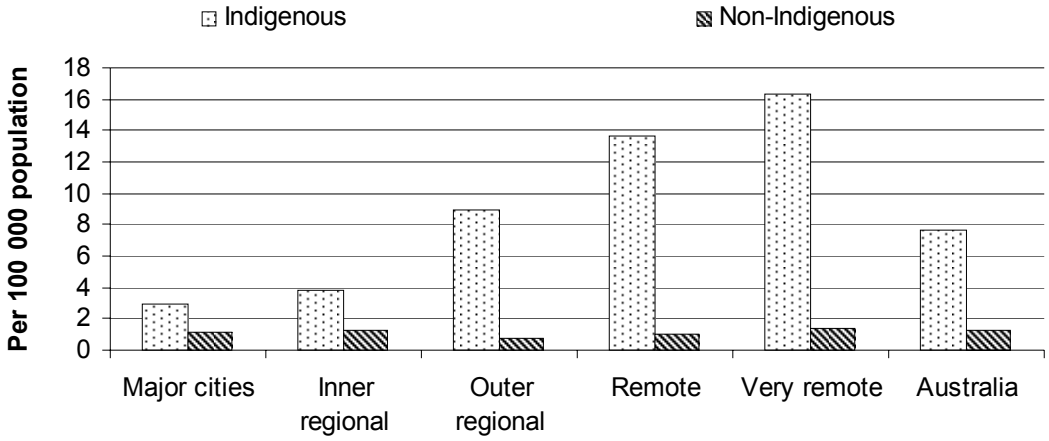
Most hospitalisation data used in this section are for six jurisdictions: NSW, Victoria, Queensland, WA, SA, and the NT. These data have sufficient levels of Indigenous identification for 2004-05 to 2006-07. Longer time series data for Queensland, WA, SA and the NT from 2001-02 to 2006-07 are included in attachment tables 4A.11.6–11. From 2001-02 to 2006-07, there was no clear trend in hospitalisation rates for assault for Indigenous and non-Indigenous people. Hospitalisation data for these four states and territories should not be assumed to represent the hospitalisation experience in the other jurisdictions.

Indigenous people are much more likely to be both victims and perpetrators of homicide than other Australians (AIC 1993; Mouzos 2001). The next part of this section reports data on homicides from the Australian Institute of Criminology (AIC) and the ABS. Australian Institute of Criminology homicide data are based on police records whereas ABS homicide deaths data are based on death registration (see appendix 4). Despite the differences in collections, the AIC and ABS data allow for some detailed examination of the circumstances and characteristics of homicide occurring in the Indigenous and non-Indigenous populations.

Figure 4.11.1 presents homicide rates by remoteness. These data should be interpreted with caution. Data for five years have been combined for this analysis to reduce the effect of fluctuations from year to year in the relatively small annual number of homicides. Homicides have been assigned to remoteness areas by the AIC using an ABS concordance of postcodes to remoteness areas. However, it is not always possible to assign homicides precisely to remoteness areas, because postcode and remoteness area boundaries may not coincide and postcodes, particularly in regional and remote areas, may cover more than one remoteness area. Population denominators derived for this analysis may also have a margin of error.[9] It is not known whether the likelihood of Indigenous people being identified as Indigenous in the AIC homicide monitoring data varies by remoteness area. In some other data collections, the likelihood of Indigenous people being identified as Indigenous increases with remoteness.

[9] Population denominators for remoteness areas have been derived by applying the proportions of Indigenous people living in each remoteness area in 2001 to experimental estimates and projections (low series) of the Indigenous population published by the ABS. Non-Indigenous denominators have been derived by applying proportions of non-Indigenous people in each remoteness area in 2001 to non-Indigenous population estimates derived by subtracting ABS Indigenous population projections from the ABS total Estimated Resident Population for each year.

Figure 4.11.1 **Homicide rate, by remoteness, 2002-03 to 2006-07**[a, b, c]



[a] Indigenous homicides are where both victims and offenders of homicide are Aboriginal and/or Torres Strait Islanders. Non-Indigenous homicides are where neither the victim nor the offender is Indigenous. [b] Excludes cases where Indigenous status of victim is unknown or remoteness area of homicide incident is unknown. [c] Population denominators for remoteness areas have been derived by applying the proportions of Indigenous people living in each remoteness area in 2001 to experimental estimates and projections (low series) of the Indigenous population published by the ABS. Non-Indigenous denominators have been derived by applying proportions of non-Indigenous people in each remoteness area in 2001 to non-Indigenous population estimates derived by subtracting ABS Indigenous population projections from the ABS total Estimated Resident Population for each year. Therefore, data should be used with caution.

Source: Australian Institute of Criminology, National Homicide Monitoring Program, 2006-2007 [computer file]; ABS 2004, *Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2009*, Cat. no. 3238.0; table 4A.11.15.

- Data on homicide by remoteness show that, from 2002-03 to 2006-07, the rate of Indigenous homicides increased with remoteness, and was higher than the non-Indigenous homicide rate in all remoteness areas (figure 4.11.1).
- In 2006-07, a higher proportion of Indigenous homicides than non-Indigenous homicides took place within families (77.5 per cent compared with 42.0 per cent) (table 4A.11.19).
- Based on AIC data, in 2006-07, there were 247 homicide incidents where Indigenous status could be determined, of which 31 (12.6 per cent) were Indigenous homicides,[10] 200 (81.0 per cent) were non-Indigenous homicides and the remaining 16 (6.5 per cent) were inter-racial homicides (table 4A.11.19).

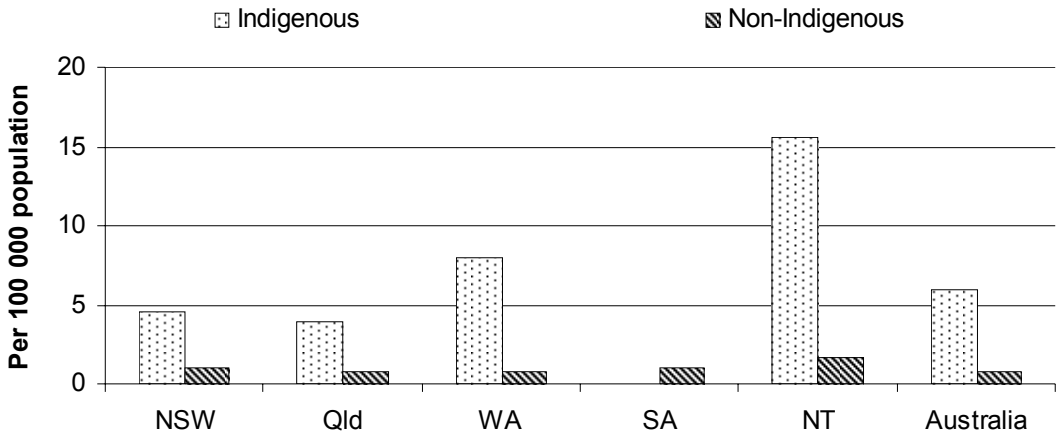
[10] Indigenous homicides refers to homicides where both victims and offenders of homicide are either Aboriginal and/or Torres Strait Islanders; non-Indigenous homicides refers to homicides where both victims and offenders are not Indigenous but are Caucasian, Asian and Maori/Pacific islanders; and inter-racial homicides where either the victim or the offender, but not both, is Indigenous (AIC unpublished 2003).

- Nationally, from 2002-2003 to 2006-07, the Indigenous homicide rate (7.7 per 100 000) was much higher than the non-Indigenous homicide rate (1.3 per 100 000) (figure 4.11.1).
- Most Indigenous victims and offenders (eight out of ten cases in 2006-07 compared to four out of ten for non-Indigenous homicides) were unemployed at the time of the homicide (table 4A.11.19). However, this is not unexpected given the higher unemployment rate for Indigenous people (see section 4.6).
- In 2006-07, domestic altercation was the most common motive identified in Indigenous homicides (45.2 per cent). Domestic altercation was a much more common motive for Indigenous homicides than for non-Indigenous homicides (22.0 per cent). The most common motive in non-Indigenous homicides was 'other arguments' (37.0 per cent) (table 4A.11.19).[11]

Further information on the circumstances and characteristics of homicide occurring in the Indigenous and non-Indigenous populations is included in tables 4A.11.12–22.

[11] Other arguments refers to argument over money/drugs, revenge, and racial/sexual vilification (hate crimes), sexual gratification, envy, and other motives.

Figure 4.11.2 **Homicide death rates, age standardised, by jurisdiction, 2003–2007**[a, b, c, d, e]



[a] Deaths from homicide are defined as causes of death with ICD codes X85–Y09 and Y87.1. [b] Data on deaths of Aboriginal and Torres Strait Islander Australians are affected by differing levels of Indigenous identification across states and territories. Care should be exercised in analysing these data, particularly in making comparisons across states and territories and between Indigenous and non-Indigenous data. [c] Calculations of rates for the Indigenous population are based on ABS *Experimental Projections, Aboriginal and Torres Strait Islander Australians* (low series, 2001 base). There are no comparable population data for the non-Indigenous population. Calculations of rates for the non-Indigenous population are based on data derived by subtracting Indigenous population projections from total population estimates and should be used with care. [d] Non-Indigenous includes deaths with a 'not stated' Indigenous status. [e] Australia includes NSW, Queensland, WA, SA and the NT combined.

Source: ABS *Causes of Death, Australia,* Cat. no. 3303.0 (unpublished); table 4A.11.23.

- After adjusting for age differences, for those jurisdictions for which data were available, there was a higher rate of homicide in the Indigenous population than the non-Indigenous population.
- From 2003–2007, for those jurisdictions for which data are available, the Indigenous homicide rate was 7.4 times as high as the non-Indigenous homicide rate (the Indigenous homicide death rate was 5.9 per 100 000 population and the non-Indigenous death rate was 0.8 per 100 000) (table 4A.11.23).
- Homicide death rates for Indigenous people were particularly high for people in the age groups 25–34 and 35–44 years (table 4A.11.24).

Non-age standardised homicide death rates for males and females are included in table 4A.11.25.

Victim support data

The Supported Accommodation Assistance Program (SAAP) National Data Collection provides information on the number of people seeking assistance from

agencies funded under the SAAP. Reasons for seeking accommodation support include financial difficulties, substance abuse, homelessness and family violence.

Supported Accommodation Assistance Program data under-estimate the true extent of family violence occurring within the community, because not all victims of violence access these services and victims may be turned away because the support required cannot be provided (AIHW 2006). In August 2006 and May 2007 there were an average of 90 Indigenous people per day with valid unmet requests for assistance (table 4A.11.26).

In 2006-07:

- escaping family violence was the main reason Indigenous and non-Indigenous people sought SAAP assistance (28.8 per cent and 21.9 per cent, respectively) (table 4A.11.30)
- the rate of Indigenous females escaping family violence was 45.0 per 1000 population compared with 3.3 per 1000 population for non-Indigenous females (table 4A.11.32)
- for both Indigenous and non-Indigenous people, domestic violence affects a large proportion of children in SAAP. Of the 42 500 SAAP clients who sought assistance to escape family violence, over half of both Indigenous and non-Indigenous clients had accompanying children (tables 4A.11.28 and 4A.11.30).
- Indigenous children accompanying SAAP clients escaping family violence attended a SAAP agency at a rate of 569 per 10 000 Indigenous children, while for non-Indigenous children it was 66 per 10 000 (table 4A.11.31).

More information on the reasons people sought SAAP support in 2005-06 and 2006-07, by Indigenous status and jurisdiction can be found in tables 4A.11.27–30 and tables 4A.11.33–36.

State and Territory police records

There is no national data collection on Indigenous crime victimisation reported to police. The next part of this section is based on available data from some jurisdictional police collections. Data on crime victimisation for selected offences were available for NSW, Victoria and Queensland. For Victoria and Queensland the offence category 'assault' includes 'domestic violence related assault' (that is, domestic violence related assault is a subset of assault). Data from other jurisdictions are not published in this report, either because there is no process to

identify Indigenous people in data collections or, where Indigenous status is collected, data are not of sufficient coverage or quality to publish.

However, there are several limitations to using police records to measure family and community violence. For example, data do not represent all victims of crime, just those that come to the attention of, and whose details are recorded by, police. In addition, data presented generally reflect victims of violent criminal incidents where the violent incident was reported to, or otherwise detected by, police. Finally, the tendency to report criminal victimisation to police may differ between Indigenous and non-Indigenous people (and there is no way of estimating the level of under-reporting).

There is no national collection for domestic and family violence statistics for all people, including Indigenous people. Some jurisdictions have data disaggregated by Indigenous status, but there are no standard definitions used to identify cases of domestic and family violence. The police data are not comparable between states and territories and are subject to the caveats included in the attachment tables.

In NSW, in 2007:

- Indigenous people were five and a half times as likely to be a victim of domestic violence as non-Indigenous people (table 4A.11.37)
- Indigenous women were 6.2 times as likely to be a victim of domestic violence as non-Indigenous women (table 4A.11.43)
- for Indigenous people, the spouse was the offender in 38.7 per cent of domestic violence related assault offences (compared with 37.2 per cent for non-Indigenous) (table 4A.11.49)
- for both Indigenous and non-Indigenous people, offences against the person are most likely to occur in residential dwellings (61.4 per cent of offences against Indigenous people occurred in residential dwellings compared with 45.6 per cent for non-Indigenous people) (table 4A.11.52).

More information (from NSW Bureau of Crime Statistics and Research) on murder, assault and sexual assault against victims can be found in tables 4A.11.37–42. More information on female victims is in tables 4A.11.43–48. Information on relationships of offenders to victims is in tables 4A.11.49–54.

In Victoria, in 2007-08:

- Indigenous people were 4.5 times as likely to be a victim of domestic violence related assault as non-Indigenous people (table 4A.11.55)
- for Indigenous females, the rate of domestic violence related assault was five times as high as the rate for non-Indigenous females (table 4A.11.61)

- Indigenous juveniles (under 18 years of age) were 2.3 times as likely to be a victim of domestic violence as non-Indigenous juveniles (table 4A.11.67)
- the offender was a family member in 64.8 per cent of the domestic violence related assault cases for both Indigenous and non-Indigenous people (table 4A.11.73).
- for Indigenous people most offences against the person occurred in a dwelling (59.2 per cent) (table 4A.11.77).

More information (from Victoria Police) on murder, assault and sexual assault against victims can be found in tables 4A.11.55–80.

In Queensland, in 2007-08:

- Indigenous people were 17.8 times as likely as non-Indigenous people to be a victim of domestic violence related assault (table 4A.11.81)
- The rate of domestic violence for Indigenous females was 21.2 times as high as the rate for non-Indigenous females (table 4A.11.85)
- in 69 per cent of Indigenous domestic violence related assaults, the offender was a family member. For non-Indigenous people, 57 per cent of domestic violence related assaults were committed by a family member (table 4A.11.89)
- for Indigenous people, offences against the person most commonly occurred in a dwelling (60 per cent), while for non-Indigenous people most offences against the person occurred in a non-residential place (47 per cent) (table 4A.11.93).

Tables 4A.11.81–88 contain data on victims of selected crimes in Queensland. Tables 4A.11.89–96 contain data on Indigenous victim-offender relationships and place of offence for victims of offences against the person.

The 2003 and 2005 reports included data on victimisation rates for WA (tables 4A.11.97–101). WA police record the age, Indigenous status and sex of victims of offences against the person. WA was unable to provide data for the 2007 report because the Indigenous status of the victim was not recorded for a large proportion of offences against the person. Victim offender relationship data were also unavailable because in most cases of offences against the person the relationship was not stated.

SA police started recording the Indigenous status of victims in mid-2007 and should be available for future publication.

Indigenous people in the ACT, were 2.7 times as likely to be victims of assault as non-Indigenous people (1180.4 victims per 100 000 Indigenous people compared with 438.9 per 100 000 non-Indigenous people) (ABS 2008).

4.12 Imprisonment and juvenile detention rates

Box 4.12.1 **Key messages**

- After adjusting for age differences, Indigenous people were 13.3 times as likely as non-Indigenous people to be imprisoned in 2008 (table 4A.12.3).
- The imprisonment rate increased by 45.5 per cent for Indigenous women and by 26.6 per cent for Indigenous men between 2000 and 2008 (table 4A.12.7).
- Indigenous juveniles were 28 times as likely to be detained as non-Indigenous juveniles at 30 June 2007. The Indigenous juvenile detention rate increased by 26.7 per cent between 2001 and 2007 (figure 4.12.5).

This indicator provides an insight into the level of involvement of Indigenous people in the criminal justice system as offenders. Australia's Indigenous people are highly overrepresented in the criminal justice system, with the proportion of Indigenous people in prisons far exceeding their representation in the community (Willis 2008, Woodward 2003). The NSW Bureau of Crime Statistics and Research found that a higher rate of Indigenous offenders were sent to prison than non-Indigenous offenders because of a higher rate of conviction for violent crime and higher rate of re-offending (Snowball and Weatherburn 2006).

The WA Department of Justice (2002a) highlighted that the early involvement of Aboriginal juveniles in the criminal justice system was likely to place them at significantly greater risk of imprisonment as adults. Lynch, Buckman and Krenske (2003) reported that Indigenous juvenile offenders were more likely than non-Indigenous juvenile offenders to progress to the adult criminal justice system and end up in prison. The study found that 86 per cent of Indigenous juvenile offenders entered the adult correction system, with 65 per cent of them serving at least one prison term. For non-Indigenous juvenile offenders, 75 per cent entered the adult correction system with 41 per cent serving at least one prison term.

Putt, Payne and Milner (2005) found that for many Indigenous male offenders, substance abuse, particularly alcohol intoxication, was associated with criminal behaviour. Further, Weatherburn, Snowball and Hunter (2008) reported that alcohol abuse is the strongest correlate with Indigenous representation in the criminal justice system. The 2008 study also suggest a correlation between Indigenous contact with the criminal justice system and factors including economic stress, welfare dependence and unemployment. Other research has shown that alcohol abuse is a strong factor leading to violent crime; and dependence on illicit drugs was found to increase involvement in crime, due in part to the costs of funding the drug habit (Legislative Council, Standing Committee on Social Issues, 2008).

Adverse socioeconomic conditions in Indigenous communities (such as poverty, unemployment, low levels of educational attainment and lack of access to social services) are associated with high crime rates. The 1991 Royal Commission into Aboriginal Deaths in Custody (RCIADIC) identified links between the formal education system, child welfare practices, juvenile justice, health, and employment opportunities as contributors to the disproportionate representation of Aboriginal people in police and custodial facilities (RCIADIC 1991).

The Royal Commission stated that changes to the operation of the criminal justice system alone will not have a significant impact on the number of Indigenous people entering custody (RCIADIC 1991). Nevertheless, there has been some success in reducing the offending rates of Indigenous people by implementing culturally appropriate justice practices. Box 4.12.2 describes the success of alternative sentencing processes for Indigenous people in SA, Victoria, Queensland and Tasmania.

Box 4.12.2 **'Things that work'— Culturally appropriate justice practices**

Aboriginal sentencing operates within the SA magistrates courts in Port Adelaide (Nunga court), Port Augusta, Murray Bridge, Ceduna and Berri. The aim of these courts is to make the justice system more culturally appropriate to Indigenous people. The sentencing alternative is available to Indigenous defendants who plead guilty and encourages defendants to address offence related problems, such as drug and alcohol dependency.

The courts aim to reduce arrests for non-appearance by defendants on bail and to break the cycle of Indigenous imprisonment for unpaid fines, by applying alternative penalties including community services and allowing the gradual payment of fines. During 2007-08, 212 defendants appeared in these culturally appropriate courts in SA (SA Government, unpublished; Office of Crime Statistics and Research 2004).

In 2007-08, **Aboriginal conferencing** was introduced in the Magistrates Court, supported by the Youth Court, in the Port Lincoln area, SA. After pleading guilty before sentencing, cultural aspects of the incident are considered with involvement of elders in a restorative conference. Conferencing involves the defendant, members of the Aboriginal community (elders), SA Police and victims, encouraging contrition and reparation, provide a restorative opportunity for victims. After the conference, the coordinator writes a report for the court that the magistrate considers when sentencing. The initiative has been strongly supported by the local community and the magistracy. An independent review found that the process provided an opportunity to address issues underlying offending by linking sentencing to rehabilitative services, and gave more relevant information to magistrates, leading to more effective sentencing. Between September 2007 and June 2008 nine matters referred and seven resulted in a conference. Between July 2008 and March 2009, there were 16 conferences (SA Government, unpublished).

The **Koori Court** in Victoria, was first established in Shepparton, and won an Australian Crime and Violence Prevention Award in 2005. The specialised court within the Magistrates Court created an informal atmosphere allowing greater Koori community participation in sentencing and support programs. A review of the Shepparton and Broadmeadows Koori Courts found that recidivism rates in these areas dropped by 12.5 per cent and 15 per cent, respectively, over a two year period.

Koori Courts have become a permanent part of the Victorian justice system. Courts now sit in Shepparton, Broadmeadows, Mildura, the LaTrobe Valley, Swan Hill, Bairnsdale, and a circuit model operates in Warrnambool and services Portland and Hamilton. The success of the Koori Court in the adult jurisdiction of the Magistrates Court has led to the opening of two Children's Koori Courts based in Melbourne and Mildura. In 2008 the Koori Court opened its first Court in the County Court, at the Latrobe Valley Court House (Victorian Government, unpublished).

(Continued next page)

Box 4.12.2 (continued)

The **Murri Court** is a Queensland Magistrates Court, or Children's Court constituted by a magistrate, which sentences Indigenous offenders pleading guilty to an offence. The Murri Court operates in 14 courts across Queensland, including evaluated Murri Courts in Brisbane, Rockhampton, Townsville, Mount Isa and Caboolture, and non-evaluated Murri Courts in Coen, Cherbourg, Caloundra, Cleveland, Ipswich, Cairns, St George, Mackay and Richlands. The Murri Court takes into account cultural factors by providing a forum where Aboriginal and Torres Strait Islander elders and respected persons have a cultural input into the sentencing process and provide insight into the impacts of offending on the local community. The legal processes of the Murri Court are more informal, less intimidating and where possible, sentences have a rehabilitative focus.

A review of the Murri Court (Parker and Pathé 2006) confirmed that the involvement of elders and respected persons assisted the offenders in developing trust in the court. Since January 2007 to December 2008, 1940 referrals have been made to Murri Courts in the five evaluated courts; this is inclusive of both the adult and children's court jurisdictions. Of the 1940 referrals, 1538 have received a final sentence, 74 have absconded subject to warrant, 221 have been remitted back to arrest court, 3 have received post sentence supervision, 3 have died and the remainder are awaiting sentence (these figures are for the five evaluated courts only) (Parker and Pathé 2006 and Department of Justice and Attorney-General, Queensland Government, unpublished).

The **Meenah Mienne** project in Tasmania brings together at-risk Aboriginal young people and Aboriginal artists to prevent crime and provide care for young people in detention. The project achieves its aims through mentoring and supported arts pathways to education and employment. Activities have included: setting up a community arts centre in Launceston; accepting referrals; facilitating matches between young people and mentor-artists and conducting arts skills workshops.

Outcomes include: improvements in the emotional health, wellbeing and self-esteem of Aboriginal young people; and positive perceptions of cultural identity and networks of kinship and community belonging (Tasmanian Government, unpublished).

The information presented in this section on imprisonment and juvenile detention takes account of only one aspect of Indigenous contact with the criminal justice system. By their nature, the offences which result in imprisonment or juvenile detention tend to be more serious. The data do not address:

- arrests that do not proceed to court (for example, as a result of diversion or restitution) (see section 10.5 'Juvenile diversions')
- convictions that lead to outcomes that are not administered by custodial facilities (for example, community service orders and fines)
- police custody (for example, for public drunkenness).

The data on adult Indigenous imprisonment are from the National Prisoner Census, the results of which are published by the ABS in *Prisoners in Australia* (ABS 2008). The census is a count of all prisoners who are held in adult prisons in Australia, as at midnight on 30 June of each year. The Prisoner Census provides a snapshot of the number of people in prison, and is not representative of the flow of prisoners. People held in juvenile institutions, psychiatric facilities or immigration custody are not included.

People under 18 years are treated as juveniles in most Australian courts and are not held in custody in adult prisons, other than in exceptional circumstances (in Queensland 'adult' refers to people aged 17 years and over).

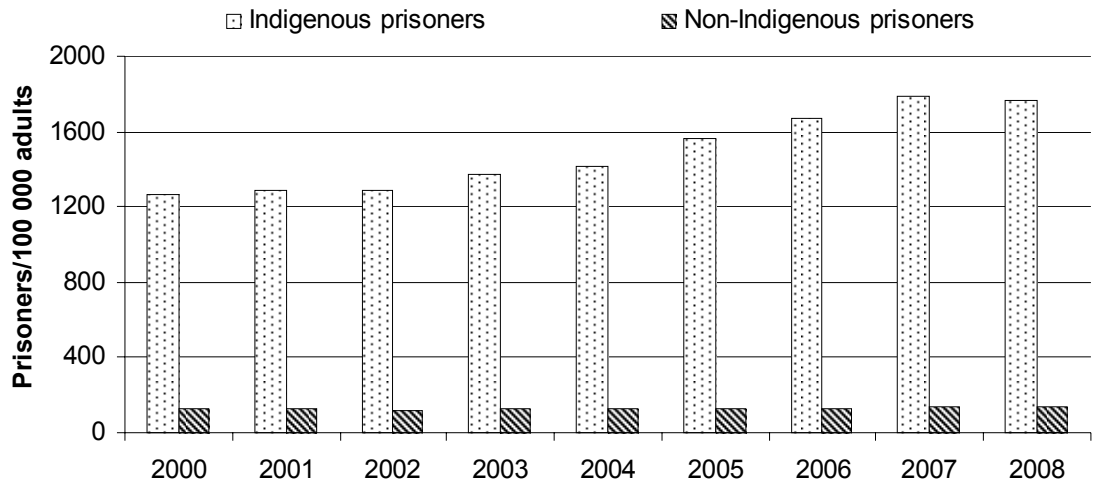
For juvenile detention, the data are sourced from the Australian Institute of Criminology (AIC) publication *Statistics on Juvenile Detention in Australia: 1981–2007* (Taylor 2009). These data contain information on the number of young people in the custody of each jurisdiction's juvenile justice agency on the last day of each quarter. Only those juveniles detained on each census night are counted, and as such, the count is not necessarily representative of the actual daily average of juvenile detainees in each State and Territory.

While detailed national data are currently available on the number of young people held in juvenile detention centres at the end of each quarter, these data illustrate only one aspect of the juvenile justice system. The vast majority of juveniles in the care of juvenile justice agencies are not placed into detention; rather, they are placed on community service orders or other types of order (Charlton and McCall 2004). In February 2006, the Australian Institute of Health and Welfare (AIHW), in collaboration with the Australasian Juvenile Justice Administrators, released their first report on juvenile justice in Australia for 2000-01 to 2003-04 and has since released three further reports in 2007. These reports publish nationally consistent data on juvenile justice supervision.

Imprisonment

Age standardised imprisonment rates for Indigenous and non-Indigenous people are presented in figure 4.12.1. Age standardisation adjusts for the younger age profile of the Indigenous population compared to the non-Indigenous population (ABS 2004a) — for both populations, younger adults are much more likely to be in prison than older people.

Figure 4.12.1 **Age standardised imprisonment rates per 100 000 adult population, by year, Australia[a, b]**

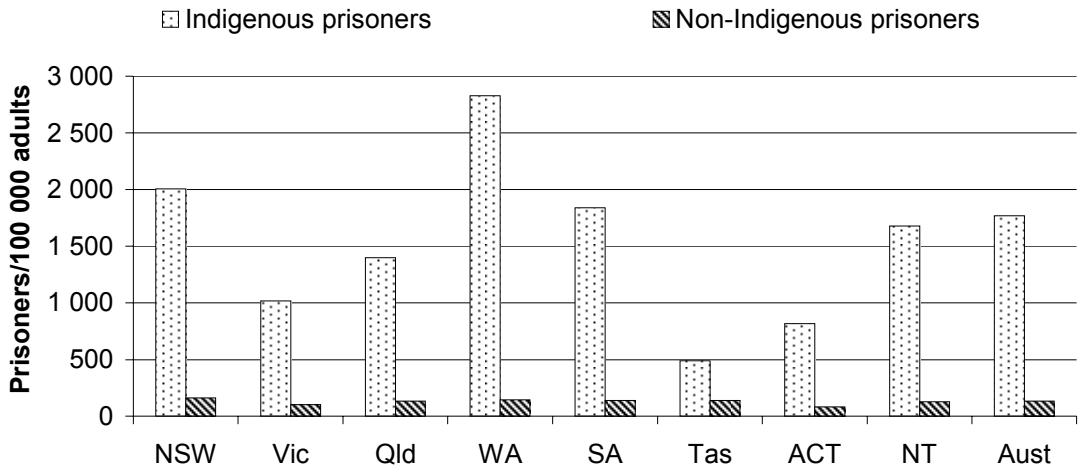


a Indigenous imprisonment rates are calculated using low series population projections (ABS Cat. no. 3238.0).
b Rates are based on prisoner census and population data at 30 June each year.

Source: ABS (2008); table 4A.12.4.

- Nationally in 2008, Indigenous people were 13.3 times more likely than non-Indigenous people to be imprisoned, with an age standardised imprisonment rate of 1769.4 prisoners per 100 000 adult Indigenous population compared with 133.3 per 100 000 for non-Indigenous prisoners (figure 4.12.1). This compares to national data from 2000 where Indigenous people were 9.9 times more likely than non-Indigenous people to be imprisoned.
- The number of Indigenous prisoners has increased over the period 30 June 2000 to 30 June 2008. There were 6 706 Indigenous prisoners in Australia at 30 June 2008, increasing over the period from 4 095 Indigenous prisoners counted at 30 June 2000 (table 4A.12.1).

Figure 4.12.2 **Age standardised imprisonment rates per 100 000 adult population, 30 June 2008[a, b]**

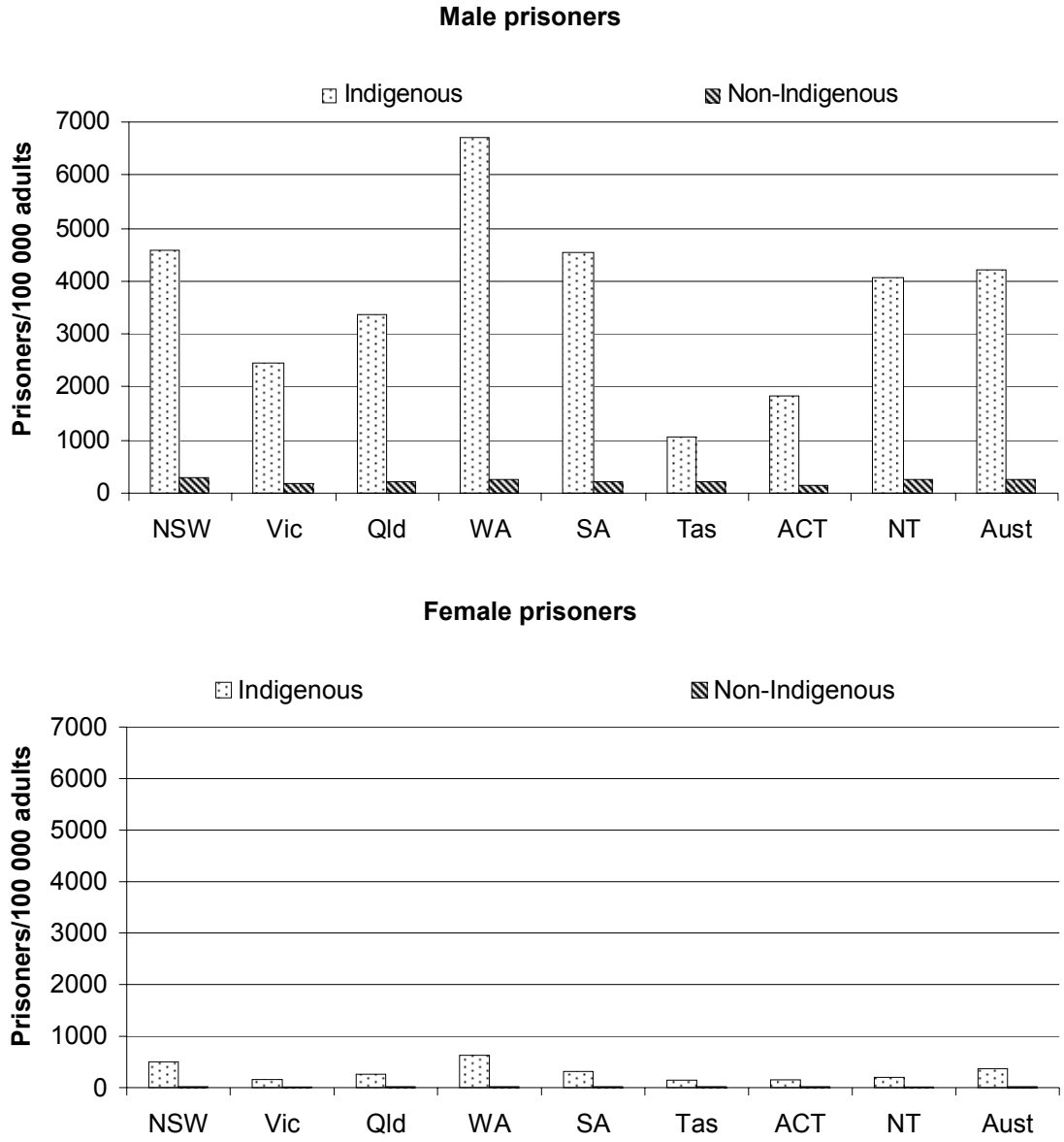


a Indigenous imprisonment rates are calculated using low series population projections (ABS Cat. no. 3238.0).
b Rates are based on prisoner census and population data at 30 June each year.

Source: ABS (2008); table 4A.12.4.

- At 30 June 2008 the age standardised imprisonment rate was higher for Indigenous people than non-Indigenous people in all jurisdictions across Australia.
- The difference between Indigenous and non-Indigenous age standardised imprisonment rates varied across jurisdictions in 2008, with WA recording the highest ratio of Indigenous to non-Indigenous at 19.8, and Tasmania reporting the lowest rate ratio of 3.5 (figure 4.12.2).

Figure 4.12.3 **Crude imprisonment rates, by gender, 30 June 2008**[a, b, c]



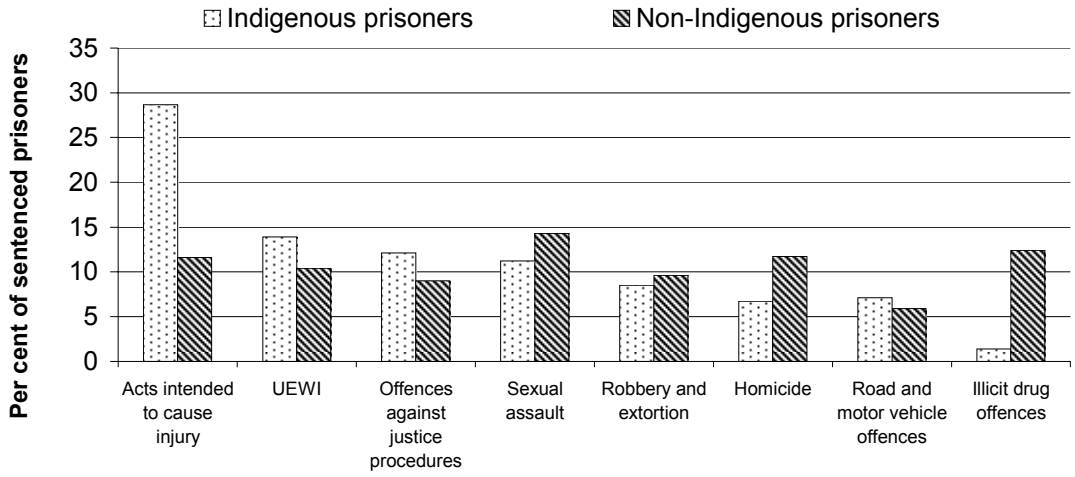
[a] Indigenous imprisonment rates are calculated using the low series population projections for June 30 2006 (ABS Cat. no. 3238.0) and are not age standardised. [b] Data for NSW exclude ACT prisoners held in NSW prisons. [c] Data for the ACT includes ACT prisoners held in the ACT as well as ACT prisoners held in NSW.

Source: ABS (unpublished); table 4A.12.7.

- Imprisonment rates for Indigenous and non-Indigenous males are considerably greater than imprisonment rates for Indigenous and non-Indigenous females across all states and territories (figure 4.12.3).
- Nationally, on 30 June 2008, Indigenous males were 17.2 times more likely than non-Indigenous males to be in prison, and Indigenous females were 21.7 times more likely than non-Indigenous females to be in prison (figure 4.12.3).

- Female prisoners comprise a small but growing proportion of the Australian prison population (table 4A.12.6) and have some specific needs not shared by most male prisoners, such as those associated with being a carer for young children. Because there are fewer prisons for women, Indigenous females are often detained in centres far from their children and communities and may also face communication difficulties (ABS 2004b). In a study of women prisoners in WA, the WA Department of Justice (2002b) found that 14 per cent of Indigenous women spoke an Aboriginal dialect as their first language.
- The imprisonment rate for Indigenous females increased by 45.5 per cent between 2000 and 2008. The imprisonment rate for Indigenous males increased by 26.6 per cent over the same period (table 4A.12.7).

Figure 4.12.4 **Sentenced prisoners by most serious offence, 30 June 2008[a, b]**



[a]UEWI = 'Unlawful entry with intent'. [b] Offences against justice procedures, includes offences against government security, government operations, for example, non-payment of fines.

Source: ABS (2008); table 4A.12.9.

- Data on sentenced prisoners by most serious offence provide a picture of people in prison at 30 June 2008. Prisoners serving long-term sentences for serious offences are over-represented in annual prisoner census data. An examination of the flow of offenders in and out of prison during the year would consist primarily of people serving short sentences for lesser offences.
- Of the 5152 Indigenous sentenced prisoners used to calculate the percentages presented in figure 4.12.4, 28.7 per cent had been sentenced with 'acts intended to cause injury' as their most serious offence, 2.5 times the proportion of non-Indigenous prisoners sentenced with the same offence.

- In contrast, only 1.4 per cent of Indigenous prisoners had been sentenced for 'illicit drug offences' as their most serious offence, a considerably smaller proportion than in the non-Indigenous prisoner population (12.4 per cent) (figure 4.12.4).
- At 30 June 2008, 12.1 per cent of Indigenous prisoners had been sentenced with 'offences against justice procedures, government security and government operations as their most series offence (figure 4.12.4).
- For Indigenous and non-Indigenous prisoners, only 1.0 per cent and 1.3 per cent respectively had been sentenced for public order offences (table 4A.12.9).

Supporting tables 4A.12.8 and 4A.12.9 show the number and proportion of sentenced prisoners by most serious offence and expected time to serve (mean and median months) at 30 June 2007 and 30 June 2008, respectively. Nationally, Indigenous prisoners were expected to serve shorter sentences than the overall prisoner population in most of the offence categories presented in figure 4.12.4, but were serving longer sentences for sexual assault. According to the ABS (2008), unsentenced Indigenous prisoners spent less time in remand for the majority of the offence categories listed in table 4A.12.9 than non-Indigenous prisoners in 2008 (in mean number of months).

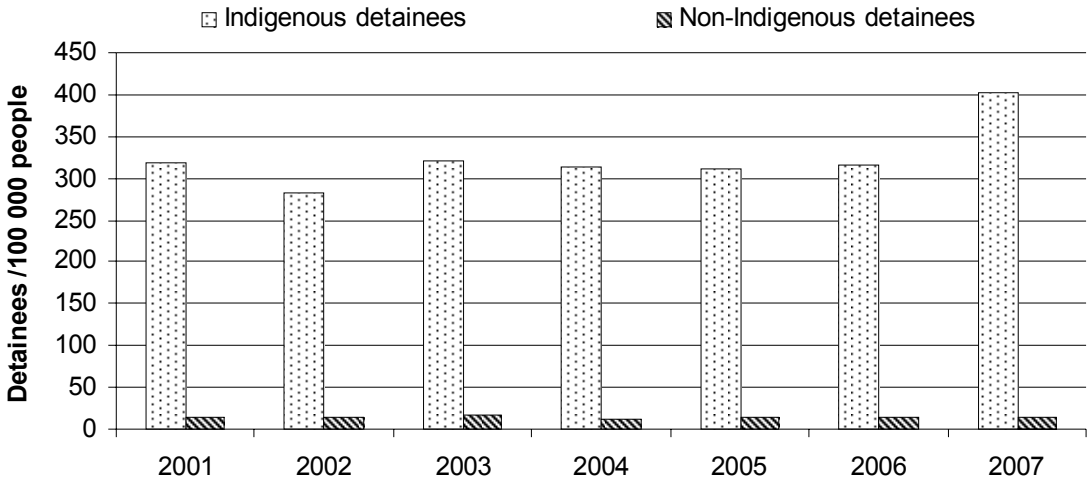
The number of prisoners and rate of imprisonment, by age group, are shown in tables 4A.12.10 (at 30 June 2007) and 4A.12.11 (at 30 June 2008). The mean and median age of prisoners at 30 June 2007 and 30 June 2008 are shown in tables 4A.12.12 and 4A.12.13, respectively. In 2008, the mean (average) age of Indigenous prisoners was 31.6 years, 4.7 years younger than the average age of non-Indigenous prisoners (36.3 years) (table 4A.12.13).

Data by jurisdiction on the proportion of prisoners on remand[12] are contained in tables 4A.12.14 (at 30 June 2007) and 4A.12.15 (at 30 June 2008). Nationally in 2008, the proportion of unsentenced Indigenous prisoners (23.2 per cent) was similar to the proportion of unsentenced non-Indigenous prisoners (22.3 per cent) (table 4A.12.15). From 2007 to 2008, the proportions of unsentenced Indigenous and non-Indigenous prisoners increased slightly on a national basis (tables 4A.12.14 and 4A.12.15).

12 According to the ABS (2006), remand prisoners are those persons who have been placed in custody while awaiting the outcome of their court hearing. They may be unconvicted (remanded in custody for trial), convicted but awaiting sentence or awaiting deportation.

Juvenile detention

Figure 4.12.5 **Juvenile detention rates, people aged 10–17 years, by year[a, b]**



[a] All data are taken from the census count at 30 June of the relevant year. [b] Indigenous rates were calculated using high series population data (ABS Cat. no. 3238.0). Any variation in derived rates may be due to the assumptions and limitations of the base population data.

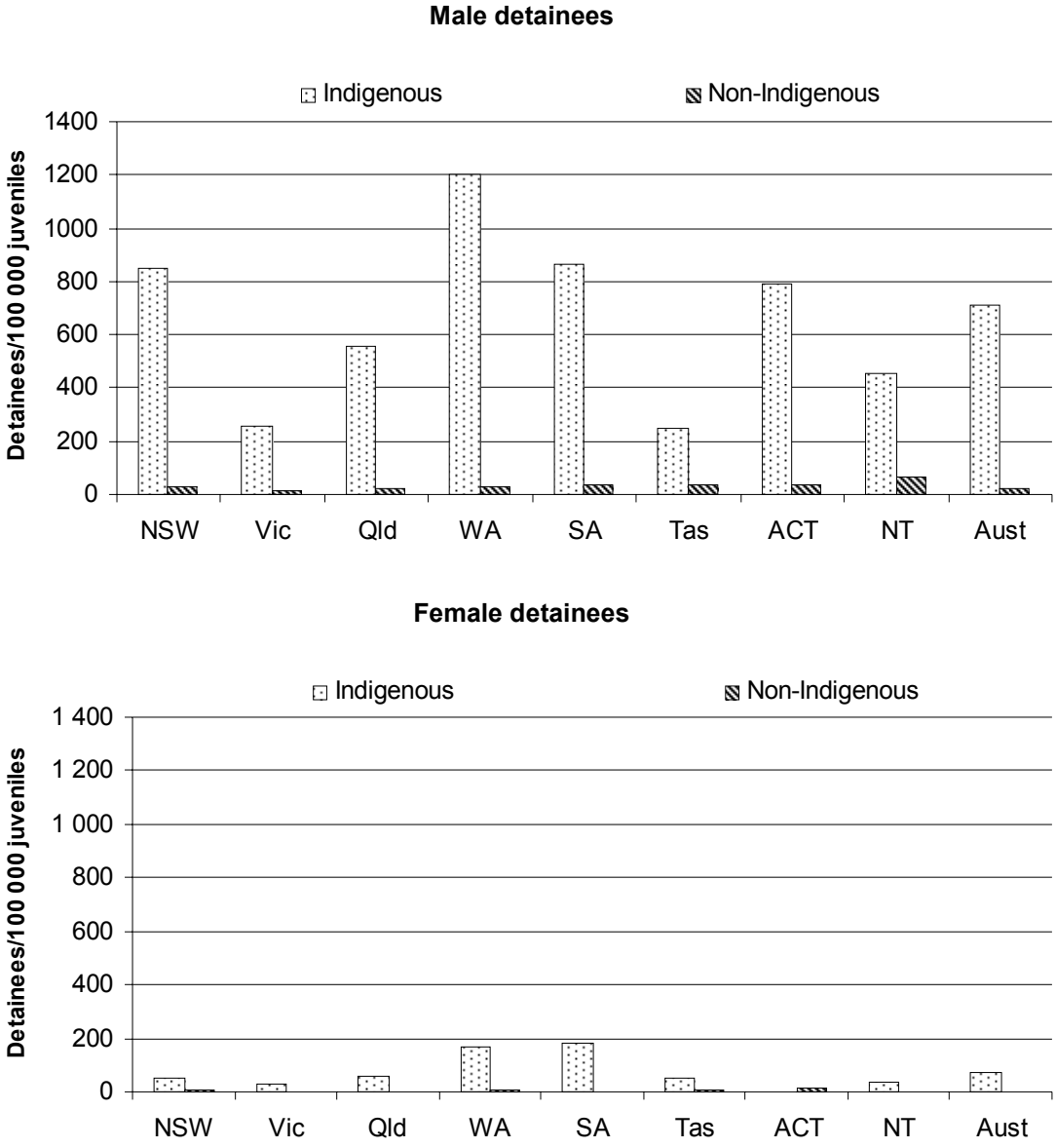
Source: Taylor (2009); table 4A.12.17.

- From 2001 to 2007 Indigenous juveniles were much more likely than non-Indigenous to be in detention. In 2007, Indigenous juveniles were 28 times as likely to be in detention (figure 4.12.5).
- Although detention rates for both Indigenous and non-Indigenous juveniles fluctuated between 2001 and 2007, the gap between Indigenous and non-Indigenous detention rates remained large (figure 4.12.5).
- There were 432 Indigenous juveniles in detention and 310 non-Indigenous juveniles in detention at 30 June 2007 (table 4A.12.16). The number of Indigenous juveniles in detention increased from 261 in 2001 (a 65 per cent increase 2001 to 2007) while the number of non-Indigenous juveniles in detention increased from 306 on 30 June 2001 (a 1.3 per cent increase 2001 to 2007).

Juvenile detention rates can be highly variable in states and territories with small populations of Indigenous people, small numbers of young people in juvenile detention, and/or small numbers of Indigenous people in juvenile detention. This particularly applies in Victoria, Tasmania, the ACT and the NT. Nationally, there were 394 Indigenous males and 38 Indigenous females in juvenile detention on 30 June 2007 (table 4A.12.18). Attachment tables 4A.12.16 and 4A.12.17 present

the numbers and rates of Indigenous and non-Indigenous juveniles (aged 10–17 years) in detention from 2001 to 2007 by State and Territory.

Figure 4.12.6 **Juvenile detention rates, aged 10–17 years, by gender, 30 June 2007[a]**



a Indigenous rates were calculated using high series population data provided by the ABS (Cat. no. 3238.0). Any variation in derived rates may be due to the assumptions and limitations of the base population data.

Source: Taylor (2009); table 4A.12.19.

- For both Indigenous and non-Indigenous juveniles, males were much more likely to be in detention than females (figure 4.12.6).

- Juvenile detention rates for Indigenous males and females per 100 000 people were considerably higher than the detention rates for non-Indigenous males and females in all jurisdictions (except for females in the ACT).
- Nationally on 30 June 2007, the rate of Indigenous females in juvenile detention was 24.4 times higher than the rate of non-Indigenous females in juvenile detention. Indigenous males were 28.2 times as likely to be in juvenile detention as non-Indigenous males (figure 4.12.6). The ACT had no Indigenous females in detention on 30 June 2007, while the NT had no non-Indigenous females in detention at this time (table 4A.12.18).

To accompany figure 4.12.6, tables 4A.12.18 and 4A.12.19 present the numbers and rates of Indigenous and non-Indigenous juveniles in detention from 2001 to 2007 by State and Territory and gender. The numbers and rates of juveniles in detention, by age category, are reported in tables 4A.12.20 and 4A.12.21, respectively. Data on the proportion of juveniles who were in detention and under sentence (as opposed to being on remand) on 30 June 2007 are reported in table 4A.12.22, while data on the number of people in juvenile detention (all ages) are reported in table 4A.12.23.

4.13 Future directions in data

Early childhood education

There are limited data currently available to inform the COAG National Indigenous Reform Agreement measures for early childhood education. The key challenges include comparable reporting on attendance (including data for 4 year old children), improving alignment of State and Territory data to ensure national comparability and reporting data for preschool and child care services by remoteness area. Interpretation of data on preschool enrolments is complicated by the different ages at which children take part and different ages at which children commence primary school in different jurisdictions. Data on the qualifications of preschool teachers are not available.

The AIHW, under the guidance of the Children's Services Data Working Group, has developed a National Minimum Data Set (NMDS) for children's services, which provides a framework for collecting a set of nationally comparable data for child care and preschool services. The AIHW completed a feasibility study on the implementation of the NMDS, and is awaiting national agreement on the way forward (AIHW 2009).

The ABS and AIHW are currently undertaking further work to develop draft standards and protocols to assist in the collection of more accurate data for the National Partnership Agreement on Early Childhood Education. COAG has agreed to fund improvements in data capacity and availability in the area of early childhood, including work to improve Indigenous data.

Employment

In addition to the five-yearly Census, the ABS program of ongoing Indigenous specific surveys, including the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and the National Aboriginal and Torres Strait Islander Social Survey (NATSISS), provides labour force data (including CDEP) on a three yearly cycle. Labour force information from the 2008 NATSISS will separately identify CDEP participants. These data will be available from late 2009. Additional estimates of Indigenous labour force data over the period 2002 to 2007 are available, compiled from the monthly Labour Force Survey (ABS 2008). These estimates are annual and hence more frequent than the Census, but, because the estimates are based on a smaller sample, they are of lower quality.

Household and individual income

In addition to the five-yearly Census, the ABS program of ongoing Indigenous specific surveys provides labour force (including CDEP) and income data on a three yearly cycle.

Substantiated child abuse and neglect

Substantiated child protection notifications data and information on care and protection orders have been used to give an insight into the prevalence of child abuse and neglect. Even as proxy measures of abuse and neglect, it is acknowledged that these data do not adequately address the issue. More work is required to develop data on the underlying prevalence of child abuse and neglect, particularly child sexual abuse.

A national project looking at the comparability of child protection data was completed in 2008 (AIFS 2008). The project report noted that multiple factors are likely to exert an influence on rates of notifications, investigations, substantiations, and rates of children on care and protection orders and in out-of-home care. Some factors were thought to exert a national influence on statutory child protection activity (for example, increased public awareness of the issue of child abuse and neglect and the broadened concept of what constitutes child abuse and neglect),

while other factors were suggested to be specific to particular jurisdictions (for example, the implementation of policy reforms and the flow on effects of reviews of child protection services). The project report concluded that further research was necessary to test the extent of the suggested relationships.

Family and community violence

Data on the prevalence of family and community violence are not widely available for Indigenous or non-Indigenous people. The National Information Development Plan for Crime and Justice Statistics (ABS 2005) identifies the development of statistics on family and domestic violence for all people as a priority. The Family and Domestic Violence Statistics Working Group was established to consider issues and develop proposals concerning definitions of family and domestic violence, the scope of statistical requirements, measurement issues and data sources. The Working Group endorsed the development of a conceptual framework. A conceptual framework for domestic and family violence statistics was developed and published in 2009 (ABS 2009). The AIHW prepared a report that examined key national data sources (AIHW 2006). The ABS National Centre for Crime & Justice Statistics is working with police agencies to collect and publish nationally comparable crime victimisation data and data on the relationship between victims and perpetrators, by Indigenous status. This should help generate more comparable information in future years.

The ABS 2008 NATSISS has collected (from Indigenous people 15 years and over) information about victimisation and perceived problems at the neighbourhood or community level, including family violence, neighbourhood conflict and personal safety. These data will be available from late 2009.

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