

AIM

This publication is the sixth in the series of reports on the health and welfare of Australia's Aboriginal and Torres Strait Islander peoples. By drawing on recent data available from a variety of sources, it aims to provide a comprehensive picture of the health and welfare of Australia's Indigenous population. It covers a range of topics regarded as important for improving the health of Aboriginal and Torres Strait Islander peoples.

The definition of health that underpins the publication is a holistic one put forward in the National Aboriginal Health Strategy Working Party report:

'Not just the physical well-being of the individual but the social, emotional and cultural well-being of the whole community. This is a whole of life view and it includes the cyclical concept of life-death-life' (National Aboriginal Health Strategy Working Party 1989).

This report also provides a broader context for the two major indicator based reports on Indigenous health and welfare—the Aboriginal and Torres Strait Islander Health Performance Framework (auspiced by the Australian Health Minister's Advisory Council) and the COAG Overcoming Indigenous Disadvantage (OID) Key Indicators Report. The Health Performance Framework has around 70 indicators under three tiers of reporting—health status and outcomes, determinants of health, and health system performance—while the OID framework reports on 12 headline indicators of social and economic outcomes, such as life expectancy at birth, Years 10 and 12 retention and attainment, labour force participation and unemployment, home ownership, suicide and self-harm, family and community violence, and imprisonment and juvenile detention rates.

Information about the social context and specific issues that impact on the health and welfare of Indigenous Australians is presented in Chapters 2, 3, 4, and 8. Chapter 2 provides background information on the demographic, social and economic context in which Indigenous Australians live. Chapter 3 provides information on education and employment status, including the transition from school to work. Chapter 4 examines the housing circumstances of Indigenous Australians, while Chapter 8 looks at selected health risk factors.

Health status of, and outcomes for, Indigenous Australians are described in Chapters 5, 6, 7, and 9. Chapter 5 focuses on disability (need for assistance with core activities) and carers, primarily using data from the 2006 Census. Chapter 6 provides information on the health status of Indigenous mothers and children; Chapter 7 provides an overview of the health status of Aboriginal and Torres Strait Islander peoples; while Chapter 9 describes Indigenous mortality, including a discussion of trends where these can be observed.

AIM *continued*

Chapters 10 (Health service—provision, access and use) and 11 (Community services) look at system performance issues, including access to, and utilisation of, these services by Indigenous Australians.

Chapter 12 provides a summary of the relevant, available information about the health and welfare of Torres Strait Islander peoples.

The breadth and depth of data assembled for this report will also provide the basis for the development of an ABS Framework for the measurement of Indigenous wellbeing. The Framework has been identified as a key strategic area in the ABS Indigenous statistics program and will be developed in consultation with Indigenous researchers and stakeholders.

DATA SOURCES

The data presented in this report were drawn from key national statistical collections including the latest information from both the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW). Important new information about Aboriginal and Torres Strait Islander health and welfare was collected through the ABS 2006 Census of Population and Housing and 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS). The report also includes data from other ABS collections such as the 2006 Community Housing and Infrastructure Needs Survey (CHINS) and the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). AIHW surveys such as Bettering the Evaluation and Care of Health (BEACH), and national administrative data collections such as the National Hospital Morbidity Data Collection, the National Mortality Data Collection and the National Perinatal Data Collection are all important data sources used in the production of this report. In addition, the report includes updated estimates of expenditure on health services for Indigenous people.

DATA ISSUES

The Aboriginal and Torres Strait Islander 2006 preliminary population estimates used in this report are based on the population counts from the five-yearly 2006 Census of Population and Housing (on a usual residence basis), adjusted for instances in which Indigenous status was unknown (not stated) and for net undercount. Unless otherwise indicated, rates in this publication have been based on the 2001 'low series' resident population estimates and projections.

Estimating the size and composition of the Indigenous population is difficult for a range of reasons, including the incomplete and differential Indigenous identification in births and deaths records across jurisdictions, which do not support the standard approach to population estimation. Indigenous identification is also incomplete in many other administrative data collections used in this report. The ABS and the AIHW, in partnership with state and territory authorities and the Indigenous community, are making efforts to improve the quality and completeness of Indigenous identification in key administrative data collections.

CHAPTER 2

DEMOGRAPHIC, SOCIAL AND ECONOMIC CONTEXT

INTRODUCTION

There is strong evidence from Australia and other developed countries that low socioeconomic status is associated with poor health and increased exposure to health risk factors (Blakely, Hales & Woodward 2004; Turrell & Mathers 2000). Recent statistics from the 2007 Overcoming Indigenous Disadvantage Report by the Steering Committee for the Review of Government Service Provision (SCRGSP) have highlighted some improvements in the lives of Indigenous Australians in the areas of employment, educational attainment and income (SCRGSP 2007a). However, Aboriginal and Torres Strait Islander people continue to experience relative disadvantage compared with non-Indigenous people.

This chapter provides an overview of the demographic characteristics of the Aboriginal and Torres Strait Islander population. The data are primarily from the 2006 Census of Population and Housing, with supplementary information from the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). These data provide a context for the health and welfare information in later chapters, with topics including education, housing, income and labour force status. Some of the topics in this chapter are explored in more detail in later chapters within this report. For more information on the demographic characteristics of the Torres Strait Islander population, see Chapter 12.

DEMOGRAPHIC CHARACTERISTICS

The Australian Bureau of Statistics (ABS) provides two types of Indigenous population figures. The first are Census counts, which are taken from the five-yearly Census of Population and Housing. These figures represent the number of people enumerated by the Census without any adjustment. The second type of population figures are estimated resident population (ERP) figures, which are initially based on Census counts, and then adjusted to account for unknown Indigenous status and undercount from the Census (see box 2.3). In this chapter, Indigenous ERP data have been used to describe the age structure and distribution of the Indigenous population across states and territories. All other analyses (including those for Indigenous Regions) are based on Census counts.

Preliminary estimated resident Indigenous population

At 30 June 2006, the estimated resident Aboriginal and Torres Strait Islander population of Australia was 517,200, or 2.5% of the total Australian population. The Indigenous population is estimated to have increased by 58,700 (13%) between 2001 and 2006 (ABS 2007e and table 2.1). Finalised ERP data will be available in mid-2008.

2.1 ESTIMATED RESIDENT POPULATION(a), by Indigenous status—2006 (preliminary)

	Aboriginal	Torres Strait Islander	Both Aboriginal and Torres Strait Islander	Total Indigenous	Non-Indigenous	All persons	Proportion of total Indigenous population	Proportion of state/territory population
	no.	no.	no.	no.	no.	no.	%	%
New South Wales	140 000	5 100	3 100	148 200	6 669 000	6 817 200	28.7	2.2
Victoria	27 700	2 200	900	30 800	5 097 500	5 128 300	6.0	0.6
Queensland	113 300	21 100	12 000	146 400	3 945 100	4 091 500	28.3	3.6
South Australia	24 600	1 000	400	26 000	1 542 200	1 568 200	5.0	1.7
Western Australia	75 200	1 400	1 300	77 900	1 981 100	2 059 000	15.1	3.8
Tasmania	15 000	1 300	600	16 900	473 000	489 900	3.3	3.4
Northern Territory	64 100	800	1 700	66 600	144 100	210 700	12.9	31.6
Australian Capital Territory	3 800	200	100	4 000	330 200	334 200	0.8	1.2
Australia	463 900	33 100	20 200	517 200	20 184 300	20 701 500	100.0	2.5

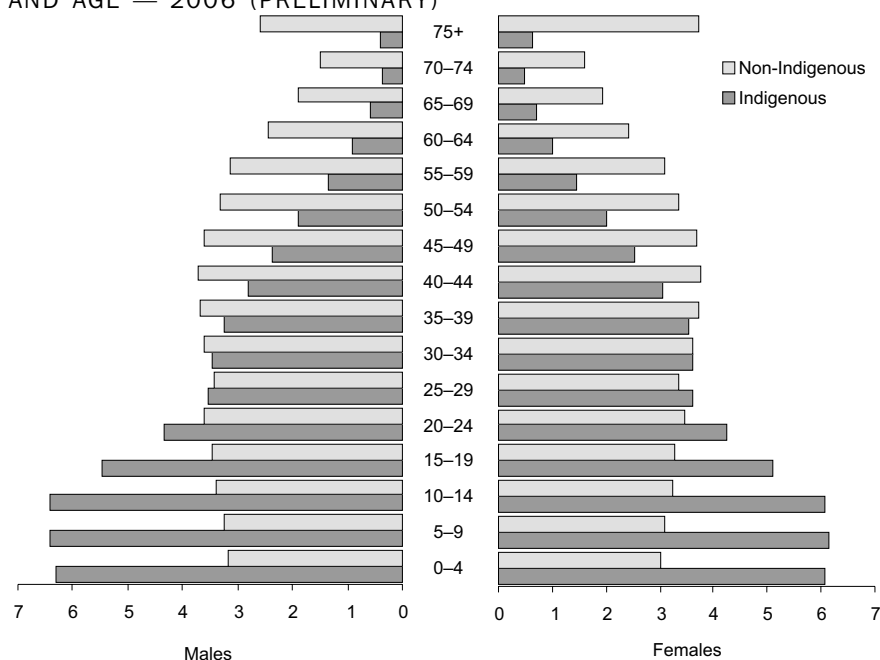
(a) Estimates are subject to revision once 2006 population estimates have been finalised and after analysis of growth in the Indigenous population (demographic and non-demographic factors) between 2001 and 2006.

Source: ABS 2007f

Age

The Indigenous population is relatively young, with a median age of 21 years compared with 37 years for the non-Indigenous population. This is largely the product of higher rates of fertility and deaths occurring at younger ages among the Indigenous population (ABS 2004c). At 30 June 2006, people aged 65 years and over comprised just 3% of the Indigenous population, compared with 13% of the non-Indigenous population. In comparison, 37% of Indigenous people were under 15 years of age compared with 19% of non-Indigenous people (figure 2.2).

2.2 ESTIMATED RESIDENT POPULATION, BY INDIGENOUS STATUS AND AGE — 2006 (PRELIMINARY)



Age continued

Because age is closely associated with health status, some comparisons between Indigenous and non-Indigenous data in this report are presented for separate age groups, or otherwise age standardised. For more information on age standardisation, see the Glossary.

Life expectancy

The latest available data presenting estimated Indigenous life expectancy at birth are for the period 1996–2001. Nationally, experimental estimated Indigenous life expectancy was 59 years for Indigenous males (compared with 77 for all males) and 65 years for Indigenous females (compared with 82 years for all females). This is a difference of around 17 years for both males and females (ABS 2004b). Life expectancy data for the 2001–2006 period will be released in late 2008.

Where Indigenous people live

At 30 June 2006, the jurisdictions with the largest estimated resident Indigenous populations were New South Wales (148,200 or 29% of the total Indigenous population) and Queensland (146,400 or 28% of the total Indigenous population). The Northern Territory had a higher proportion of Indigenous residents (32%) than any other state or territory.

For Australians living in remote areas, distance can be a barrier to accessing services. While an estimated one-third of Indigenous Australians (32%) were living in major cities and a further 43% were living in regional areas at 30 June 2006, a much larger proportion of the Indigenous than non-Indigenous population were living in remote or very remote areas (25% compared with 2%). For more information on access to services, see Chapter 10 of this report.

2.3 2006 CENSUS COUNTS

Census undercount

Each Census, some people are missed and others are counted more than once. In Australia, a greater number of people are missed than are counted more than once and the overall effect is called net undercount. In 2006, the Indigenous preliminary net undercount was estimated to be 11.5%, and this was not uniform across all states and territories (ABS 2007f).

Census counts

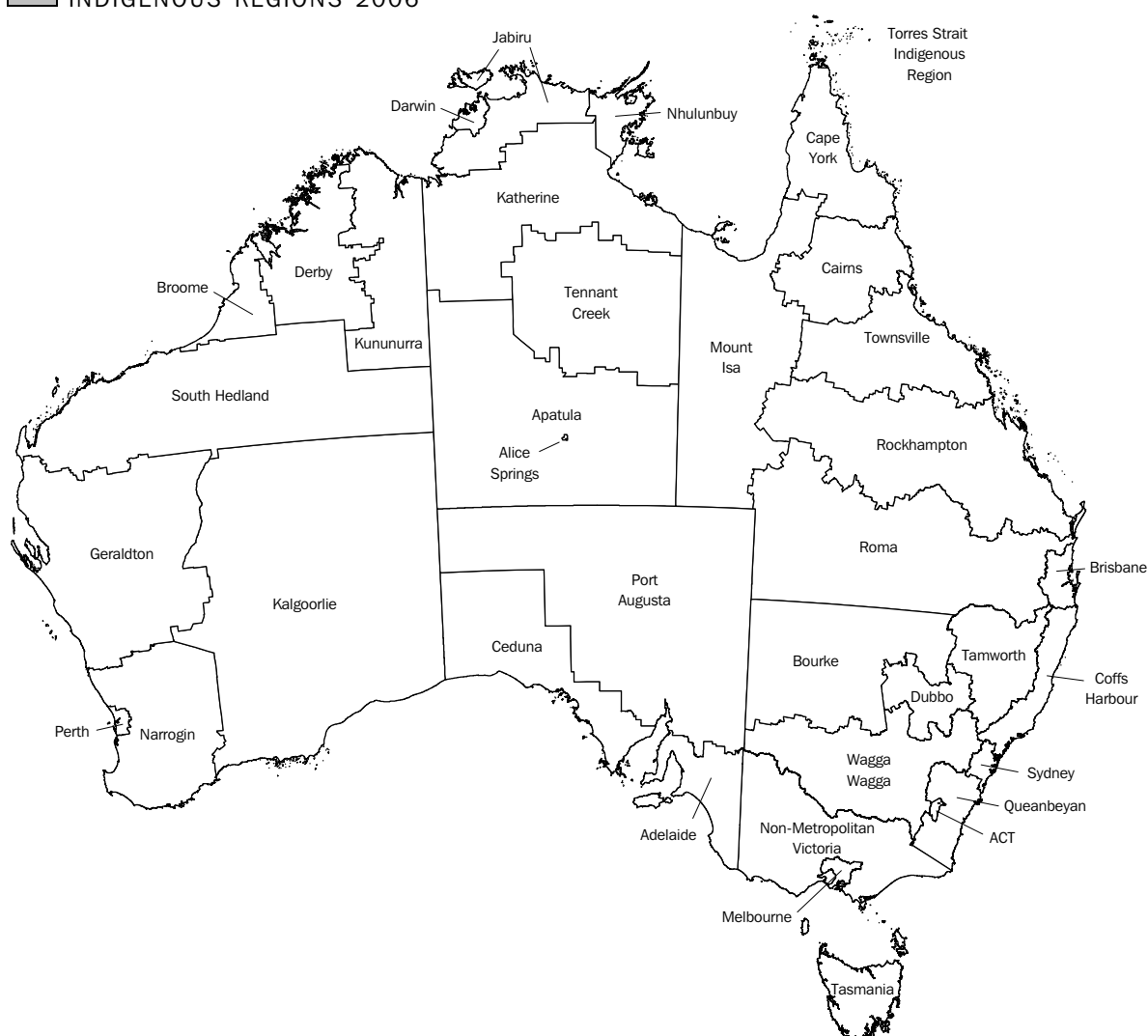
The number of people identified as being of Aboriginal and/or Torres Strait Islander origin in the 2006 Census was 455,000, representing 2.3% of the total Australian population. This is an increase of 11% since the 2001 Census, compared with an increase of 6% in the total Australian population over the same period. Among people identified as Indigenous in 2006, 90% were of Aboriginal origin only, 6% were of Torres Strait Islander origin only and 4% were of both Aboriginal and Torres Strait Islander origin. Around three-quarters (76%) of the Indigenous population were living in major cities and regional areas in 2006, with the remaining 24% in remote areas.

Where Indigenous people
live continued

INDIGENOUS REGIONS

Indigenous Regions (IREGs) are the highest level of the Australian Indigenous Geographical Classification (AIGC). IREGs are based on Aboriginal and Torres Strait Islander Commission (ATSIC) Regions (used in the 2001 Census of Population and Housing) but also reflect recent changes in both local government areas and in government administrative arrangements. Where possible and appropriate, the 2001 ATSIC boundaries were maintained to allow the characteristics of Indigenous people within a region to be compared across Censuses. The map below (figure 2.4) indicates the new Indigenous Region structure across Australia.

2.4 INDIGENOUS REGIONS 2006



In 2006, the Indigenous Regions with the largest populations were Sydney (41,800), Brisbane (41,400) and Coffs Harbour (40,000). The Indigenous Regions with the highest proportion of Indigenous residents, which were outside major population centres, included the Torres Strait Islander Region in Queensland (83%), and the Apatula and Jabiru Indigenous Regions in the Northern Territory (79% and 77% respectively). The highest regional increases in the Indigenous population between 2001 and 2006, based on 2006 AIGC boundaries, occurred in the Indigenous Regions of Coffs Harbour (25%),

*Where Indigenous people
live continued*

INDIGENOUS REGIONS *continued*

Non-Metropolitan Victoria (25%), Wagga Wagga (21%) and Melbourne (20%) (ABS 2007f).

POPULATION
CHARACTERISTICS

Language

Aboriginal and Torres Strait Islander languages were spoken in the home by 12% of Indigenous Australians aged five years and over in 2006, the majority of whom (83%) were also proficient English speakers. The Indigenous languages most commonly spoken at home were Torres Strait Creole (5,800 speakers), Kriol (3,900), Arrernte (2,800), Djambarrpuyngu (2,700), Pitjantjatjara (2,600) and Warlpiri (2,500).

Homelands

In the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS), 70% of Indigenous people aged 15 years and over recognised an area as their homelands or traditional country, while 22% lived in homelands or traditional country. Almost half (46%) of the Indigenous population did not live in their homelands or traditional country, but were allowed to visit. Nationally between 1994 and 2002 the proportion of Indigenous people living in their homelands or traditional country decreased (from 29% to 22%) (ABS 2004d).

Social networks

In 2002, 90% of Indigenous people aged 15 years and over reported that they had been involved in social activities in the last three months; nearly half (49%) had participated in sport or physical recreation activities in the last 12 months and 28% had undertaken voluntary work in the last 12 months. In addition, the overwhelming majority of Indigenous people (90%) were able to get support in a time of crisis from someone outside their household; most commonly from family members and friends (ABS 2004d). For further information, see the 2005 edition of this report (ABS & AIHW 2005).

Education

The educational opportunities available to an individual can have a significant impact on their future health, wellbeing and socioeconomic status. Between 2001 and 2006, there was a slight increase in the proportion of Indigenous people aged 15 years and over (excluding those still at school) that had completed Year 12 (from 20% to 23%), with the largest increases in major cities and very remote areas (4% between 2001 and 2006). Indigenous males and females had similar rates of Year 12 attainment (22% compared with 24%). In comparison, almost half (49%) of non-Indigenous Australians had completed Year 12 in 2006.

In both 2001 and 2006, there were around 7,100 Indigenous people studying at a university. This represents a slight decrease in the proportion of Indigenous people attending university (from 5% to 4%). Among Indigenous people aged 25–64 years, 26% had a non-school qualification compared with over half (54%) of non-Indigenous people. One in five Indigenous people aged 25–64 years with a non-school qualification (20%) had a bachelor degree or above, and three-quarters had a certificate or diploma as their highest qualification.

REMOTENESS

Levels of educational attainment among Indigenous people aged 15 years and over (excluding those still at school) were lower in geographically remote areas. In 2006, almost one-third (31%) of those living in major cities had completed Year 12 compared

Education continued

with 22% of Indigenous people living in regional areas and 14% in remote areas (table 2.5).

2.5 HIGHEST YEAR OF SCHOOL COMPLETED(a), Indigenous persons aged 15 years and over—2006

		Major Cities	Regional	Total Remote	Australia(b)
Year 12 or equivalent	%	30.8	22.2	14.0	23.0
Year 10 or 11	%	44.4	46.4	36.2	43.2
Year 9 or below(c)	%	24.8	31.3	49.8	33.8
Total stated	%	100.0	100.0	100.0	100.0
Highest year of school completed not stated	no.	9 345	14 950	8 444	32 951
Persons aged 15 years and over(a)	no.	85 822	111 737	67 046	265 820

(a) Excludes persons still attending school.

(b) Includes 'Offshore and migratory'.

(c) Includes persons who did not attend school.

Source: ABS 2006 Census of Population and Housing

The attainment of non-school qualifications is also higher in urban locations. In the 2006 Census, one-third (34%) of Indigenous people aged 25–64 years living in major cities had attained a non-school qualification, compared with just over one-quarter (27%) of those living in regional areas and 15% of those in remote areas. Although a higher proportion of Indigenous Australians had attained a non-school qualification (26% in 2006 compared with 20% in 2001), Indigenous Australians were less than half as likely as non-Indigenous Australians to have a non-school qualification in 2006 (26% compared with 53%).

Labour force status

2.6 LABOUR FORCE STATUS—CENSUS AND INDIGENOUS-SPECIFIC SURVEY DATA

Labour force estimates from the 2006 Census, 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) and 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) are based on the same underlying concepts as those used in the monthly Labour Force Survey (LFS). However, there are differences in the collection methodologies, definitions, questions and estimation procedures which affect the comparability of data between collections. While the labour force estimates may differ, the broad trends are similar across collections.

Collection methodologies

The 2006 Census was collected by self-enumeration, except in Discrete Indigenous Communities where interviewers were used to assist respondents in providing the required data. These collection methodologies differed from those used in the 2002 NATSISS and the 2004–05 NATSIHS, both of which collected labour force data from selected persons aged 15 years and over via a personal interview.

Scope and content

Labour force status continued

The questions used to derive labour force status in the 2006 Census, 2002 NATSISS and 2004–05 NATSIHS were not as detailed or comprehensive as those used in the LFS. While NATSISS and NATSIHS both included the standard labour force module for household surveys, the 2006 Census used a shorter questionnaire module. In addition, the NATSISS and NATSIHS samples covered usual residents of private dwellings only, i.e. people in hotels, motels, hostels and hospitals, and visitors to private dwellings, were excluded.

Community Development Employment Projects (CDEP)

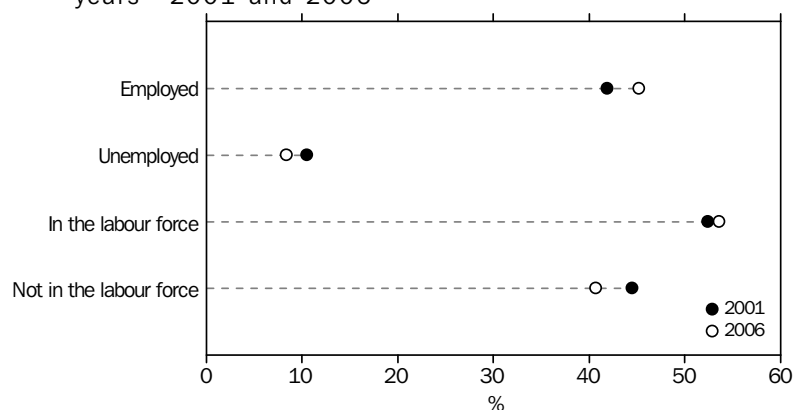
The NATSISS and NATSIHS labour force modules also differ from current LFS practices and the self-completion forms used in the 2006 Census in that they specifically asked respondents about participation in the CDEP programme. In the 2006 Census, consistent with recent changes in policy, coverage of CDEP participation was limited to people in Discrete Indigenous Communities, where it was collected by interviewers. As CDEP participants are categorised as employed, the absence of specific CDEP prompts on the 2006 Census self-completion forms has resulted in substantially lower counts of CDEP participants, and may also have resulted in a lower overall Indigenous employment rate than would have otherwise been obtained.

LABOUR FORCE PARTICIPATION

Labour force participation is the number of persons in the labour force (employed plus unemployed) expressed as a percentage of the total population aged 15–64 years. People who did not report their labour force status are excluded when calculating the participation rate.

There was an increase in the labour force participation rate for Indigenous people aged 15–64 years from 52% in 2001 to 54% in 2006 (graph 2.7). In 2006, Indigenous males were more likely than females to be participating in the labour force (63% compared with 51%). Consistent with data from the 2001 Census, Indigenous Australians aged 15–64 years were less likely to be participating in the labour force than non-Indigenous Australians (54% compared with 75%).

2.7 LABOUR FORCE STATUS, Indigenous persons aged 15–64 years—2001 and 2006



Source: ABS 2001 and 2006 Censuses of Population and Housing

Labour force status
continued

EMPLOYMENT

In 2006, almost half (45%) of Indigenous people aged 15–64 years were employed (graph 2.7). Of those who were employed, half (53%) were employed full-time, compared with 65% of non-Indigenous people. Part-time employment accounted for a greater share of total employment among Indigenous people (37%) than non-Indigenous people (29%). The remaining employed Indigenous people (10%) were away from work at the time of the Census.

2.8 COMMUNITY DEVELOPMENT EMPLOYMENT PROJECTS (CDEP)

The following data on the Community Development Employment Projects (CDEP) programme are taken from the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) as coverage of this topic in the 2006 Census was limited to people in remote areas.

The CDEP programme accounts for a significant proportion of employment for Indigenous Australians. This programme aims to create local employment opportunities in Indigenous communities (predominantly in remote and regional areas) where the labour market might not otherwise offer employment. CDEP employment is usually part-time work and income is received in place of an income support payment. In the 2004–05 NATSIHS, there were around 30,600 Indigenous CDEP participants aged 15–64 years, accounting for 21% of employed Indigenous people in this age group (SCRGSP 2007a).

UNEMPLOYMENT

Between 2001 and 2006, the unemployment rate (i.e. the unemployed as a proportion of the labour force) for Indigenous people aged 15–64 years decreased from 20% to 16%. However, the unemployment rate for Indigenous Australians was still three times the rate for non-Indigenous Australians (16% compared with 5%), similar to the rate ratios from the 2001 Census (20% compared with 7%) (table 2.9) (ABS 2003). As CDEP is considered a form of employment, those people who reported being employed under the CDEP programme are excluded from unemployment figures. This has a greater effect on the unemployment rate in remote areas than in non-remote areas.

NOT IN THE LABOUR FORCE

In the 2006 Census, 41% of Indigenous people aged 15–64 years were not in the labour force. Almost half (46%) of all Indigenous females aged 15–64 years were not in the labour force compared with just over one-third of Indigenous males (35%). Indigenous people in remote areas were more likely than those in major cities to not be participating in the labour force (43% compared with 37%) (table 2.9).

2.9 LABOUR FORCE STATUS, by Indigenous status—2001 and 2006

		INDIGENOUS 2001	INDIGENOUS 2006				NON-INDIGENOUS 2006
		Total	Major Cities	Regional	Remote	Total	Total
Employed							
Full time	%	na	30.2	23.6	16.7	24.1	45.9
Part time	%	na	14.7	15.4	21.2	16.6	20.5
Total(a)	%	41.9	49.5	43.4	42.8	45.2	70.8
Unemployed							
Looking for full time work	%	8.2	6.2	6.8	4.0	5.9	2.4
Looking for part time work	%	2.3	2.6	2.8	1.8	2.4	1.5
Total	%	10.5	8.8	9.6	5.8	8.4	3.8
Not in the labour force	%	44.5	37.2	42.0	43.1	40.7	24.2
Not stated	%	3.1	4.5	5.0	8.4	5.7	1.2
Persons aged 15–64 years	no.	237 636	88 012	113 675	65 919	268 807	12 276 785
Labour force participation rate	%	52.4	58.3	53.0	48.6	53.6	74.7
Unemployment rate	%	20.0	15.0	18.1	11.9	15.6	5.1

na not available

Source: ABS 2001 and 2006 Censuses of Population and Housing

(a) Includes persons employed but away from work.

Income

Nationally, the median weekly individual income of Indigenous Australians aged 15 years and over was \$278 in 2006; just over half the median income for non-Indigenous Australians which was \$473. Indigenous people in the ACT had higher median weekly personal income than those in any other state or territory, at \$508. Indigenous people in major cities had higher median personal weekly income (\$352) than those in regional areas (\$294) or remote areas (\$223).

Household characteristics

An Indigenous household is defined as a household in which there are one or more Aboriginal and/or Torres Strait Islander people usually resident. Households in which there are no identified Indigenous usual residents are referred to as 'other households' in this report. There were around 166,700 Indigenous households in 2006, representing 2.3% of all households in Australia.

*Equivalised household
income*

2.10 EQUIVALISED INCOME

Equivalised gross household income is a standardised income measure, adjusted for the different income needs of households of different size and composition. It takes into account the greater income needs of larger households and the economies of scale achieved when people live together. For a lone person household, it is equal to gross household income. For a household comprising more than one person, it indicates the gross household income that would need to be received by a lone person household to achieve the same economic wellbeing as a household comprising more than one person.

Low resource households

In this publication, people in low resource households are defined as those with a mean equivalised gross household income within the income boundaries of the first quintile, or lowest 20%. People with mean equivalised gross household income in the first quintile who were living in a home that was owned outright or owned with a mortgage by a household member, or in which there was an owner/manager of an unincorporated business have been excluded from this definition.

Equivalised household income provides an indication of how much money is available to each individual, taking into account the combined income, size and composition of the household in which they live. In 2006, the median equivalised gross household income of Indigenous people was \$362 per week, with the highest median reported in major cities (\$439). The median weekly equivalised gross household income for Indigenous people was equivalent to just over half the corresponding income for non-Indigenous people, which was \$642. For more information on equivalised income, see the Glossary.

PEOPLE IN LOW RESOURCE HOUSEHOLDS

In 2006, 39% of Indigenous people were living in low resource households, more than four times the rate of non-Indigenous people (8%). For more information on low resource households and income quintiles, see box 2.10 and the Glossary.

Tenure type

In the 2006 Census, one-third (34%) of Indigenous households were living in dwellings that were either owned outright or owned with a mortgage by a member of the household; half the rate of home ownership reported by other households (69%). The median monthly housing loan repayment being made by Indigenous households was \$1,127 compared with \$1,300 for other households.

More than half (59%) of Indigenous households were renting in 2006 (either privately or from state/territory or community housing providers), double the rate for other households (26%). Median weekly rent paid by Indigenous households was \$140, with those renting from private and other landlords paying the highest median weekly rent (\$190). Almost half (48%) of Indigenous households renting from state/territory housing authorities were paying less than \$100 per week.

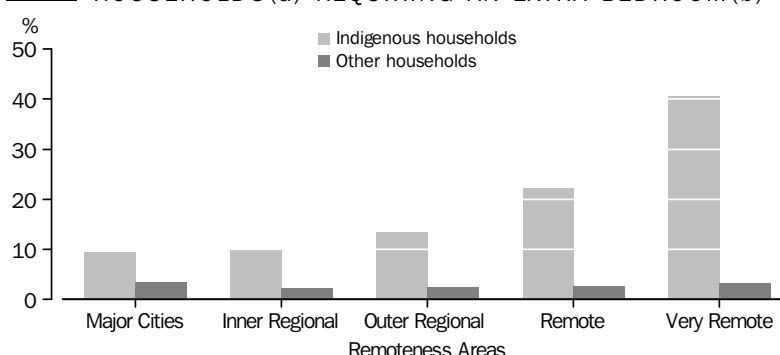
Household size

The Canadian National Occupancy Standard for housing appropriateness is an

internationally accepted measure of housing utilisation that is sensitive to both household size and composition. Using this measure, households that require at least one additional bedroom are considered to experience some degree of overcrowding. For more information on the criteria used in the Canadian National Occupancy Standard, see Chapter 4.

In the 2006 Census, the average number of bedrooms in all Australian dwellings was 3.1. However, the average number of persons per bedroom in Indigenous households was higher than in other households (3.4 compared with 2.6). Based on the Canadian National Occupancy Standard for housing utilisation, around one in eight Indigenous households (14%) were living in dwellings that needed one or more extra bedrooms compared with 3% of other households. In 2006, the proportion of Indigenous households experiencing overcrowding was higher in remote areas, with dwellings in very remote areas being the most likely to require one or more extra bedrooms (graph 2.11). Reflecting the generally higher rates of overcrowding in remote areas, some 34% of Indigenous households in the Northern Territory were living in overcrowded conditions, followed by 14% in both Western Australia and Queensland.

2.11 HOUSEHOLDS (a) REQUIRING AN EXTRA BEDROOM (b) — 2006



(a) In occupied private dwellings.

(b) Based on the Canadian National Occupancy Standard for housing appropriateness.

Source: ABS 2006 Census of Population and Housing

Law and justice

In the 2002 NATSISS, around one-quarter (24%) of Indigenous people aged 15 years and over reported being a victim of physical or threatened violence in the 12 months prior to the survey (26% of males and 23% of females), nearly double the overall rate reported in 1994 (13%). In addition, one in five Indigenous people (19%) reported a family member having been sent to jail/currently in jail in 2002 (ABS 2004d).

Indigenous prisoners represented 24% of the total prisoner population at 30 June 2007. The proportion of prisoners that were Indigenous varied across states and territories. In the Northern Territory, which has the largest proportion of Indigenous residents, 84% of the prisoner population was Indigenous, while in Victoria, 6% of the prisoner population was Indigenous. After adjusting for differences in the age structure of the Indigenous and non-Indigenous populations, the Indigenous imprisonment rate was 1,787 per 100,000 adult Indigenous population, 13 times the non-Indigenous rate at 30 June 2007 (table 2.12) (ABS 2007g). Indigenous people were 21 times more likely to be in prison

than non-Indigenous people in Western Australia; the highest age standardised ratio of Indigenous to non-Indigenous rates of imprisonment in Australia.

2.12 IMPRISONMENT RATES(a)(b), by Indigenous status and state/territory—30 June 2007

	NSW(c)	Vic.	QLD	SA	WA	Tas.	NT	ACT(d)	Australia
Crude rates									
Indigenous	2 467.4	1 288.5	1 761.4	2 334.7	3 886.2	632.9	2 046.6	774.9	2 255.5
Non-Indigenous	155.0	99.1	132.0	113.6	141.8	124.4	126.1	83.8	129.2
Ratio of crude rates(e)	15.9	13.0	13.3	20.6	27.4	5.1	16.2	9.2	17.5
Age-standardised rates									
Indigenous	1 987.7	999.5	1 405.4	1 839.5	3 077.2	521.1	1 602.9	672.8	1 786.7
Non-Indigenous	161.8	100.8	136.1	124.9	146.1	140.6	117.0	80.5	133.5
Ratio of age standardised rates(e)	12.3	9.9	10.3	14.7	21.1	3.7	13.7	8.4	13.4
All prisoners	195.4	104.6	174.0	143.9	241.9	140.6	595.2	90.6	169.4

(a) Rate per 100,000 adult population.

(b) The data presented in this table have been confidentialised to prevent identification of individuals.

(c) Data for NSW excludes ACT prisoners held in NSW prisons.

(d) Data for ACT includes prisoners held in NSW prisons as well as ACT prisoners held in ACT prisons.

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

Source: ABS 2007g

Access to motor vehicles

In the 2006 Census, almost one-quarter (23%) of Indigenous households did not have ready access to a registered vehicle (i.e. garaged or parked at, or near, their dwelling), compared with 10% of other households. The Northern Territory had the highest proportion of Indigenous households without access to a registered vehicle (44%).

SUMMARY

The Aboriginal and Torres Strait Islander population of Australia was estimated to be 517,200 at 30 June 2006, or 2.5% of the total Australian population. The Indigenous population is relatively young, with a median age of 21 years, compared with a median age of 37 years in the non-Indigenous population.

At 30 June 2006, an estimated 32% of the Indigenous population were living in major cities, 43% in regional areas and one-quarter (25%) in remote areas. The jurisdictions with the largest estimated resident Indigenous populations were New South Wales (148,200 or 29% of the total Indigenous population) and Queensland (146,400 or 28% of the total Indigenous population). The Northern Territory had a higher proportion of Indigenous residents (32%) than any other state or territory.

Between the 2001 and 2006 Censuses, there was an increase in the proportion of Indigenous people completing Year 12 (from 20% to 23%). Over the same period, there was also a decrease in the Indigenous unemployment rate from 20% to 16% and an increase in the amount of household income available to Indigenous people. In 2006, the median weekly equivalised gross household income for Indigenous people (\$362) was equivalent to 56% of the corresponding income for non-Indigenous people (\$642). Despite these improvements, the unemployment rate was still much higher for Indigenous people than non-Indigenous people (16% compared with 5%), and rates of home ownership for Indigenous households were half those of other households (34% compared with 69%).

INTRODUCTION

Education is considered to be a key factor in improving the health and wellbeing of Indigenous Australians. Higher levels of educational attainment are thought to directly impact on health by improving a person's health-related knowledge and their ability to efficiently use this information. Educational attainment is also associated with better employment prospects and higher income which, in turn, may serve to increase access to health-related services and products. Being employed also enhances self-esteem, increases opportunities for self-development and reduces social alienation (SCRGSP 2007a) (for more information on how socioeconomic status influences health, see Chapter 8).

The first part of this chapter provides an overview of the educational attainment of Aboriginal and Torres Strait Islander people from the 2006 Census of Population and Housing. The second explores the ways in which education, employment and health are interlinked. Previously, this report has outlined how health impacts on Indigenous children's participation and attendance at school (ABS & AIHW 2005). With the subsequent release of the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS), this chapter examines the related issue of how education impacts on economic and health outcomes in adulthood.

SCHOOL RETENTION

A major focus of Indigenous education initiatives has been to encourage students to continue their education beyond the compulsory years of schooling in order to increase their future employment prospects and opportunities for non-school education.

The National Schools Statistics Collection showed that, in 2007, the apparent retention rate for Indigenous full-time students from Year 7/8 to Year 10 was 91% and to Year 12 was 43% (see the Glossary for more information on apparent retention rates).

Indigenous retention to Year 10 and beyond has steadily increased over the last 10 years (table 3.1). This trend is particularly evident at the Year 11 level, where the apparent retention rate from Year 7/8 rose from 52% in 1998 to 70% in 2007.

3.1 APPARENT SCHOOL RETENTION RATES, by Indigenous status—1998–2007

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	%	%	%	%	%	%	%	%	%	%
To Year 9										
Indigenous	95.0	93.9	95.5	96.5	97.8	96.8	97.2	99.2	98.4	97.5
Non-Indigenous	99.7	99.9	99.8	99.9	99.9	99.9	99.9	99.9	100.0	100.4
Difference (percentage points)	-4.7	-6.0	-4.3	-3.4	-2.0	-3.1	-2.7	-0.7	-1.6	-2.9
To Year 10										
Indigenous	83.3	82.0	83.0	85.7	86.4	87.2	85.8	88.3	91.4	90.5
Non-Indigenous	97.4	97.9	98.0	98.4	98.5	98.9	98.5	98.6	98.9	99.7
Difference (percentage points)	-14.1	-15.9	-15.0	-12.7	-12.1	-11.7	-12.7	-10.3	-7.5	-9.2
To Year 11										
Indigenous	52.3	56.0	53.6	56.1	58.9	61.4	61.1	62.3	67.7	69.7
Non-Indigenous	85.4	86.4	86.2	87.6	88.7	89.5	89.0	88.3	88.8	89.4
Difference (percentage points)	-33.1	-30.4	-32.6	-31.5	-29.8	-28.1	-27.9	-26.0	-21.1	-19.7
To Year 12										
Indigenous	32.1	34.7	36.4	35.7	38.0	39.1	39.8	39.5	40.1	42.9
Non-Indigenous	72.7	73.2	73.3	74.5	76.3	76.5	76.9	76.6	75.9	75.6
Difference (percentage points)	-40.6	-38.5	-36.9	-38.8	-38.3	-37.4	-37.1	-37.1	-35.8	-32.7

Source: National Schools Statistics Collection, ABS 2008

SCHOOL RETENTION*continued*

While Indigenous retention rates remain considerably lower than those for non-Indigenous school students, the disparity between the two groups is slowly lessening. In Year 11, the difference between Indigenous and non-Indigenous students decreased by 13 percentage points between 1998 and 2007. While the Year 12 differences decreased by 8 percentage points over this time period, Indigenous students were still much less likely than non-Indigenous students to progress to the final year of schooling in 2007.

EDUCATIONAL**ATTAINMENT**

Highest year of school completed

Among those who reported their highest year of schooling, the proportion of Indigenous people aged 15 years and over who had completed school to Year 12 increased from 20% in 2001 to 23% in 2006 (table 3.2). Rates of Year 12 completion improved in all states and territories, with the largest increases recorded in Tasmania (17% to 22%), the ACT (42% to 46%) and Queensland (26% to 30%).

Highest year of school
completed *continued*

3.2 HIGHEST YEAR OF SCHOOL COMPLETED, Indigenous persons aged 15 years and over(a)—2001 and 2006

	2001		2006	
	no.	%	no.	%
Year 12	41 233	19.5	53 490	23.0
Year 10/11	87 303	41.4	100 552	43.2
Year 9 or below(b)	82 481	39.1	78 826	33.9
Total	211 017	100.0	232 870	100.0
Not stated	20 113	. .	32 951	. .

. . not applicable

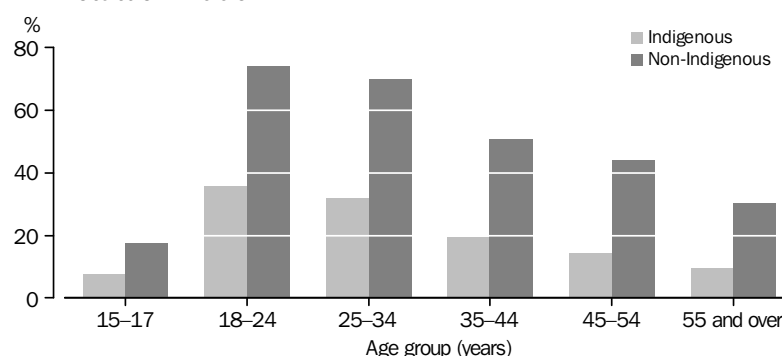
(a) Excludes persons still attending secondary school.

(b) Includes persons who never attended school.

Source: ABS 2001 and 2006 Censuses of Population and Housing

Younger Indigenous people were more likely than older Indigenous people to have completed Year 12. The proportion of Indigenous people who had completed Year 12, as shown in the 2006 Census, ranged from 36% of people aged 18–24 years to 9% of people aged 55 years and over (graph 3.3). Overall, Indigenous males and females reported similar rates of Year 12 completion (22% compared with 24%).

3.3 COMPLETED SCHOOL TO YEAR 12(a)(b), by Indigenous status—2006



(a) Persons who were not attending school.

(b) Excludes persons who did not state their highest year of school completed.

Source: ABS 2006 Census of Population and Housing

Indigenous people living in rural or remote areas of Australia were less likely than those in urban areas to have completed Year 12. In 2006, 31% of Indigenous people living in major cities had completed school to this level, compared with 22% in regional areas and 14% in remote areas. With the exception of Queensland, this was reflected across the states and territories, with the ACT (46%) having the largest proportion of Indigenous people who had completed Year 12 and the Northern Territory the lowest (10%).

Despite the improvements in school completion within the Indigenous population, Indigenous people aged 15 years and over were still half as likely as non-Indigenous Australians to have completed school to Year 12 in 2006 (23% compared with 49%). They were also twice as likely to have left school at Year 9 or below (34% compared with 16%). In 2006, around 10,400 young Indigenous adults aged 18–24 years (22%) had left school

Highest year of school completed continued

at Year 9 or below compared with 58,100 non-Indigenous young people in the same age group (4%). These relative differences have remained unchanged since 2001.

Non-school qualifications

Non-school qualifications are attained through the successful completion of vocational education and training and/or higher education at universities. Some vocational education and training may be undertaken in conjunction with secondary school studies. At the broadest level, non-school qualifications are grouped as follows: Postgraduate degree; Graduate diploma/Graduate certificate; Bachelor degree; Advanced diploma/Diploma; and Certificate. Within the Certificate grouping, a distinction is made between Certificate levels I/II and Certificate levels III/IV due to significant differences in the skills and knowledge attained by students completing Certificates at these levels. While Certificate levels I/II can be generally characterised as providing a set of basic vocational skills with a narrow range of application, Certificate levels III/IV provide a broader knowledge base and the skills necessary to perform a wide range of skilled tasks, to provide technical advice of a complex nature, and to provide work group leadership when organising activities (ABS 2001).

Results from the 2006 Census of Population and Housing show that 47,600 Indigenous people aged 25–64 years had attained a non-school qualification. The proportion of Indigenous people who had a non-school qualification increased from 20% in 2001 to 26% in 2006. The majority of this increase was at the Certificate/Diploma level (14% to 20%). There was only a slight increase in the proportion of those with a Bachelor Degree or above (4% to 5%).

There was no difference in the proportion of Indigenous males and females who had a non-school qualification in 2006 (26%). Reflecting the location of tertiary institutions and the availability of jobs that utilise tertiary qualifications, the likelihood of having a non-school qualification was lower in remote areas than in non-remote areas. Overall, 30% of Indigenous people aged 25–64 years in non-remote areas had a non-school qualification compared with 15% of people in remote areas.

A relatively small number of Indigenous people did not report the level of their non-school qualification (2,200 or 5% of those with a non-school qualification). Of the 45,300 Indigenous people aged 25–64 years who reported their level of qualification in 2006, 62% had obtained a Certificate (48% had a Certificate level III/IV, 8% had a Certificate level I/II, and 6% had a Certificate, the level of which was unknown). Reflecting a greater tendency on the part of men to undertake study towards a trade qualification, Indigenous men had attained a Certificate level III/IV at almost twice the rate of Indigenous women (63% compared with 34%). Around one in six Indigenous people (17%) had an Advanced Diploma or Diploma and 21% had a Bachelor Degree or above. The majority of Indigenous people with higher level degrees (i.e. above the Certificate level) were female. Indigenous women were twice as likely as Indigenous men to have an Advanced Diploma or Diploma (22% compared with 12%) and more than one-and-a-half times as likely to have a Bachelor degree or above (26% compared with 15%).

Among the 42,400 Indigenous people aged 25–64 years who reported both the level of their non-school qualification and their main field of study, 18% had studied in the field of Management and Commerce, 17% in Society and Culture, and 16% in Engineering and

*Non-school qualifications
continued*

Related Technologies. Indigenous men were much more likely than women to have a qualification in the field of Engineering and Related Technologies and Architecture and Building, whereas women were more likely than men to have attained a qualification in the fields of Management and Commerce, Education, and Health.

Although there have been continued improvements in the educational attainment of Indigenous Australians in recent years, their levels of attainment remain below those of non-Indigenous Australians. Among those aged 25–64 years, non-Indigenous people were twice as likely as Indigenous people to have a non-school qualification in 2006 (53% compared with 26%). Non-Indigenous people were more than four times as likely to have a Bachelor Degree or above (21% compared with 5%) and twice as likely to have an Advanced Diploma or Diploma (9% compared with 4%).

EDUCATION,
EMPLOYMENT AND
INCOME

*The transition from
education to work*

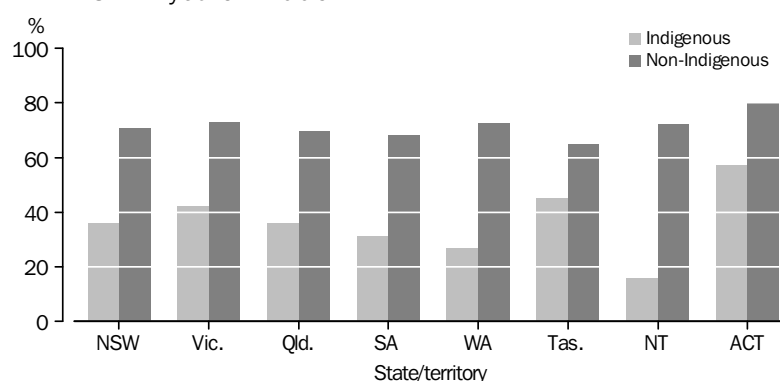
The transition from school to continued study or full-time employment can have long-term implications. For example, those who are not fully engaged in either education and/or work (i.e. not in full-time work, full-time education or in a combination of both part-time work and part-time study) during this period may be at risk of becoming long-term unemployed, underemployed or only marginally attached to the labour force (ABS 2006f).

One-third (33%) of all Indigenous young people aged 18–24 years were fully engaged in work and/or study in 2006, similar to the rate reported in 2001 (31%). Indigenous males were more likely than Indigenous females to be fully engaged (36% compared with 29%), while participation in full-time work and/or study was higher among people in non-remote than remote areas (38% compared with 18%).

In 2006, Indigenous young people aged 18–24 years were half as likely as non-Indigenous young people to be engaged in either full-time work, full-time study or in both part-time work and part-time study (33% compared with 71%). Across the states and territories, there was relatively wide variation in the proportion of Indigenous young people fully engaged compared with non-Indigenous young people. Reflecting increased access to educational institutions and mainstream employment opportunities in urban areas, the ACT had the highest proportion of Indigenous young people fully participating in education and/or work (57%), followed by Tasmania (45%) and Victoria (42%) (graph 3.4).

*The transition from
education to work
continued*

3.4 FULLY ENGAGED IN EDUCATION AND/OR WORK(a), Persons aged 18–24 years—2006



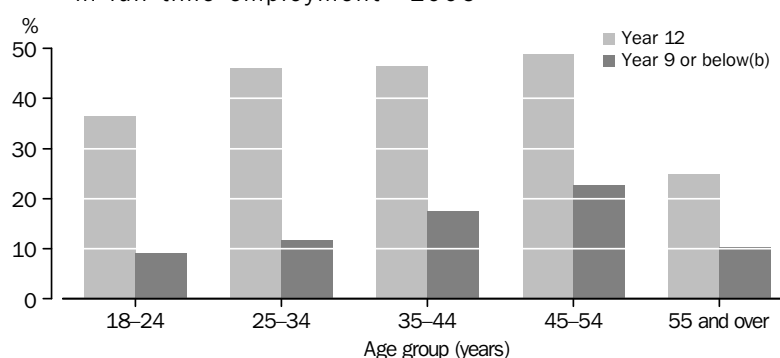
(a) Employed full-time, studying full-time or both employed part-time and studying part-time.

Source: ABS 2006 Census of Population and Housing

*Education and
employment*

The positive effect that education has on an individual's economic outcomes, particularly employment and income, has been well established (Biddle 2005). Results from the 2006 Census show that Indigenous people aged 15 years and over with higher levels of schooling (who were not currently attending secondary school) were more likely than those with lower levels of attainment to be in full-time employment. In every broad age group, Indigenous people who had completed Year 12 were more than twice as likely as those who had completed school to Year 9 or below to have a full-time job (graph 3.5). This was particularly the case for young people aged 18–24 years, where the rate of full-time employment among those who had completed Year 12 was four times as high as among those who had left school at Year 9 or below (37% compared with 9%).

3.5 HIGHEST YEAR OF SCHOOL COMPLETED(a), Indigenous persons in full-time employment—2006



(a) Excludes persons still attending secondary school.

(b) Includes persons who never attended school.

Source: ABS 2006 Census of Population and Housing

Among those who had completed Year 12, the proportion of people in full-time employment was lower in the Indigenous population than in the non-Indigenous population (42% compared with 49%). Rates of part-time employment and non-participation in the labour force were similar for both groups. However, among

*Education and
employment continued*

Australians who had completed Year 12, Indigenous people were more than twice as likely as non-Indigenous people to be unemployed (7% compared with 3%) (table 3.6).

3.6 LABOUR FORCE STATUS, by highest year of school completed—Persons aged 15 years and over—2006

		YEAR 12		YEAR 10/11		YEAR 9 OR BELOW(a)	
		Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
Employed							
Full-time	%	(b) 41.7	49.2	29.8	42.2	13.7	19.2
Part-time	%	20.5	20.6	18.7	17.9	14.0	9.5
Total(c)	%	68.2	74.1	53.6	64.2	31.3	31.3
Unemployed	%	7.1	3.2	10.3	3.6	8.5	2.8
Not in the labour force	%	23.3	22.2	34.1	31.4	57.1	64.2
Not stated	%	1.4	0.6	2.0	0.8	3.1	1.6
Persons aged 15 years and over	no.	53 491	6 549 115	100 552	4 693 351	78 827	2 104 152
Labour force participation rate	%	75.3	77.2	63.9	67.8	39.8	34.2
Unemployment rate	%	9.5	4.1	16.1	5.3	21.4	8.3

(a) Includes persons who never attended school.

(b) Unemployed persons as a proportion of those in the labour force.

(c) Includes persons for whom full-time/part-time status was not known and persons who were away from work in the last four weeks.

Source: ABS 2006 Census of Population and Housing

The same pattern of association is evident among those who had completed a non-school qualification. Indigenous people aged 25–64 years who had a non-school qualification of a Certificate III or above were more than twice as likely as those without a non-school qualification to be employed full-time (52% compared with 23%). Indigenous women with a Certificate III or above were less likely than Indigenous men with the same level of qualification to be employed full-time, and were around twice as likely to be employed part-time or not be participating in the labour force. This reflects the fact that many women in this age group are likely to be caring for children full-time, or combining childcare with part-time employment (ABS 2006d).

In 2006, the difference in the full-time employment rates for Indigenous and non-Indigenous people with a Certificate III or above was 8 percentage points (52% compared with 60%) (table 3.7). This disparity in full-time employment rates was considerably lower than the difference between the full-time employment rates for Indigenous and non-Indigenous people with a non-school qualification (35% compared with 56%) and between Indigenous and non-Indigenous people without a non-school qualification (23% compared with 41%).

Education and
employment *continued*

3.7 LABOUR FORCE STATUS, by non-school qualification—Persons
aged 25–64 years—2006

		NON-SCHOOL QUALIFICATION			No non-school qualification	
		Certificate III or above (a)	Other	Total		Total
INDIGENOUS						
Employed						
Full-time	%	51.8	16.1	34.9	22.8	27.7
Part-time	%	18.7	11.7	15.4	17.4	16.6
Total(b)	%	76.2	32.3	55.4	44.6	49.0
Unemployed	%	5.7	5.6	5.7	8.4	7.3
Not in the labour force	%	17.1	39.2	27.6	45.1	38.0
Not stated	%	0.9	22.9	11.3	1.9	5.7
Persons aged 25–64 years	no.	38 939	35 067	73 998	108 786	182 791
Labour force participation rate	%	82.0	37.9	61.1	53.0	56.3
Unemployment rate	%	7.0	14.8	9.3	15.8	13.0
NON-INDIGENOUS						
Employed						
Full-time	%	60.3	38.3	56.5	41.1	50.0
Part-time	%	18.7	20.0	18.9	19.4	19.1
Total(b)	%	83.6	63.6	80.1	64.6	73.6
Unemployed	%	2.5	3.5	2.7	3.8	3.2
Not in the labour force	%	13.6	26.1	15.8	30.8	22.1
Not stated	%	0.3	6.7	1.4	0.7	1.1
Persons aged 25–64 years	no.	4 670 956	981 530	5 652 487	4 165 625	9 818 107
Labour force participation rate	%	86.1	67.2	82.8	68.5	76.7
Unemployment rate	%	2.9	5.3	3.2	5.6	4.1

(a) Comprises Certificate levels 3 and 4, Diplomas and Advanced diplomas, Bachelor degrees, Graduate diplomas, Graduate certificates and Postgraduate degrees.

(b) Includes persons for whom full-time/part-time status was not known and persons who were away from work in the last four weeks.

Source: ABS 2006 Census of Population and Housing

Education and income

In 2006, Indigenous people who had completed secondary school had higher incomes than those who had left school at lower grades. Among those who were employed, Indigenous people aged 15 years and over who had completed Year 12 had a median gross individual income of \$620 per week compared with \$405 per week for those who left school at Year 9 or below. Nevertheless, employed Indigenous people who had completed Year 12 had a lower median weekly income in 2006 than did employed non-Indigenous people with Year 12 (\$620 per week compared with \$811 per week).

Likewise, among those aged 25–64 years who were employed, Indigenous people with a Certificate III or above had one-and-a-half times the weekly income of those without a non-school qualification (\$791 compared with \$510). However, they still had a lower median weekly income compared with non-Indigenous people with the equivalent qualification level (\$791 compared with \$965).

LINKS BETWEEN EDUCATION AND HEALTH

There is growing evidence that education leads to more than just better employment opportunities and higher income. International research has clearly established that higher levels of educational attainment are also associated with improved health outcomes (ABS & AIHW 2005). For example, strong positive correlations have been found between parental education, particularly that of the mother, and child health. It has also been shown that higher levels of educational attainment are associated with better self-assessed health and physical functioning, and lower levels of morbidity and mortality (Albano et al 2007; Ross & Wu 1995).

However, while there is general acceptance of a positive association between education and health, the full extent of this relationship has yet to be explained (see box 3.8). Likewise, while there is some evidence to suggest that the effect of education on health is similar for Aboriginal and Torres Strait Islander people (Biddle 2005; Gray & Boughton 2001), there has been relatively little research overall.

3.8 EXPLAINING THE LINKS BETWEEN EDUCATION AND HEALTH

While the positive association between education and health has been well established, the explanations for the association have not. Generally, the most common explanations fall into two main categories. Firstly, education may lead to better health outcomes through increasing a person's health-related knowledge and information, or their ability to make efficient use of such information. Doing so may increase the likelihood of a person engaging in positive health behaviour (e.g. exercising, regular health check-ups), or alternatively not engaging in behaviour likely to be harmful to one's health (e.g. smoking).

Furthermore, those with higher education levels are more likely to be employed and generally have access to better working conditions and higher incomes. These factors may in turn affect health by allowing a person to avoid some of the negative health consequences of 'low status' jobs, or through increasing the ability to pay for health or health related products, such as medication, health insurance, specialist services and so on. Well educated people may also feel a greater sense of control over their lives and their health, and have higher levels of social support.

Secondly, the association between education and health may be partly explained by the fact that healthy individuals are better able to undertake education in the first place. A child's health has a powerful impact on whether or not they attend school and on their ability to learn and participate in school activities. Therefore children with disability or chronic health conditions may be at risk of not completing their education (for more details on the impact of health on education, see Chapter 3 in the 2005 edition of this report). Similarly, poor health could manifest itself through relatively low life expectancy, thereby not allowing a person to enjoy the benefits of education for as long as they otherwise would. Poor health may also restrict a person's ability to make use of their enhanced earnings power derived from their education.

Source: Biddle 2005; Kennedy 2003; Ross & Wu 1995

*Health and education
correlations from the
2004–05 NATSIHS*

This section explores the relationship between highest level of schooling and selected health indicators for Indigenous people aged 18 years and over using the results from the 2004–05 NATSIHS. However, it is important to note that the interactions between educational attainment and health outcomes are complex and are difficult to measure in household surveys. So while the NATSIHS can provide insights into the associations between school completion and health (and vice versa), it cannot determine the causal pathways that underlie them.

Furthermore, both level of education and health status are strongly related to age, meaning that younger people are much more likely than older people to be in good health and to be well educated. For example, in 2004–05, those aged 18–34 years comprised 71% of all Indigenous people who had completed Year 12 and 62% of all Indigenous people who reported excellent/very good health, although this age group represented slightly less than half the total adult population. Therefore to reduce the effect of age, the following analysis focuses on two broad age groups: young adults aged 18–34 years and older adults aged 35 years and over.

Results from the 2004–05 NATSIHS show that educational attainment was positively associated with health status. Table 3.9 shows that young Indigenous adults (aged 18–34 years) who had completed Year 12 were more likely than those who had left school at Year 9 or below to rate their health as excellent or very good (57% compared with 45%), and were less likely to rate their health as fair or poor (10% compared with 16%). They were also around half as likely to report high/very high levels of psychological distress in the last four weeks (19% compared with 35%). A similar pattern of association between educational attainment and health outcomes was also observed for Indigenous people aged 35 years and over.

The likelihood of engaging in health risk behaviours also decreased with higher levels of schooling. In 2004–05, young adults who had completed Year 12 were half as likely as those who had completed Year 9 or below to regularly smoke and to consume alcohol at long-term risky/high risk levels. In non-remote areas, Indigenous young people with higher educational attainment were also less likely to be sedentary or engage in low levels of exercise, and to have no usual daily intake of fruit or vegetables (table 3.9). However, among Indigenous people aged 35 years and over, only rates of smoking and low fruit consumption significantly decreased with higher levels of schooling.

3.9 SELECTED HEALTH CHARACTERISTICS OF INDIGENOUS PERSONS, by highest year of school completed(a)—2004–05

		18–34 YEARS				35 YEARS AND OVER			
		Year 12	Year 10/11	Year 9 or below(b)	Total(c)	Year 12	Year 10/11	Year 9 or below(b)	Total(c)
Self-assessed health status									
Excellent/Very good	%	(d) 57.4	48.5	(d) 44.8	50.6	(e) 38.9	35.8	(e) 21.2	29.4
Good	%	32.9	36.6	39.4	36.0	34.4	40.2	34.1	36.6
Fair/poor	%	(d) 9.7	14.8	(d) 15.7	13.3	(e) 26.7	24.0	(e) 44.7	34.1
Long-term health conditions									
Has a long-term health condition	%	(d) 75.5	70.4	(d) 68.2	71.6	89.1	88.7	92.1	90.4
Diabetes/high sugar levels	%	* 1.9	3.3	* 3.5	2.8	(e) 15.7	11.5	(e) 25.9	18.8
Eyes/sight problems	%	(d) 33.8	24.0	(d) 18.5	26.0	(e) 63.9	59.3	(e) 75.9	67.7
Ear/hearing problems/diseases	%	(d) 8.7	10.3	(d) 15.7	11.0	20.0	15.9	21.8	19.2
Heart and circulatory problems/diseases	%	(d) 5.4	9.1	(d) 10.5	8.2	(e) 27.0	23.8	(e) 40.9	32.3
Asthma	%	18.0	17.2	13.8	16.7	15.8	14.2	18.1	16.3
Arthritis	%	5.4	5.9	5.7	5.7	24.0	23.2	30.7	26.8
Back pain/symptoms	%	14.8	20.9	19.7	18.6	28.3	28.1	27.0	27.7
Osteoporosis	%	np	np	np	*—	** (e) 0.8	* 2.2	(e) 4.0	2.9
Kidney disease	%	** 0.9	* 2.4	* 2.1	1.8	** (e) 0.8	2.7	(e) 5.9	3.9
Does not have a long-term health condition	%	(d) 24.5	29.6	(d) 31.8	28.4	10.9	11.3	7.9	9.6
Health risk factors									
Current daily smoker	%	(d) 33.8	58.7	(d) 70.1	53.0	(e) 35.4	50.4	(e) 48.2	47.4
Long-term risky/high risk alcohol consumption(f)	%	(d) 9.8	19.8	(d) 20.5	16.6	18.1	16.4	15.8	16.3
Short-term risky/high risk alcohol consumption(f)	%	(d) 13.8	24.5	(d) 27.3	21.6	* 12.8	17.4	18.0	17.1
Overweight/obese(g)	%	50.0	52.2	54.7	51.9	73.1	67.7	67.1	68.2
Sedentary/low levels of exercise(h)	%	(d) 69.0	74.8	(d) 79.6	73.5	75.0	81.0	84.3	81.6
No usual daily fruit intake	%	(d) 11.4	18.7	(d) 19.5	16.5	(e) 5.1	12.8	(e) 15.9	13.3
No usual daily vegetable intake	%	* (d) 3.5	6.1	(d) 10.1	6.1	* 4.6	3.1	7.0	5.1
High/very high psychological distress(i)	%	(d) 19.2	28.1	(d) 34.5	26.5	(e) 20.9	26.0	(e) 31.0	27.7
Indigenous persons aged 18 years and over	no.	41 100	57 200	27 200	125 600	17 100	52 600	62 100	131 800

* estimate has a relative standard error of 25% to 50% and should be used with caution

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

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Excludes persons still attending secondary school.

(b) Includes persons who never attended school.

(c) Includes 'Highest year of school completed not stated'.

(d) Difference between Year 12 and Year 9 or below for persons aged 18–34 years is statistically significant.

(e) Difference between Year 12 and Year 9 or below for persons aged 35 years and over is statistically significant.

(f) See Glossary for more information.

(g) Proportions are calculated excluding 'Body mass index unknown'.

(h) Non-remote areas only.

(i) In the last four weeks.

Source: ABS 2004–05 NATSIHS

Health and education correlations from the 2004–05 NATSIHS continued

Education level has also been shown to be associated with long-term health conditions, particularly heart disease and diet-related illnesses (MCEETYA 2001). In 2004–05, Indigenous people aged 35 years and over who had completed school to Year 12 were around half as likely to report having diabetes or cardiovascular disease as those who had left school at Year 9 or below. They were also less likely to report eye/sight problems, osteoporosis and kidney disease.

Poor health among young people may also impact on their opportunity to attend and succeed at school. As outlined in the 2005 edition of this report, health conditions such as otitis media (middle ear infection) and poor nutrition have been shown to negatively affect educational attainment. In 2004–05, young Indigenous people who had left school

*Health and education
correlations from the
2004–05 NATSIHS
continued*

at Year 9 or below were around twice as likely as those who had completed Year 12 to have ear/hearing problems and heart/circulatory diseases. These conditions—if present from childhood—may have had a significant impact on both school performance and attendance. However, because the NATSIHS did not collect information on age of onset of chronic conditions, causality cannot be determined.

ADDITIONAL EFFECTS OF EMPLOYMENT AND INCOME ON HEALTH

Overall, half (51%) of Indigenous people aged 18–34 years reported excellent or very good health in 2004–05. This proportion was higher among those who had completed Year 12 (57%) and among those who were employed (55%). Just under two-thirds (63%) of people who had completed Year 12 and who were also employed reported excellent/very good health. This proportion was only slightly higher among those who had completed Year 12, who were employed and who had access to higher household incomes (64%) (table 3.10).

3.10 SELECTED SOCIOECONOMIC INDICATORS, Indigenous persons aged 18–34 years with excellent/very good self-assessed health—2004–05

	Excellent/very good health.....	
	%	no.
Completed Year 12	57.4	23 600
Employed	55.1	38 400
Household income in third quintile or above(a)	57.8	20 600
Completed Year 12 and employed(b)	62.9	15 600
Completed Year 12 and household income in third quintile or above(c)	64.1	11 600
Completed Year 12 and employed and household income in third quintile or above(b)(c)	65.5	11 200
Indigenous persons aged 18–34 years with excellent/very good health	51.3	64 000

(a) Based on equivalised gross household weekly income.

(b) Excludes persons for whom information on highest year of school completed was not known.

(c) Excludes persons for whom information on highest year of school completed and/or household income was not known.

Source: ABS 2004–05 NATSIHS

The 2004–05 NATSIHS used a modified five-item version of the Kessler Psychological Distress Scale (known as the K5) to measure non-specific psychological distress. A high score indicates that the person may be experiencing feelings of anxiety or depression on a regular basis, whereas a low score indicates that the person is experiencing these feelings infrequently or not at all. In 2004–05, around three-quarters (73%) of all Indigenous people aged 18–34 years reported low levels of psychological distress in the four weeks prior to interview. Again, the proportion of Indigenous people reporting low levels of psychological distress was higher among those who had completed Year 12 (81%) and those who were employed (79%), but was only slightly higher for those who met both criteria (83%). The rate did not change significantly with inclusion of the income criterion (83%) (table 3.11).

Health and education
correlations from the
2004–05 NATSIHS
continued

ADDITIONAL EFFECTS OF EMPLOYMENT AND INCOME ON HEALTH continued

3.11 SELECTED SOCIOECONOMIC INDICATORS, Indigenous persons aged 18–34 years with low levels of psychological distress—2004–05

	Low psychological distress(a).....	
	%	no.
Completed Year 12	80.6	32 800
Employed	79.3	54 800
Household income in third quintile or above(b)	79.7	28 300
Completed Year 12 and employed(c)	82.7	20 400
Completed Year 12 and household income in third quintile or above(b)(d)	82.5	14 900
Completed Year 12 and employed and household income in third quintile or above(b)(d)	83.1	14 200
Indigenous persons aged 18–34 years with low levels of psychological distress	73.0	91 100

(a) In the four weeks prior to interview.

(b) Based on equivalised gross household weekly income.

(c) Excludes persons for whom information on highest year of school completed was not known.

(d) Excludes persons for whom information on highest year of school completed and/or household income was not known.

Source: ABS 2004–05 NATSIHS

SUMMARY

Educational attainment among Aboriginal and Torres Strait Islander people continues to improve. Between 2001 and 2006, the proportion of Indigenous people aged 15 years and over who had completed Year 12 increased from 20% to 23%. There was also an increase in the proportion of people who had completed a non-school qualification (20% to 26%).

Higher educational attainment was associated with better employment prospects and higher income in 2006. In every broad age group, Indigenous people aged 15 years and over who had completed Year 12 were more than twice as likely as those who had completed school to Year 9 or below to be in full-time employment in 2006. Likewise, rates of full-time employment were twice as high among Indigenous people aged 25–64 years with a non-school qualification of a Certificate III or above compared with those without a non-school qualification.

Among employed Indigenous people aged 15 years and over, the median individual weekly income for those who had completed Year 12 (\$620 per week) was one-and-a-half times that of people who had completed Year 9 or below (\$405 per week). Similarly, employed Indigenous people aged 25–64 years who had a Certificate III or above had one-and-a-half times the median individual weekly income of those without a non-school qualification (\$791 compared with \$510).

Higher levels of schooling were also linked with improved health outcomes. In 2004–05, Indigenous people aged 18–34 years with higher levels of schooling were more likely than those with lower levels of schooling to report better self-assessed health and lower

SUMMARY *continued*

levels of psychological distress. They were also less likely to regularly smoke, drink alcohol at risky/high risk levels, be physically inactive and have no usual daily intake of fruit or vegetables.