### CHAPTER 4

#### HOUSING CIRCUMSTANCES .....

INTRODUCTION

The housing circumstances of Aboriginal and Torres Strait Islander people differ markedly from those of other Australians. Indigenous people are much less likely to own their homes and are more likely to receive some form of government housing assistance. The average size of Indigenous households is larger than the size of other Australian households. Some Indigenous people, particularly those in more remote areas, live in poorly maintained housing without essential infrastructure such as a supply of safe drinking water or effective sewerage systems. Indigenous people are also vulnerable to homelessness because of their relative social and economic disadvantage.

Housing has been identified as a major factor affecting the health of Aboriginal and Torres Strait Islander people. Inadequate or poorly maintained housing and the absence of functioning infrastructure can pose serious health risks. Overcrowded dwellings and poor quality housing have been associated with poorer physical and mental health among residents.

Housing assistance programs are especially important for Indigenous people as they are generally aimed at people on low incomes or those with special needs (box 4.5). A large proportion of Indigenous households rent their accommodation through housing assistance programs such as public housing or Indigenous community housing. For those in the private rental market, rent assistance programs provide an important income supplement for lower income households. Housing assistance programs also play a role in relation to homelessness both by directly assisting homeless people and by helping those at risk of homelessness. For example, the Supported Accommodation Assistance Program (SAAP) was designed specifically to assist homeless people with accommodation and other services.

This chapter describes the characteristics of Indigenous households and their housing circumstances. It includes data on tenure type and housing assistance, location and housing costs. The chapter examines the relationship between housing and health, and provides data on those housing characteristics that may contribute to poor health outcomes—overcrowding and poor quality housing. The final part of the chapter focuses on those who are most disadvantaged in relation to housing, namely homeless people. Detailed information on the characteristics of homeless people is provided through data from the AIHW SAAP National Data Collection.

Indigenous households

For the purposes of analysis, Indigenous households have been defined as households containing at least one Indigenous person of any age, excluding visitors. This definition is also used in the National Housing Assistance Data Dictionary (AIHW 2006e).

HOUSING TENURE

Of the estimated 166,700 Indigenous households in the 2006 Census, 34% were home owners (with or without a mortgage), 59% were renting and 3% had other types of tenure (figure 4.1). Among the 98,100 Indigenous households in rental accommodation, 27% were renting privately, 20% were renting from state or territory housing authorities, 9% were renting from Indigenous or mainstream community housing organisations and the remaining 4% were other renters (i.e. with other or unspecified landlord types) (figure 4.1). In comparison, 69% of the estimated 7 million other Australian households were home owners (with or without a mortgage) 26% were renting and 2% had other tenure types. Of the 1.8 million other households that were renting, the majority were renting privately (1.4 million or 20% of other households), with just 4% renting from state or territory housing authorities and 1% from Indigenous or mainstream community organisations.

#### 4.1 INDIGENOUS HOUSEHOLDS AND PERSONS IN INDIGENOUS HOUSEHOLDS-2006 Indigenous households - 166 669(a) All persons - 549 922 Indigenous persons - 410 557 Renters Homeowners/purchasers Other tenure types(b) 98 091 households - 59% 56 026 households - 34% 4 457 households - 3% 332 420 persons - 60% 181 286 persons - 33% 14 578 persons - 3% 265 205 Indigenous persons 116 144 Indigenous persons 11 429 Indigenous persons No mortgage With mortgage 18 363 households - 11% 37 663 households - 23% 50 743 persons - 9% 130 543 persons - 24% 32 117 Indigenous persons 84 027 Indigenous persons Renters - housing Private renters Other renters(c) assistance programs 44 406 households - 27% 5 933 households - 3% 47 752 households - 29% 133 235 persons - 24% 17 951 persons - 3% 181 235 persons - 33% 89 820 Indigenous persons 13 876 Indigenous persons 161 510 Indigenous persons State/Territory Housing Indigenous or mainstream community housing(d) Authority 33 294 households - 20% 14 458 households - 9% 109 720 persons - 20% 71 515 persons - 13%

(a) The 8,095 Indigenous households with tenure type not stated are not shown in this chart.

69 212 Indigenous persons

- (b) Includes households and persons in rent/buy schemes, living rent-free or under a life tenure scheme.
- (c) Includes 1,331 Indigenous households with landlord not stated.
- (d) Community housing managed by Indigenous community housing organisations or mainstream community housing providers.

Source: ABS 2006 Census of Population and Housing

92 298 Indigenous persons

HOUSING TENURE continued

Home ownership provides a relatively secure form of housing tenure. There are much lower rates of home ownership among Indigenous households, partly reflecting the lower socioeconomic status of many Indigenous households and the fact that one-quarter of the Indigenous population live on Indigenous land in remote areas where individual home ownership is generally not possible. In 2006, 11% of Indigenous households were home owner households without a mortgage and 23% were home owner households with a mortgage (figure 4.1).

As most residents of Indigenous households are Aboriginal or Torres Strait Islander people, the proportion of Indigenous people in Indigenous households, by tenure type, is broadly similar to the distribution of Indigenous households by tenure type. However, there are some differences related to the size of households across the different tenure types (see table 4.8). There was a larger proportion of Indigenous people living in Indigenous or mainstream community housing (17%) than the proportion of Indigenous households with this tenure type (9%). In contrast, a smaller proportion of Indigenous people were living in home owner households (28%) than the proportion of home owner households (34%) (table 4.2). This reflects the larger average household size for those living in Indigenous or mainstream community housing (see table 4.8). Information about the housing circumstances of Indigenous people, in addition to Indigenous households, is shown in selected tables in this chapter.

Changes over time in housing tenure

Between 2001 and 2006 the proportion of Indigenous home owner households increased from 31% to 34%. The proportion of these households without a mortgage decreased from 13% in 2001 to 11% in 2006, while the proportion with a mortgage increased from 18% to 23% over the same period (table 4.2). The proportions of Indigenous households renting from Indigenous or mainstream community housing organisations and those renting from private or other providers, fell by around two percentage points between 2001 and 2006, while the proportion of Indigenous households renting from state housing authorities remained relatively unchanged over this period.

Consistent with increases in the proportion of households living in dwellings that were being purchased, the proportion of Indigenous people living in these dwellings increased from 16% in 2001 to 20% in 2006 (table 4.2). Over the same period, there was a decrease in the proportion of Indigenous people living in Indigenous or mainstream community housing (from 21% in 2001 to 17% in 2006).

Changes over time in housing tenure continued

#### INDIGENOUS HOUSEHOLDS AND INDIGENOUS PERSONS, by **4.2** tenure type—2001 and 2006

		HOUSEHOLDS		PERSONS(	a)
		2001	2006	2001	2006
Fully owned	%	12.6	11.0	9.1	7.8
Being purchased	%	18.4	22.6	16.2	20.4
Private and other renter(a)	%	32.2	30.2	26.3	25.3
Renter state or territory housing					
authority	%	20.4	20.0	22.5	22.5
Renter Indigenous/mainstream					
community housing	%	10.9	8.7	20.8	16.8
Other tenure(b)	%	2.3	2.7	2.3	2.8
Not stated	%	3.2	4.9	2.9	4.4
Total number(c)	no.	144 493	166 669	372 125	411 334

- (a) Includes households for which landlord type was not stated.
- (b) Includes those living under life tenure schemes, those living rent free and participants in rent/buy schemes.
- (c) Excludes visitors.

Source: ABS 2001 and 2006 Censuses of Population and Housing

Tenure by state and territory

The tenure type of Indigenous households varies by state and territory, partly reflecting differences in the types of housing that are available to Indigenous people. In 2006, the Northern Territory had the lowest proportion of Indigenous home owner households (18%) and the highest proportion of households in Indigenous or mainstream community housing (41%). Tasmania, on the other hand, had a relatively high proportion of Indigenous home owner households (52%) and just 1% of Indigenous households in Indigenous or mainstream community housing (table 4.3).

Rates of home ownership were highest in jurisdictions with mainly urban Indigenous populations—Tasmania (52%), the Australian Capital Territory (42%) and Victoria (39%). The proportions of Indigenous households renting from private and other landlords were highest in Queensland (37%), New South Wales (32%), and Victoria (31%). Relative to other jurisdictions, South Australia (29%), the Australian Capital Territory (27%) and Western Australia (26%) had high proportions of Indigenous households renting from state/territory housing authorities (table 4.3). State and territory housing authorities provide both public housing and state and territory owned and managed Indigenous housing (SOMIH). Information on SOMIH is covered in some detail in later sections of this chapter.

At the state/territory level, the distribution of Indigenous people, by tenure type, is broadly similar to the proportions of Indigenous households by tenure type. Variation is due to differences in the size of households by tenure type. For example, the proportion of Indigenous people living in Indigenous or mainstream community housing in the Northern Territory was significantly greater than the proportion of Indigenous households in these types of dwellings (63% compared with 41%) (table 4.3). This difference reflects the higher average number of people living in Indigenous or mainstream community housing (five people per dwelling) compared with other types of housing (three people per dwelling). For more information on household size by tenure, see table 4.8.

4.3 INDIGENOUS HOUSEHOLDS AND PERSONS, by tenure type and state/territory—2006

		NSW	Vic.	Qld	WA	SA	Tas.	ACT	NT	Australia(a)	
• • • • • • • • • • • • • •											
HOUSEHOLDS											
Home owner/purchaser Private and other	r %	35.6	39.3	31.5	29.4	33.4	51.9	41.5	17.9	33.6	
renter(b) Renter state/territory	%	32.1	30.7	36.5	24.2	23.6	25.3	27.0	13.9	30.2	
housing authority Renter Indigenous/ mainstream	%	21.0	19.5	16.3	25.8	28.8	16.6	26.5	14.3	20.0	
community housing	%	4.9	2.4	8.6	10.9	6.3	1.0	2.0	41.2	8.7	
Other tenure	%	2.2	2.7	2.7	3.4	2.3	2.6	1.4	4.0	2.7	
Not stated	%	4.2	5.3	4.3	6.4	5.6	2.7	1.7	8.7	4.9	
Total number(c)	no.	EZ 040	44454	4= 000	40.004			4 04 4			
Total lidiliber (c)	110.	57 246	14 151	45 938	18 381	9 949	7 923	1 814	11 199	166 669	
• • • • • • • • • • • • •	• • • •	57 246	14 151	• • • • • • • •	• • • • • • •	9 949	7 923	1 814	11 199	166 669	
• • • • • • • • • • • • •		57 246	14 151	• • • • • • • •	RSONS	9 949	7 923	1814	11 199	166 669	
Home owner/purchaser		33.1	37.8	• • • • • • • •	• • • • • • •	29.6	52.1	40.1	10.1	28.3	
Home owner/purchase		• • • • • • •		PE	RSONS	• • • • • • •	• • • • • • •	• • • • • •	• • • • • • •	• • • • • • •	
Home owner/purchaser Private and other renter(b)	r %	33.1	37.8	PE 26.4	RSONS 23.6	29.6	52.1	40.1	10.1	28.3	
Home owner/purchaser Private and other renter(b) Renter state/territory housing authority Renter Indigenous/	" % " %	33.1 29.5	37.8 27.2	PE 26.4	RSONS 23.6 19.2	29.6 19.6	52.1 23.9	40.1 23.2	10.1	28.3	
Home owner/purchaser Private and other renter(b) Renter state/territory housing authority Renter Indigenous/ mainstream	% % %	33.1 29.5 24.1	37.8 27.2 24.2	PE 26.4 31.4 20.5	RSONS 23.6 19.2 29.7	29.6 19.6 32.1	52.1 23.9 18.1	40.1 23.2 30.6	10.1 7.7 10.7	28.3 25.3 22.5	
Home owner/purchaser Private and other renter(b) Renter state/territory housing authority Renter Indigenous/ mainstream community housing	% % %	33.1 29.5 24.1	37.8 27.2 24.2	PE 26.4 31.4 20.5	RSONS 23.6 19.2 29.7	29.6 19.6 32.1	52.1 23.9 18.1	40.1 23.2 30.6	10.1 7.7 10.7	28.3 25.3 22.5	

<sup>(</sup>a) Includes 'Other territories'.

(c) Excludes visitors.

Source: ABS 2006 Census of Population and Housing

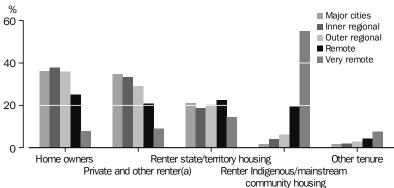
Tenure by Remoteness Areas In 2006, there were around 24,300 Indigenous households (15%) in remote or very remote areas, 76,000 (46%) living in inner and outer regional areas and 66,300 (40%) living in major cities. Tenure type varied by remoteness, reflecting the different housing options available to Indigenous people in different locations, as well as the generally lower socioeconomic status of Indigenous households in more remote areas.

Home ownership rates (with or without a mortgage) were highest among Indigenous households in inner regional areas (38%) and lowest among those in very remote areas (8%). The proportion of Indigenous households living in Indigenous or mainstream community housing was highest in very remote areas (55%) (graph 4.4).

<sup>(</sup>b) Includes landlord type not stated.

Tenure by Remoteness
Areas continued





(a) Includes landlord type not stated.

Source: ABS 2006 Census of Population and Housing

HOUSING ASSISTANCE

A large proportion of Indigenous households receive government housing assistance of some kind (see box 4.5). The following analysis is based on data from housing administrative data collections including the AIHW Commonwealth-State Housing Agreement (CSHA) and National Reporting Framework for Indigenous housing data collections, and the Commonwealth Rent Assistance data collection.

Administrative data on the number of households in these programs differ from data on tenure type from the 2006 Census. This is due to a range of factors including the under-identification of Indigenous households in public and mainstream community housing data collections. The Census data and the housing administrative data collections are also based on different reference periods and use different collection methodologies. There may also be some undercounting of Indigenous households in the Census data as this definition is dependent on the identification of Indigenous people in the Census.



### MAJOR HOUSING ASSISTANCE PROGRAMS AND ADMINISTRATIVE DATA COLLECTIONS

#### Indigenous-specific programs:

- State and territory owned and managed Indigenous housing (SOMIH) is managed by the state governments and allocated specifically to Indigenous Australians. Funding is through the Commonwealth-State Housing Agreement (CSHA).
- Indigenous community housing (ICH) is managed by Indigenous community housing organisations, with funding provided by the states and territories and the Australian Government.

#### Mainstream programs:

Public housing is administered by the states and territories and provides publicly owned dwellings that are funded through CSHA and used to provide appropriate, affordable and accessible shelter for low to moderate income earners who may have difficulty entering the housing market. HOUSING ASSISTANCE continued

- Community housing is managed by non-profit community-based organisations such as local governments, churches and charity groups and is funded through the CSHA. It takes several forms: from emergency or crisis accommodation, to medium-term or transitional accommodation, to long-term housing.
- Commonwealth Rent Assistance (CRA) is an income supplement that may be payable to recipients of social security, family tax benefit and Australian Government Department of Veteran's Affairs payments in the private rental market. To be eligible for assistance the rent paid must be above a specified threshold level, which varies according to a client's family situation.
- Private Rental Assistance (PRA) is a suite of housing assistance programs, including rental assistance (subsidies), bond assistance and relocation expenses, provided by the states and territories through the CSHA and aimed at assisting low-income households experiencing difficulty in securing or maintaining private rental accommodation. For the year ending 30 June 2006, there were 7,989 new Indigenous households who received PRA.
- Home Purchase Assistance (HPA) or home ownership assistance is provided for people who wish to buy their own house but need help with financing. Assistance can be in the form of deposit assistance, mortgage relief and access to surplus housing stock. For the year ending 30 June 2006 there were 295 new Indigenous households who received HPA.

#### Administrative data collections

The AIHW collects the national administrative data on programs funded under the CSHA, that is public rental housing, mainstream community housing, private rent assistance and home purchase assistance. There is much variability in the quality of information about mainstream housing assistance for Indigenous Australians. Indigenous identification is not complete and the number of Indigenous households receiving assistance under these programs is therefore underestimated.

The AIHW also collects data on Indigenous community housing from the Australian Government and the states and territories in the National Reporting Framework (NRF) data collection. This administrative data collection was established in 2003–04.

Data on those in receipt of Commonwealth Rent Assistance (CRA) come from the FaHCSIA Housing Dataset. A copy of this dataset is provided to the AIHW each year.

At 30 June 2006, administrative data collections recorded around 55,000 Indigenous households receiving assistance through a range of housing programs—an estimated 22,200 in Indigenous community housing, 12,400 in SOMIH, 21,100 in public rental housing and 1,700 in mainstream community housing. There were another 30,200 Indigenous income units (single persons, couples or family units comprising parents with dependent children) in receipt of CRA (table 4.6). Across Australia, over 50 in every 100 Indigenous households were receiving housing assistance of some kind—18 per 100 were in receipt of CRA, 13 per 100 in both Indigenous community housing and public housing and 7 per 100 in SOMIH.

Housing assistance by state/territory

The rate of Indigenous households in the different housing assistance programs varied across states and territories. Compared with other states, the Northern Territory had much higher rates for Indigenous community housing (61 per 100). This was followed by Western Australia (18 per 100) and Queensland (12 per 100). For SOMIH, South Australia had the highest rate (18 per 100) followed by Western Australia (12 per 100). Western Australia had the highest rate of Indigenous households in public housing (24 per 100) followed by New South Wales and the Northern Territory (15 per 100). The rate of Indigenous households receiving CRA was highest in Queensland (23 per 100) followed by New South Wales (20 per 100).

## **4.6** INDIGENOUS HOUSEHOLDS OR INCOME UNITS IN MAJOR HOUSING ASSISTANCE PROGRAMS, by state/territory—30 June 2006

	NSW	Vic.	Qld	WA	SA	Tas.	ACT	NT	Australia	
			NUMBEF	₹						
Indigenous community housing(a)	4 989	442	5 671	3 213	991	56	23	6 807	22 192	
SOMIH	4 041	1 248	2 822	2 138	1 791	346			12 386	
Public housing	(b)8 700	1 233	3 122	4 399	1 210	639	191	1 647	21 141	
Community housing	661	56	725	121	65	11	24	na	1 663	
Commonwealth Rent Assistance(c)	11 692	1 945	10 377	2 612	1 368	1 007	124	1 031	30 168	
• • • • • • • • • • • • • • • • • • • •	• • • • • • • •						• • • • • •			
	RAT	E PER	100 HO	USEHOL	DS					
Indigenous community housing(a)	8.7	3.1	12.3	17.5	10.0	0.7	1.3	60.8	13.3	
SOMIH	7.1	8.8	6.1	11.6	18.0	4.4			7.4	
Public housing	(b) 15.2	8.7	6.8	23.9	12.2	8.1	10.5	14.7	12.7	
Community housing	1.2	0.4	1.6	0.7	0.7	0.1	1.3	na	1.0	
Commonwealth Rent Assistance(c)	20.4	13.7	22.6	14.2	13.8	12.7	6.8	9.2	18.1	

<sup>..</sup> not applicable

Source: AIHW CSHA data collection and AIHW NRF data collection, CRA data collection

#### Remoteness Areas

The location of dwellings (with resident Indigenous households) provided under the three major housing assistance programs according to remoteness areas is shown in table 4.7. SOMIH is provided across all remoteness areas with 34% of SOMIH dwellings located in major cities, 48% in regional areas and 18% in remote or very remote areas. Public housing dwellings (with resident Indigenous households) were also spread across remoteness areas, with the highest proportion located in major cities (33%) followed by outer regional areas (30%). Over two-thirds of Indigenous community housing dwellings were located in remote or very remote areas (68%), with 32% located in non-remote areas (table 4.7).

At 30 June 2006, most Indigenous income units receiving CRA were located in major cities or inner regional areas (67%) with only 2% in very remote areas (Australian Government Housing Dataset June 2006).

na not available

<sup>(</sup>a) ICH data are number of dwellings at 30 June 2006 as data on the number of households are not available. The number of households would be similar to the number of dwellings.

<sup>(</sup>b) Estimate based on the 2001 Census of Population and Housing.

<sup>(</sup>c) Commonwealth Rent Assistance data refer to income units receiving CRA at 3 March 2006. Income units are used to determine eligibility for CRA and comprise single persons, couples, or families with dependent children. In some cases there may be more than one income unit per household.

Remoteness Areas continued

## **4.7** DWELLINGS (WITH INDIGENOUS HOUSEHOLDS) IN MAJOR HOUSING ASSISTANCE PROGRAMS, by Remoteness Areas—2006

	SOMIH		Public hou	sing(a)	Indigenous community housing(b)		
	no.	%	no.	%	no.	%	
Major cities	4 389	34.1	4 049	32.5	na	na	
Inner regional	2 858	22.2	1 827	14.7	7 006	32.1	
Outer regional	3 350	26.0	3 772	30.3	na	na	
Remote	1 092	8.5	2 047	16.5	2 441	11.2	
Very remote	1 198	9.3	746	6.0	12 407	56.8	
Total	12 893	100.0	12 441	100.0	21 854	100.0	

na not available

- (a) The public housing data do not include New South Wales because of the under reporting of Indigenous status. When NSW data are included the proportion of dwellings by location is similar.
- (b) Includes permanent dwellings managed by Indigenous housing organisations. Data were categorised as non-remote, remote and very remote according to the location of the organisation managing the dwellings.

Source: AIHW CSHA data collections, ABS 2006 CHINS

HOUSEHOLD TYPES AND SIZE

According to the 2006 Census, 76% of the 166,700 Indigenous households were one family households, and 14% were lone person households. The remaining 10% of Indigenous households was divided equally between multi-family households (5%) (that is, with two or more families in the household) and group households (5%) (that consist of unrelated adults).

Indigenous households are more likely to be larger than other Australian households, with an average household size of 3.4 people compared with 2.6 in other households (table 4.8 and Chapter 2). In 2006, 23% of Indigenous households had five or more residents, 18% had four, 20% had three, 26% had two and 14% had one person.

Average Indigenous household size varied by tenure type, with an average of 4.8 people per household in Indigenous or mainstream community housing compared with 3.1 for those renting from private and other landlords and 3.3 for home owner households (with or without a mortgage). Almost half (47%) of households in Indigenous or mainstream community housing had five or more residents compared with 18% of households renting from private and other landlords (table 4.8).

**4.8** INDIGENOUS HOUSEHOLDS, by tenure type and number of persons in household—2006

	Home owners	Private and other renter	Renter state/territory housing authority	Renter Indigenous/mainstream community housing	Other tenure types	Total				
NUMBER										
One person Two people Three people Four people Five or more people Total Average number per household	5 008 15 654 11 236 12 201 11 927 <b>56 027</b>	7 005 14 811 11 046 8 648 8 829 <b>50 339</b>	5 543 7 206 6 642 5 367 8 536 33 294	1 508 2 098 1 984 2 059 6 809 <b>14 458</b>	845 1 114 762 658 1 079 4 458	23 030 42 537 32 737 29 780 38 586 <b>166 669</b>				
• • • • • • • • • • •		• • • • • • • • • • • •	• • • • • • • • • • •		• • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • •				
			PROPORTIO	N (%)						
One person Two people Three people Four people Five or more	8.9 27.9 20.1 21.8	13.9 29.4 21.9 17.2	16.6 21.6 19.9 16.1	10.4 14.5 13.7 14.2	19.0 25.0 17.1 14.8	13.8 25.5 19.6 17.9				
people <b>Total</b>	21.3 <b>100.0</b>	17.5 <b>100.0</b>	25.6 <b>100.0</b>	47.1 <b>100.0</b>	24.2 <b>100.0</b>	23.2 <b>100.0</b>				

Source: ABS 2006 Census of Population and Housing

HOUSING COSTS

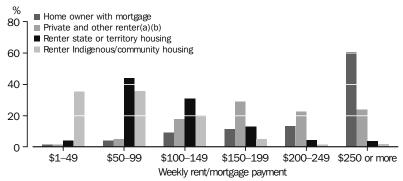
Indigenous Australians have access to a range of housing assistance programs, but housing costs remain high relative to incomes for many households. Weekly housing costs reflect the type of housing, and to some extent, the condition of the dwelling (discussed further in the section on Housing quality). Households renting from state or territory housing authorities and those renting from Indigenous or community housing providers pay rents that are subsidised or related to income, and therefore have lower effective housing costs than those renting in the private market.

Among Indigenous households in 2006, the median weekly mortgage payment for home owners with a mortgage was \$264. The median weekly rents for private/other renters were \$190, for renters of public housing (from state or territory housing authorities) were \$100 and for those renting from Indigenous or mainstream community housing organisations were \$60.

Data on the distribution of weekly housing costs for Indigenous households paying mortgages or rent are shown in graph 4.9. Of the 34,800 Indigenous households that reported their mortgage payments, 60% were paying \$250 or more per week in mortgage payments in 2006. Of the 48,600 Indigenous households renting from private/other landlords, 24% were paying \$250 or more per week in rent. More than two-thirds (71%) of Indigenous households renting from Indigenous or mainstream community organisations and 48% of those renting from state/territory housing authorities were paying less than \$100 per week in rent in 2006.

HOUSING COSTS continued





- (a) Without adjustment for Commonwealth Rent Assistance.
- (b) Includes landlord type not stated.

Source: ABS 2006 Census of Population and Housing

HOUSING AND HEALTH

Housing is a key social determinant of health and is often considered to be a proxy indicator of socioeconomic status as well as of health and wellbeing (Shaw 2004). In Britain, housing tenure has been found to be related to health outcomes such as self-assessed health, hospital admissions and mortality; with home owners having better outcomes than renters.

Housing can impact on health in both direct and indirect ways (Shaw 2004). Overcrowding, poor dwelling conditions and inadequate basic utilities such as facilities for washing clothes, sewerage systems or safe drinking water, can directly impact on both physical and mental health. Indirect effects include the area or neighbourhood in which housing is located, proximity to services and facilities, and the broader community functioning (Shaw 2004; Bailie 2007).

Health problems related to inadequate housing and infrastructure in remote areas of Australia include infectious diseases such as skin infections and infestations, respiratory infections, eye and ear infections, diarrhoeal diseases and rheumatic fever (Menzies School of Health Research 2000). These diseases have the greatest impact on Indigenous children and are directly related to factors such as inadequate water supplies, sanitation and overcrowding (Bailie 2007).

Information on the status of housing and infrastructure in discrete Indigenous communities (including access to essential services) is presented later in this chapter. Data are from the 2006 Community Housing and Infrastructure Needs Survey (CHINS).

Overcrowding

Overcrowding can put stress on bathroom, kitchen and laundry facilities as well as on sewerage systems such as septic tanks. It can lead to the spread of infectious diseases such as meningococcal, tuberculosis, rheumatic fever, respiratory diseases and skin infections (Howden-Chapman & Wilson 2000). It has also been associated with poorer self-reported physical and mental health and higher rates of smoking and hazardous drinking (Waters 2001; Shaw 2004).

#### Overcrowding continued

### 4.10 WAACHS—POOR QUALITY HOUSING

The 2001–02 Western Australian Aboriginal Child Health Survey (WAACHS) collected a range of data about the housing characteristics of families with Aboriginal children and examined their relationship to life stresses, family functioning and community characteristics (Silburn et al 2006). Using criteria based on number of bedrooms and number of people in the household, the WAACHS researchers classified 15% of dwellings with Aboriginal children as overcrowded. This result is similar to that for WA using the Canadian National Occupancy Standard and 2006 Census data (see table 4.12).

In the 2001–02 WAACHS, overcrowding was independently associated with poor housing quality, higher levels of life stresses, overuse of alcohol (causing problems in the household) and a higher number of neighbourhood problems. An earlier report from the survey, however, found that overcrowding had some positive effects. Children living in households with a high household occupancy level were half as likely to be at risk of clinically significant emotional or behavioural difficulties as children living in homes with a low household occupancy level (Zubrick et al 2005).

Data on overcrowding at the national level come from ABS surveys and the Census. Various measures can be used to define and measure the extent of overcrowding. The Canadian National Occupancy Standard for housing appropriateness is an internationally accepted measure of housing utilisation. Households that require one additional bedroom to meet the standard are considered to experience 'a moderate degree of overcrowding', whereas households requiring two or more bedrooms are said to experience a 'high degree of overcrowding'. The Canadian model is sensitive to both household size and composition and uses the following criteria to assess bedroom requirements:

- there should be no more than two people per bedroom;
- a household of one unattached individual may reasonably occupy a bed-sit (i.e. have no bedroom);
- couples and parents should have a separate bedroom;
- children less than five years of age, of different sexes, may reasonably share a bedroom:
- children five years of age or over, of the opposite sex, should not share a bedroom;
- children less than 18 years of age and of the same sex may reasonably share a bedroom; and
- single household members aged 18 years or over should have a separate bedroom.

In the 2006 Census, information on the number of bedrooms (in dwellings) was obtained for 151,900 Indigenous households (91% of all Indigenous households). Some 376,600 Indigenous people were living in these dwellings. The following overcrowding rates are based on these dwellings (and their Indigenous residents), i.e. those for whom housing utilisation could be determined.

Using the Canadian housing utilisation measure, there were around 20,700 overcrowded Indigenous households (14%) and 102,400 Indigenous people (27%) living in

Overcrowding continued

overcrowded conditions in 2006. There has been some improvement in rates of overcrowding, with the proportion of Indigenous households that were overcrowded decreasing from 16% in 2001 to 14% in 2006 (table 4.11).

Overcrowding rates varied according to tenure, with the highest rates of overcrowding found in Indigenous households renting Indigenous/mainstream community housing (40% of Indigenous households and 64% of Indigenous people). In contrast, home owners (with or without a mortgage) had the lowest rates of overcrowding (7% of Indigenous households and 11% of Indigenous people).



OVERCROWDED INDIGENOUS HOUSEHOLDS AND PERSONS LIVING IN OVERCROWDED CONDITIONS(a)(b), by tenure type—2001 and 2006

	Households	2001	Households	2006	Persons 2006	
	no.	%	no.	%	no.	%
Home owner/purchaser	3 310	7.7	3 687	6.9	12 528	11.4
Private and other renter	6 077	13.5	5 570	11.6	19 167	18.6
Renter state/territory housing authority	4 546	16.3	4 970	15.9	24 371	28.1
Renter Indigenous/mainstream community	/					
housing	6 572	42.9	5 567	39.9	43 853	63.6
Total	21 258	15.7	20 734	13.6	102 364	27.2

<sup>(</sup>a) Excludes dwellings for which the number of bedrooms was not stated.

Source: 2001 and 2006 Censuses of Population and Housing

#### STATE OR TERRITORY

Overcrowding rates also varied by jurisdiction, reflecting the type of housing options available to Indigenous people in different parts of Australia. In 2006, Queensland had the largest number of overcrowded Indigenous households (6,200) followed by New South Wales (5,200). The highest rates of overcrowding among Indigenous households were in the Northern Territory (38%) followed by Western Australia (16%). Rates of overcrowding were especially high in the Indigenous/mainstream community housing sector in the Northern Territory, where 61% of households were overcrowded.

<sup>(</sup>b) Excludes visitors.

## **4.12** OVERCROWDED INDIGENOUS HOUSEHOLDS(a), by tenure type and state/territory—2006

	• • • • •	• • • • • • •	• • • • • • •	• • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • •	• • • • • • • • •
	NSW	Vic.	Qld	WA	SA	Tas.	ACT	NT	Australia
				• • • • •		• • • • •	• • • • •	• • • • • •	
NUMBE	ER OF	CROWDE	ED HOUS	SEHOI	LDS				
Home owner/purchaser	1 301	318	1 081	366	194	187	22	218	3 687
Private and other renter(b)	1 977	423	2 088	413	210	177	21	258	5 570
Renter state/territory housing authority	1 309	323	1 511	894	390	133	44	366	4 970
Renter Indigenous/mainstream community housing	475	50	1 253	811	223	6	3	2 743	5 567
Other	135	40	246	109	31	22	3	163	752
Total(c)	5 246	1 170	6 232	2 615	1 064	530	93	3 775	20 734
OVERCROWDED HOUSEHOLDS	AS A	PROPOR	TION OF	ALL	INDIGE	NOUS	HOUSE	HOLDS	
Home owner/purchaser	6.7	6.0	7.9	7.2	6.1	4.8	3.1	11.6	6.9
Private and other renter(b)	11.3	10.1	13.0	9.8	9.3	9.2	4.5	17.5	11.6
Renter state/territory housing authority	11.5	12.3	21.5	20.5	14.5	10.7	9.6	24.9	15.9
Renter Indigenous/mainstream community housing	18.0	15.6	33.0	41.7	36.9	8.7	8.8	60.8	39.9
Other	11.2	11.4	13.5	19.4	14.6	11.4	13.0	39.9	18.1
Total(c)	10.0	9.0	14.8	16.0	11.8	7.2	5.5	38.5	13.6

<sup>(</sup>a) Excludes dwellings for which the number of bedrooms was not stated.

Source: ABS 2006 Census of Population and Housing

Housing quality

The most recent national survey to include measures of housing quality was the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). According to the survey, around one-third (35%) of Indigenous households were living in dwellings that had structural problems (e.g. rising damp, major cracks in floors or walls, major electrical/plumbing problems and roof defects). Just over half (55%) of Indigenous households renting mainstream or community housing reported that their dwellings had structural problems, while the corresponding proportions for renters of state/territory housing, private and other renters, and home owners were 42%, 33% and 22% respectively (ABS & AIHW 2005). In 2006, the ABS Community Housing and Infrastructure Needs Survey (CHINS) also collected information about the state of repair of houses in discrete Indigenous communities, and their connection to essential services. Selected data from the survey are presented in tables 4.13 and 4.14.

The WAACHS developed a measure of housing quality based on the healthy living practices outlined in the National Framework for Indigenous Housing. The survey classified 16% of dwellings with Aboriginal children as being of 'poor housing quality'. Dwellings with poor housing quality were more likely to be rented, and to be located in areas of extreme isolation and areas of relative socioeconomic disadvantage. Households living in poor quality dwellings had poorer economic wellbeing, lower levels of family functioning, experienced more life stresses and were more likely to overuse alcohol (Silburn et al 2006).

#### DISCRETE INDIGENOUS COMMUNITIES

The 2006 CHINS provides more detailed information on the housing quality of dwellings in discrete Indigenous communities (ABS 2007). Discrete Indigenous communities are those inhabited predominantly by Aboriginal and Torres Strait Islander people, with housing or infrastructure that is managed on a community basis. These communities

<sup>(</sup>c) Includes tenure type not stated.

<sup>(</sup>b) Includes landlord type not stated.

Housing quality continued

#### DISCRETE INDIGENOUS COMMUNITIES continued

have an estimated population of 92,960 people and are primarily located in remote and very remote areas of Australia (ABS 2007d).

#### Dwelling condition

The CHINS data on dwelling condition were collected for permanent dwellings and categorised according to the cost of repairs required to the dwelling. No data were collected on the 1,596 temporary or improvised dwellings in these communities which are likely to have been in the poorest condition. Some 4,039 Indigenous people (4% of the usual resident population) were living in temporary or improvised dwellings in 2006.

In discrete Indigenous communities across Australia, there were around 6,674 dwellings (31%) that required major repair or replacement (table 4.13). Dwellings in remote and very remote areas tended to be in the poorest condition, with 9% requiring replacement compared with 4% of dwellings in non-remote areas.

# **4.13** CONDITION OF PERMANENT DWELLINGS IN DISCRETE INDIGENOUS COMMUNITIES, by remoteness—2006

Dwelling condition	Non-remote	Remote	Very remote	Total							
• • • • • • • • • • • • • • • • • • • •											
NUMBER											
Minor or no repair	5 015	1 560	8 605	15 180							
Major repair	1 718	634	2 759	5 111							
Replacement	273	247	1 043	1 563							
Total	7 006	2 441	12 407	21 854							
	PERC	ENT									
Minor or no repair	71.6	63.9	69.4	69.5							
Major repair	24.5	26.0	22.2	23.4							
Replacement	3.9	10.1	8.4	7.2							
Total	100.0	100.0	100.0	100.0							

Source: ABS 2006 CHINS

#### Connection to services

The 2006 CHINS collected data on main source of water, sewerage and electricity at the community level for all discrete Indigenous communities. While the data show services available to communities and the number of permanent dwellings located in these communities, some of these dwellings may not have had access to a service that was available at the community level. In addition there are improvised dwellings in these communities for which data were not collected.

The main source of drinking water for the majority of permanent dwellings (8,078 or 53%) was bore water. There were another 4,685 dwellings (30%) in communities connected to a town supply and 1,682 (11%) in communities where the main source of water was a river or reservoir. In addition there were 201 permanent dwellings in communities where the main source of water was a well or spring and 10 permanent dwellings in communities that had no organised water supply (table 4.14).

#### Housing quality continued

#### Connection to services continued

In relation to sewerage, 5,725 permanent dwellings (33%) were in communities with some type of septic system. The next most common type of sewerage system was a town system (5,229 or 30% of dwellings) followed by community water-borne systems (5,162 or 30% of dwellings). There were also 51 permanent dwellings in communities with no organised sewerage supply (table 4.14).

The main type of electricity supply for the majority of permanent dwellings (9,161 or 53%) was community generators. There were also 6,323 dwellings (37%) in communities connected to the state grid and 447 (3%) in communities with domestic generators as their main source of electricity. In addition, there were 85 permanent dwellings in communities with no organised electricity supply (table 4.14).

## 4.14 TYPES OF CONNECTION TO WATER, SEWERAGE AND ELECTRICITY IN DISCRETE INDIGENOUS COMMUNITIES—2006

Total	1 187	17 177	
No organised electricity supply	32	85	0.5
Other organised electricity supply	8	214	1.2
Solar hybrid	107	395	2.3
Solar	105	304	1.8
Domestic generators	178	447	2.6
Community generators	377	9 161	53.3
Main type of electricity supply State grid transmitted supply	274	6 323	36.8
No organised sewerage system	25	51	0.3
Other organised sewerage system	9	6	_
Pan toilets	1	3	_
Pit toilets	202	587	3.4
Septic tank with leach drain	593	3 531	20.6
Community water-borne system Septic tanks with common effluent disposal	108	2 194	12.8
Connected to town system	121 108	5 229 5 162	30.4 30.1
Type of sewerage system(b)	404	F 000	20.4
No organised supply	9	10	0.1
Other organised supply	3	33	0.2
Carted water	27	105	0.6
Well or spring	39	201	1.2
River or reservoir	57	1 682	9.8
Rain water tank	41	525	3.1
Bore water	694	8 078	47.0
Main source of drinking water Connected to town supply	209	4 685	27.3
	no.	no.	%
	communities	dwellings(a)	dwellings
	All	permanent	of
		Number of	Proportion

<sup>..</sup> not applicable

Source: ABS 2006 CHINS

nil or rounded to zero (including null cells)

<sup>(</sup>a) Data are collected at the community level and some permanent dwellings may not be connected to the type of service reported at the community level.

<sup>(</sup>b) More than one type of sewerage system could be specified.

Housing quality continued

Connection to services continued

Between the 2001 and 2006 CHINS' there was a decrease in the number and proportion of permanent dwellings not connected to an organised sewerage system (table 4.15). Over this period, the number of dwellings in communities not connected to an organised sewerage system fell from 153 to 51. There was also a small decrease in the number of dwellings in communities not connected to an organised water supply (from 13 to 10) and a small increase in the number of permanent dwellings in communities not connected to an organised supply of electricity (from 80 to 85).

4.15

PERMANENT DWELLINGS IN DISCRETE INDIGENOUS COMMUNITIES, not connected to an organised supply of water, sewerage and/or electricity—2001 and 2006

	2001		2006	
	Number of dwellings in communities with no organised supply	Total number of permanent dwellings	Number of dwellings in communities with no organised supply	Total number of permanent dwellings
Water Sewerage Electricity	13 153 80	16 966 16 966 16 966	10 51 85	17 177 17 177 17 177

Source: ABS 2001 and 2006 CHINS

HOMELESSNESS

Aboriginal and Torres Strait Islander people are more likely to be homeless than other Australians as they generally do not have the same access to affordable and secure housing. The Indigenous population is more mobile than the remainder of the population. Indigenous people often need to leave their home to access services or to observe cultural obligations. These factors combined with the absence of adequate temporary accommodation, can contribute to homelessness in this population (Keys Young 1998). Measuring the extent of homelessness, however, can be difficult and depends on which definition is used. This section examines how homelessness is defined and measured and then provides a range of data on Indigenous homeless people in the major program response to homelessness, the SAAP.

Defining and measuring homelessness

Homeless people may be simply defined as those with no housing or residing in temporary or emergency accommodation. The concept of homelessness is, however, subjective and depends on prevailing community standards. The Chamberlain and MacKenzie (2003) definition, adopted by the ABS, defines people as homeless if their accommodation falls below the minimum community standard of a small rental flat with a bedroom, living room, kitchen, bathroom and some security of tenure.

The definition of homelessness can also be related to Aboriginal and Torres Strait Islander history, values and beliefs (Keys Young 1998; Memmott et al 2004). Keys Young developed a number of definitions of Indigenous homelessness which emphasised the multi-layered and multi-dimensional nature of Indigenous homelessness and incorporated the concept of spiritual homelessness. Underlying these definitions was the understanding that 'home' can have different meanings for Indigenous Australians (AIHW

Defining and measuring homelessness continued

2003a). These differing concepts of homelessness are not, however, captured in current data sources.

#### ESTIMATING THE NUMBER OF HOMELESS INDIGENOUS PEOPLE

Chamberlain and MacKenzie defined the following three levels of homelessness:

- Primary homelessness—includes all people with no conventional accommodation such as people living on the streets, in the parks, in derelict buildings and other improvised dwellings.
- Secondary homelessness—includes people who move frequently from one form of temporary shelter to another. This includes people residing temporarily with other households because they have no accommodation of their own, as well as people accommodated in SAAP establishments.
- Tertiary homelessness—includes people who live in boarding houses on a medium-to-long-term basis, operationally defined as 13 weeks or longer. These people are regarded as homeless because their accommodation situation is below community standard.

To provide a count of the number of Indigenous homeless people, Chamberlain and MacKenzie used Census data supplemented with data from the SAAP National Data Collection. The Chamberlain and MacKenzie estimate also included an adjustment for undercounting. Using this approach, there were an estimated 7,526 homeless Indigenous people at the time of the 2001 Census (a rate of 176 per 10,000) compared with 91,699 homeless non-Indigenous people (or 50 per 10,000 population) (ABS & AIHW 2005).

A similar count using data from the 2006 Census and SAAP data is not yet available. The following table therefore provides an estimate of the number and rate of Indigenous homeless people using Census data only, and with no adjustment for undercounting. This is the simple definition of homelessness and provides an estimate that is considerably lower than that determined by Chamberlain and MacKenzie using 2001 Census data.

According to the 2006 Census, there were 4,116 Indigenous people who were homeless on Census night (table 4.16). This included 2,283 Indigenous people with no conventional accommodation (i.e. in improvised dwellings or sleeping rough), 662 in hostels, refuges or night shelters, and 1,171 residing temporarily with others. The Northern Territory recorded the largest number of Indigenous homeless people (1,143), followed by Queensland (1,019).

## **4.16** NUMBER OF HOMELESS INDIGENOUS PERSONS, by state/territory—2006

	NSW	Vic.	Qld	WA	SA	Tas.	ACT	NT	Australia
	no.	no.	no.	no.	no.	no.	no.	no.	no.
No conventional accommodation	250	55	469	402	152	24	4	927	2 283
Hostel, refuge, night shelter	206	38	198	76	39	9	14	82	662
Friends/relatives	315	70	352	171	67	43	19	134	1 171
Total number	771	163	1 019	649	258	76	37	1 143	4 116

Source: ABS 2006 Census of Population and Housing

There are two major national programs that provide assistance to homeless people:

- the SAAP, which provides temporary accommodation and support services, such as domestic violence counselling, employment assistance and living skills development to homeless people, and aims to help them achieve self-reliance and independence. It is jointly funded and managed by the Australian and state/territory governments with services delivered largely by non-government agencies with some local government participation.
- the Crisis Accommodation Program (CAP) which is funded under the Commonwealth-State Housing Agreement and provides emergency accommodation for homeless people. Funds are used for the purchase, lease and maintenance of dwellings.

The SAAP was established to assist those who are homeless or at risk of homelessness, defined by the *Supported Accommodation Assistance Program Act 1994* (Section 4) as someone who has 'inadequate access to safe and secure housing' (FaCS 1999:19). In the context of homelessness, the Act refers to housing situations that may damage health, threaten safety, marginalise a person from both personal amenities and the economic and social support a home normally offers; where the affordability, safety, security or adequacy of housing is threatened; or where there is no security of tenure. A person is also considered homeless under the Act if they are living in SAAP or other emergency accommodation.

Those using SAAP services represent a subset of homeless people, no matter which definition of homelessness is used, as not all people experiencing homelessness will use SAAP services. The existence of the SAAP National Data Collection, however, means that there is a wide range of information available on SAAP clients. In addition to counting all people assisted by SAAP, there are also some data collected on those who seek accommodation but whose requests for accommodation could not be met.

There were 16,200 Aboriginal and Torres Strait Islander people aged 15 years or over who received SAAP support in 2005–06 (table 4.17), making up 17% of all SAAP clients. In every state and territory, Indigenous clients of SAAP services were substantially over-represented relative to the proportion of Indigenous people in those jurisdictions.

### 4.17 INDIGENOUS SAAP CLIENTS(a) -2005-06

	INDIGEN	OUS	INDIGENOL	JS
	CLIENTS (	(b)	PERSONS	
	•••••	•••••	***************************************	•••••
		% of		% of the
		all		total
		SAAP		Australian
	Number	clients	Number	population
New South Wales	4 100	17.6	89 400	1.6
Victoria	1 800	5.4	19 400	0.5
Queensland	3 400	21.7	84 400	2.7
Western Australia	3 100	40.1	45 100	2.8
South Australia	1 800	18.8	17 600	1.4
Tasmania	400	9.8	11 500	3.0
Australian Capital Territory	200	9.9	2 700	1.0
Northern Territory	1 800	62.2	39 600	25.5
Australia	16 200	16.8	309 800	1.9

- (a) Clients and Indigenous population aged 15 years and over. Numbers are rounded to the nearest hundred.
- (b) Number excluded due to errors and omissions (weighted): 5,131 clients. Figures have been weighted to adjust for agency non-participation and client non-consent. The number of clients within a state or territory relates to clients who have received assistance from a SAAP agency in that state or territory. Since a client may have support periods in more than one state or territory, state and territory figures do not sum to the national figure.

Source: AIHW SAAP Client Collection

#### CLIENT PROFILE

The demographic profile of Indigenous and non-Indigenous SAAP clients is shown in table 4.18. Consistent with differences in the age structures of the Indigenous and non-Indigenous populations, Indigenous clients were more likely to be younger than non-Indigenous clients. For example, 68% of Indigenous clients were aged less than 35 years compared with 60% of non-Indigenous clients.

Nearly three-quarters (73%) of Indigenous SAAP clients were female compared with only 57% of non-Indigenous SAAP clients. Among Indigenous clients aged 25-29 years, over 80% were female. In two jurisdictions, the Northern Territory and Western Australia, there were far more Indigenous female clients than other Australian-born female clients—76% compared with 21% in the Northern Territory and 53% compared with 34% in Western Australia (AIHW 2007g:32). The high rate of Indigenous females in SAAP reflects the support which this program provides for those who have experienced domestic violence and those at risk of homelessness, both of which are areas of particular concern for Indigenous women (see tables 4.18 and 4.20, and Chapter 6).

CLIENT PROFILE continued

**4.18** SAAP CLIENTS, by Indigenous status, age and sex—2005–06

		INDIGEN	IOUS		NON-IND	NON-INDIGENOUS			
		SAAP CI	LIENTS		SAAP CL	SAAP CLIENTS			
Age group		••••••	••••••	••••••	•••••	••••••	•••••••		
(years)		Male	Female	Total	Male	Female	Total		
15-19	%	21.4	18.9	19.6	17.4	20.1	18.9		
20-24	%	16.0	19.2	18.3	13.5	15.9	14.9		
25-29	%	10.3	16.0	14.4	12.2	13.4	12.9		
30-34	%	13.3	16.8	15.8	13.0	14.2	13.7		
35–39	%	13.6	12.2	12.6	12.3	13.0	12.7		
40-44	%	9.9	7.9	8.4	10.3	9.1	9.6		
45-49	%	6.9	4.2	4.9	7.7	6.0	6.7		
50-54	%	4.5	2.3	2.9	5.1	3.2	4.0		
55-59	%	2.0	1.3	1.5	3.5	2.1	2.7		
60-64	%	1.3	0.7	0.9	2.2	1.2	1.6		
65 and over	%	0.9	0.5	0.6	2.8	1.9	2.3		
Total	%	100.0	100.0	100.0	100.0	100.0	100.0		
Total	%	27.2	72.8	100.0	42.7	57.3	100.0		
	no.	4 400	11 800	16 200	34 200	45 900	80 100		

Source: AIHW SAAP Client Collection

#### CHILDREN ACCOMPANYING SAAP CLIENTS

For the purposes of the National Data Collection, children who attend a SAAP service with their parent or guardian are not counted as clients in their own right, but are counted as accompanying children. In 2005–06, the first year in which the Indigenous status of accompanying children was collected, 27% of all accompanying children in SAAP were of Aboriginal and/or Torres Strait Islander origin (AIHW 2007g).

Reflecting the over-representation of Indigenous people among SAAP clients and the high proportion of clients who have experienced domestic violence, Indigenous children were far more likely than non-Indigenous children to have accompanied a parent or guardian to a SAAP agency (table 4.19). Indigenous children attended a SAAP agency at a rate of 537 per 10,000, compared with 69 per 10,000 for non-Indigenous children. In the 0–4 years age group, there were 906 Indigenous children in SAAP for every 10,000 Indigenous children in this age group. That is, 1 in every 11 Indigenous children aged 0–4 years attended a SAAP agency in 2005–06. The corresponding rates for non-Indigenous children were 113 per 10,000, or 1 in every 88 children.

#### CHILDREN ACCOMPANYING SAAP CLIENTS continued

**4.19** CHILDREN ACCOMPANYING SAAP CLIENTS, by Indigenous status and age—2005–06

Age	INDIGENOUS			NON-INDI	GENOUS		TOTAL	TOTAL			
group (years)	no.	%	rate(a)	no.	%	rate(a)	no.	%	rate(a)		
0–4	5 500	47.3	906	13 900	43.1	113	19 400	44.2	150		
5–9	3 500	29.8	572	9 300	28.9	73	12 700	29.1	95		
10-14	2 200	18.6	349	6 900	21.4	51	9 000	20.6	65		
15-17	500	4.3	150	2 100	6.6	27	2 600	6.0	32		
Total	11 600	100.0	537	32 200	100.0	69	43 800	100.0	90		

<sup>(</sup>a) Rate per 10,000 population. The rate is estimated by comparing the number of Indigenous and non-Indigenous SAAP accompanying children with the estimated resident population in each of these groups and age groups.

Source: AIHW SAAP Client Collection

#### REASONS FOR SEEKING SUPPORT

In 2005–06, the most common reason cited by Indigenous and non-Indigenous clients for seeking accommodation assistance was domestic violence (in 31% and 21% of support periods respectively) (table 4.20). A further one in five Indigenous and non-Indigenous clients sought accommodation assistance as a result of relationship or family breakdown, which also includes time out from family or other situations, and interpersonal conflict (in 21% and 20% of support periods, respectively).

Indigenous clients were less likely to cite accommodation difficulties as a reason for seeking assistance than non-Indigenous clients (in 10% and 17% of support periods, respectively), where accommodation difficulties include being evicted or asked to leave, or the ending of previous accommodation or emergency accommodation. However, Indigenous clients were twice as likely to cite overcrowding as a reason for seeking assistance, in 4% of support periods compared with 2% for non-Indigenous clients.

Indigenous clients were less likely to report financial difficulties (budgeting, rent too high, or other financial difficulty) as a reason for seeking assistance (in 8% of support periods, compared with 14% for non-Indigenous clients), while proportions for the other main reasons given for seeking assistance did not differ greatly from non-Indigenous clients. A slightly higher proportion of Indigenous clients, compared with non-Indigenous clients, were likely to be seeking assistance for being itinerant or a recent arrival to the area with no means of support.

REASONS FOR SEEKING SUPPORT continued

SAAP SUPPORT PERIODS, main reason for seeking SAAP assistance by Indigenous status of clients—2005–06

	INDIGENOUS	NON-INDIGENOUS	TOTAL	
Main reason for seeking	0/	0/	0/	
assistance	%	%	%	no.
Accommodation difficulties(a)	10.4	16.8	15.7	24 400
Relationship/family				
breakdown(b)	21.3	20.4	20.6	31 900
Sexual/physical/emotional				
abuse	2.9	2.3	2.4	3 700
Domestic violence	31.2	21.0	22.6	35 100
Financial difficulty(c)	7.9	14.2	13.1	20 300
Overcrowding	4.0	1.9	2.2	3 400
Gambling	0.1	0.4	0.3	500
Drug/alcohol/substance abuse	5.5	5.7	5.7	8 800
Recently left institution	1.3	1.4	1.4	2 100
Psychiatric illness	0.3	1.1	1.0	1 600
Recent arrival in area with no				
means of support	4.6	4.1	4.2	6 500
Itinerant	3.2	2.5	2.6	4 100
Mental health issues	0.8	1.9	1.7	2 700
Other health issues	1.3	1.1	1.1	1 700
Gay/lesbian/transgender				
issues	_	0.1	0.1	100
Other	5.0	5.1	5.1	7 900
Total	100.0	100.0	100.0	_
Total (%)	16.4	83.6	100.0	_
Total (no.)	25 400	129 600	_	155 000

nil or rounded to zero (including null cells)

Source: AIHW SAAP Client Collection

SAAP clients before and after support

SAAP aims to assist clients in re-establishing their capacity to live independently once they cease to receive assistance from the Program. To evaluate the Program's success in achieving this objective, information is collected about clients' tenure and income source both before and after their use of SAAP services. Closed support periods, that is, support periods that finished on or before 30 June 2006, are used as the basis for this analysis. The data presented in tables 4.21 and 4.22 relate only to support periods for which both before and after information on clients' tenure and income source were provided. Instances where only before or after information were provided, or neither, have been excluded so caution should be exercised in assessing the data.

Among Indigenous clients, the major type of tenure both before and after SAAP support was public housing, which increased from 23% before assistance to 25% after assistance (table 4.21). There was also a small increase in the proportion of clients in private rental accommodation, from 14% to 16%. For non-Indigenous clients, private rental was the major type of tenure both before support (28%) and after support (29%).

<sup>(</sup>a) Eviction/asked to leave; Previous accommodation ended; Emergency accommodation ended.

<sup>(</sup>b) Time out from family/ other situation: Interpersonal conflict.

<sup>(</sup>c) Budgeting; Rent too high; Other financial difficulty.

SAAP clients before and after support continued

**4.21** SAAP SUPPORT PERIODS, type of tenure before and after SAAP support by Indigenous status of clients—2005–06

		INDIGENO	ous	NON-INDI	GENOUS
		Before	After	Before	After
Type of accommodation		support	support	support	support
SAAP/CAP crisis short term					
accommodation	%	7.7	8.2	8.2	8.8
SAAP/CAP medium long term					
accommodation	%	2.1	3.7	2.7	5.2
Other SAAP/CAP funded					
accommodation	%	2.2	2.6	2.1	2.7
Institutional setting	%	2.3	2.1	3.3	2.7
Improvised dwelling/sleeping rough	%	7.0	4.1	8.7	4.9
Other (no tenure)	%	1.3	0.8	1.6	1.1
Purchasing/purchased own home	%	0.9	0.7	5.3	3.9
Private rental	%	14.3	15.5	28.0	29.0
Public housing rental	%	23.3	25.4	10.7	14.1
Community housing rental	%	14.8	15.3	2.4	3.8
Rent-free accommodation	%	7.7	6.8	8.9	6.6
Boarding	%	16.4	14.8	18.0	17.2
Total	%	100.0	100.0	100.0	100.0
Total	%	15.9	15.9	84.1	84.1
	no.	<b>15 800</b>	<b>15</b> 800	83 500	83 500

Source: AIHW SAAP Client Collection

There were only small changes in the proportions of Indigenous clients with the various sources of income before and after support. The proportion of Indigenous clients on a pension or benefit, for example, increased from 89% before support to 91% after support, and the proportion with no income decreased from 6% to 5% (table 4.22). Among non-Indigenous clients, the proportion on a government pension or benefit increased from 85% before support to 87% after support, and the proportion with no income decreased from 7% to 5%.

**4.22** SAAP SUPPORT PERIODS, primary income source immediately before and after SAAP support by Indigenous status—2005–06

	INDIGENOUS		NON-INDIGENOUS	
	Before support	After support	Before support	After support
%	6.4	4.6	7.2	4.8
%	0.7	0.8	1.0	0.8
%	89.3	90.5	84.6	86.5
%	3.7	4.1	7.1	7.8
%	100.0	100.0	100.0	100.0
% no.	16.4 20 400	16.4 20 400	83.6 107 500	83.6 107 500
	% % % %	Before support % 6.4 % 0.7 % 89.3 % 3.7 % 100.0	Before After support support % 6.4 4.6 % 0.7 0.8 % 89.3 90.5 % 3.7 4.1 % 100.0 100.0 % <b>16.4 16.4</b>	Before support         After support         Before support           %         6.4         4.6         7.2           %         0.7         0.8         1.0           %         89.3         90.5         84.6           %         3.7         4.1         7.1           %         100.0         100.0         100.0           %         16.4         16.4         83.6

Source: AIHW SAAP Client Collection

Unmet need for SAAP

The Demand for Accommodation Collection attempts to measure unmet need for SAAP accommodation in two separate weeks during the year. This collection counts those who were seeking accommodation but whose request for accommodation could not be met. The identification of Indigenous clients in this data collection is less complete than in the main SAAP data collection, with Indigenous status unknown for around 31% of people making valid unmet requests for accommodation (AIHW 2007e).

In addition to those clients who were provided with assistance, in December 2005 and May 2006 there were an average 78 Indigenous people per day with valid unmet requests for assistance. There were more Indigenous females (44) with unmet requests for assistance than Indigenous males (34) (table 4.23). While these data are an indicator of unmet need for accommodation assistance, it is difficult to extrapolate these figures to annual figures because of seasonal factors and because people can have several unmet requests for assistance in the same year.

4.00	VALID UNMET REQUESTS FOR SAAP ACCOMMODATION(a)—
4.23	VALID UNMET REQUESTS FOR SAAP ACCOMMODATION(a)—7–13 December 2005 and 17–23 May 2006

	NSW	Vic.	Qld	WA	SA	Tas.	ACT	NT	Australia
Males	4.6	1.7	11.9	9.9	3.1	0.3	0.6	2.3	34.4
Females	6.2	2.4	11.1	15.0	3.6	0.2	0.6	4.5	43.8
Persons	10.8	4.1	23.1	24.9	6.7	0.5	1.3	6.8	78.1

(a) Estimated average number per day of potential Indigenous clients with accompanying children. Source: AIHW SAAP Demand for Accommodation Collection

The tenure type of Indigenous households differs from that of other Australian households. Indigenous households are much less likely to be home owner households (with or without a mortgage) and much more likely to receive some form of housing assistance, such as Indigenous/mainstream community housing or public housing. There was, however, an increase in the proportion of Indigenous households that were home owners, from 31% in 2001 to 34% in 2006.

The housing tenure of Indigenous households varies by remoteness reflecting the availability of different tenure options for Indigenous people according to location. Home ownership rates were highest in inner regional areas (38%) and lowest in very remote areas (8%), while the proportion of Indigenous households renting mainstream or community housing was highest in very remote areas (55%).

Some Indigenous households, especially those in remote areas, live in conditions that do not support good health. In 2006, 14% of Indigenous households were overcrowded, which puts stress on basic facilities and contributes to the spread of infectious diseases. The highest rate of overcrowding was among renters of Indigenous or mainstream community housing in the Northern Territory, where 61% of Indigenous households were overcrowded. Across Australia, however, overcrowding rates fell from 16% of Indigenous households in 2001 to 14% in 2006.

There are still some dwellings in Indigenous communities not connected to essential services. In 2006 there were 51 dwellings in communities not connected to an organised sewerage system, 85 not connected to an organised electricity supply and 10 not

SUMMARY

SUMMARY continued

connected to an organised water supply. The number of dwellings in communities not connected to an organised sewerage system fell from 153 in 2001 to 51 in 2006.

The rate of Indigenous homelessness was three times the rate for other Australians. Indigenous clients made up 17% of all SAAP clients and nearly three-quarters of Indigenous clients using SAAP were women. The most common reasons for Indigenous clients seeking support through SAAP were domestic violence and family breakdown. Twenty-seven per cent of all children attending a SAAP service with their parent or guardian were Indigenous. Among Indigenous children aged less than four years, one in eleven attended a SAAP service in 2005–06.

### CHAPTER 5

#### DISABILITY AND CARERS .....

INTRODUCTION

Aboriginal and Torres Strait Islander Australians typically experience higher rates of disability and long-term health conditions and hospitalisation than do other Australians (ABS 2006c; ABS & AIHW 2005). In the 2006 Census of Population and Housing, a total of 19,600 Indigenous people (4%) were identified as needing assistance with core activities (self-care, mobility or communication) some or all of the time. After taking account of age differences between the Indigenous and non-Indigenous populations, the level of need for assistance among Indigenous people overall was almost twice as high as that among non-Indigenous people.

These Census-based indicators of disability in the Indigenous population are consistent with the relatively high disability rates among Indigenous people aged 15 years and over reported in the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS). Results from that survey revealed that among adults in non-remote areas, Indigenous Australians were twice as likely as non-Indigenous Australians to have a profound/severe core activity limitation (ABS & AIHW 2005).

The Census 'Core Activity Need for Assistance' concept was developed, recognising the need to identify Australians at the more severe end of the disability spectrum. This supports analyses by geographic area, and other shared characteristics such as Indigenous status. The Census measure of disability is relatable to the ABS Survey of Disability, Ageing and Carers (SDAC) and 2002 NATSISS concepts of profound/severe core activity limitation (see Glossary).

This chapter outlines some of the similarities and differences between rates of need for assistance with core activities (from the 2006 Census) and profound/severe core activity limitation (from the 2002 NATSISS) in the Indigenous population. The relationships between need for assistance and selected socioeconomic indicators such as educational attainment, labour force participation, income, language spoken at home, and social marital status are then explored using 2006 Census data, supplemented with information on social participation and support from the 2002 NATSISS.

The final section of this chapter examines some of the characteristics of Aboriginal and Torres Strait Islander carers—those who provided unpaid care, help or assistance to another person because of their disability, long-term illness or problems related to old age (see Appendix 1).

COMPARISON OF 2006 CENSUS AND 2002 NATSISS DISABILITY MEASURES The 2002 NATSISS included a short disability survey module comprising 12 questions (and associated prompt cards), and the 2006 Census need for assistance measure comprised a set of four questions—one for each of the core activity areas and an additional question to ascertain why assistance with core activities was needed (see ABS & AIHW 2005 and Appendix 1 of this report). In order to differentiate between the two measures, Indigenous people identified as meeting the criteria in the 2002 NATSISS are referred to as having a 'profound/severe core activity limitation' while in the 2006 Census, the corresponding population is referred to as 'needing assistance with core activities'. Results from the 2002 NATSISS and 2006 Census are based on relatable concepts, but are not suitable for direct comparison to provide an indication of change in the prevalence of disability over time.

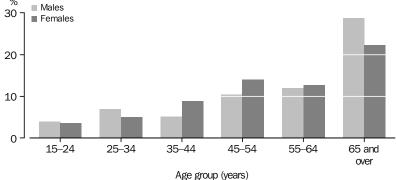
Prevalence by age and sex

The following analysis is restricted to persons living in private dwellings (i.e. excludes people in nursing homes and other cared accommodation) with further age and geographic restrictions to align the populations measured in the 2006 Census, the 2002 NATSISS and the 2002 General Social Survey (GSS).

According to the 2006 Census, around one in 20 Indigenous people aged 15 years and over in private dwellings (5%) needed assistance with core activities. In comparison, the overall rate of profound/severe core activity limitation among Aboriginal and Torres Strait Islanders aged 15 years and over reported in the 2002 NATSISS was 8%. In both collections, the disability rate was higher in older age groups, ranging from 2% of those aged 15–24 years to 22% of those aged 65 years and over in the 2006 Census, and from 4% to 25% for the same age groups in the 2002 NATSISS.

The need for assistance rates from the 2006 Census were lower than the rates of profound/severe core activity limitation from the 2002 NATSISS for all groups apart from men aged 55–64 years and women aged 65 years and over, for whom survey and Census rates were similar (graphs 5.1 and 5.2). In interpreting other characteristics of people reporting need for assistance with core activities, or profound/severe core activity limitation, the differences in levels measured in the 2002 NATSISS and 2006 Census should be taken into account.



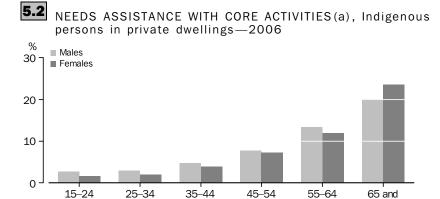


(a) Self-care, mobility and/or communication.

Source: ABS 2002 NATSISS

over

Prevalence by age and sex continued



Age group (years)

(a) Self-care, mobility and/or communication.

Source: ABS 2006 Census of Population and Housing

#### COMPARISON WITH NON-INDIGENOUS PEOPLE

The proportions of Indigenous and non-Indigenous adults with a profound/severe core activity limitation in non-remote areas are available from the 2002 NATSISS and 2002 GSS (table 5.3). When Indigenous and non-Indigenous age-specific rates are compared, the resulting rate ratio provides an indication of the relative prevalence of profound/severe core activity limitation in the two populations. For more information on the calculation of rate ratios, see the Glossary.

The Indigenous to non-Indigenous rate ratios, based on age-specific profound/severe core activity limitation rates from the 2002 NATSISS and 2002 GSS, indicate that Indigenous people were between one-and-a-half and three-and-a-half times as likely as non-Indigenous people to have a profound/severe core activity limitation. When differences in the age structure of the Indigenous and non-Indigenous populations were taken into account, Indigenous people overall were twice as likely as non-Indigenous people to have a profound/severe core activity limitation (table 5.3).

Similarly, Indigenous to non-Indigenous rate ratios from the 2006 Census indicate that Indigenous adults in non-remote areas were between one-and-a-half and three times as likely as non-Indigenous adults to need assistance with core activities. When differences in the age structure of the Indigenous and non-Indigenous populations were taken into account, Indigenous adults in non-remote areas were twice as likely as non-Indigenous adults to need assistance with core activities (table 5.3).

Prevalence by age and sex continued

COMPARISON WITH NON-INDIGENOUS PEOPLE continued

## **5.3** NEEDS ASSISTANCE AND PROFOUND/SEVERE CORE ACTIVITY LIMITATION, age-specific rates(a)(b)—2006 and 2002

	NEEDS ASSISTANCE WITH CORE ACTIVITIES (2006 CENSUS)		ACTIVITY LIN	SEVERE CORE MITATION SISS AND GSS)	NON-INDI RATE RAT	INDIGENOUS TO NON-INDIGENOUS RATE RATIOS		
Age group (years)	Indigenous %	Non-Indigenous	Indigenous %	Non-Indigenous %	2006 Census	2002 NATSISS and GSS ratio		
18–24 25–34 35–44 45–54 55–64 65 and over 18 and over	2.5 2.8 4.9 8.2 13.2 20.2 6.1	1.3 1.2 1.7 2.7 4.8 13.4 4.2	3.6 6.8 7.5 12.4 11.0 20.2 8.1	1.8 2.2 4.0 3.5 5.9 12.7 4.9	2.0 2.3 2.8 3.1 2.8 1.5	2.0 3.1 1.9 3.5 1.9 1.6		
Total - Age standardised	8.4	4.1	10.5	5.0	2.1	2.1		

- (a) Persons aged 18 years and over, living in private dwellings in non-remote areas.
- (b) These data do not represent change in prevalence over time.

Source: ABS 2006 Census of Population and Housing, 2002 NATSISS, 2002 GSS



### 2006 CENSUS — CORE ACTIVITY NEED FOR ASSISTANCE

#### 2006 Census - Need for assistance questions

The 2006 Census asked three questions about need for assistance with core activities of self-care, mobility and communication and then a further question about the reason(s) that help was needed. Responses to these questions were used to identify whether there was a Core Activity Need for Assistance (see Appendix 1). While conceptually consistent with the 'severe/profound core activity limitation' concept from the 2002 NATSISS, the Census criteria asked fewer questions to identify people with disability. Because of this, the number of people identified in the 2006 Census as needing assistance with core activities will generally be lower than comparable estimates of people with a profound/severe core activity limitation from the 2002 NATSISS (and other surveys using the standard short disability module).

#### Collection methodologies

While information in the 2002 NATSISS was collected via personal interview, Census data for more than three-quarters of the Indigenous population (77%) were provided by a household member filling in a Census form for themselves and/or on behalf of other usual household residents, without prompting or assistance. Data for 17% of Indigenous people (in discrete Indigenous communities) were collected via interview, on the Interviewer Household Form (IHF), and a further 5% (in non-private dwellings) were enumerated on a Personal Form which they may or may not have completed themselves.

Prevalence by age and sex continued

Unlike household surveys, where missing values may be imputed using statistical techniques, Census data retain this non-response within separately identified 'not stated' categories, and this is a contributor to lower numbers of Indigenous people identified as needing assistance in the Census. In the Indigenous population, the non-response rate was 7% for the questions about need for assistance, and in the non-Indigenous population, non-response was 2%.

NEED FOR ASSISTANCE

Age

In the 2006 Census, around 19,600 Aboriginal and Torres Strait Islander Australians (4%) were identified as needing assistance with self-care (eating, washing, dressing or toileting), physical mobility or communication.

Among those needing assistance, the median age for Indigenous males was 41 years, and for females, 49 years. The corresponding median ages for non-Indigenous males and females who needed assistance were 61 years and 75 years respectively. The prevalence of need for assistance with core activities increased noticeably from about 35 years of age onwards for both Indigenous men and women. This is consistent with the patterns for chronic long-term health conditions such as heart/circulatory diseases and diabetes which show onset some ten years earlier in the Indigenous population than in the non-Indigenous population (ABS 2006c).

Among Indigenous children aged 0–14 years, need for assistance was higher for boys than for girls. Male age-specific rates of core activity need for assistance were also higher than female rates for all five-year age groups from 15–69 years. A larger proportion of Indigenous females than males were aged 70 years or over in 2006 and Indigenous women were more likely than men in this age group to need assistance with core activities (table 5.5).

Age continued

### 5.5 INDIGENOUS PERSONS WHO NEEDED ASSISTANCE WITH CORE ACTIVITIES—2006

INDIGENOUS TO

					NON-INI	DIGENOUS
	INDIGENO	US			RATE RA	TIOS
	•••••	•••••	••••••	••••••	••••••	••••••
	Males(a)(	b)	Females	(a)(b)	Males	Females
Age group (years)	no.	%	no.	%	ratio	ratio
0–4	388	1.4	238	0.9	1.2	1.3
5–9	963	3.3	525	1.9	1.2	1.3
10–14	970	3.3	556	2.0	1.3	1.5
15–19	697	2.8	422	1.8	1.6	1.5
20–24	461	2.5	318	1.7	1.8	1.6
25–29	381	2.6	308	1.9	1.9	1.8
30–34	482	3.2	351	2.1	2.1	1.8
35–39	572	4.0	562	3.4	2.2	2.3
40–44	711	5.6	689	4.8	2.6	2.5
45–49	742	6.9	786	6.6	2.7	2.7
50–54	773	9.0	817	8.7	2.8	2.8
55–59	796	12.7	787	11.3	2.6	2.8
60–64	688	16.3	717	15.1	2.5	3.0
65–69	500	18.5	578	17.4	2.8	2.8
70–74	382	21.6	581	25.0	2.4	2.5
75 and over	642	33.3	1 232	40.3	1.5	1.3
Total	10 147	4.5	9 468	4.1	1.2	0.9
<b>Total - Age standardised</b> (c)		7.5		7.2	1.9	1.7

- .. not applicable
- (a) Components may not add to total due to perturbation of component data.
- (b) Rates are age-specific so will not add to 100%.
- (c) Age standardised to the 2001 final estimated resident population (ERP).

Source: ABS 2006 Census of Population and Housing

#### COMPARISON WITH NON-INDIGENOUS PEOPLE

Indigenous people were more likely than non-Indigenous people to need assistance with core activities, regardless of age. Among Australian children aged 0–14 years in 2006, Indigenous children were 1.3 times as likely as non-Indigenous children to need assistance (i.e. more than would usually be required for a child of their age) with self-care, mobility or communication. The proportion of Indigenous people needing assistance then increased to at least one-and-a-half times the rate for non-Indigenous people for age groups from 15–29 years, and to at least twice the rate among Australians in age groups from 30–74 years (table 5.5).

After adjusting for differences in the age structures of the Indigenous and non-Indigenous populations, Aboriginal and Torres Strait Islander people were almost twice as likely as non-Indigenous people to need assistance with core activities in 2006.

Need for assistance by Remoteness Areas In 2006, the proportion of Indigenous people identified as needing assistance with core activities ranged from 3% of the population in very remote parts of Australia to 5% of those living in major cities and inner regional areas. The lowest rates of need for assistance among Indigenous Australians occurred in outer regional (4%) remote (4%) and very remote (3%) areas.

Need for assistance by state/territory

Indigenous people living in Victoria, Tasmania, New South Wales and South Australia all recorded higher rates of need for assistance with core activities (around 5%) than the national rate (4%), while those in the Northern Territory recorded a lower rate (3%) (table 5.6).

# **5.6** NEED FOR ASSISTANCE, by state/territory and remoteness—Indigenous persons—2006

	NEEDS ASSI	STANCE(a	a)	Does not need		Population in remote		
	Non-remote	Non-remote Remote Total		assistance				
	%	%	%	%	%	no.	%	
New South Wales	5.0	4.0	5.0	88.7	100.0	138 508	5.1	
Victoria	5.2	10.5	5.3	88.0	100.0	30 142	0.1	
Queensland	4.1	2.7	3.8	90.1	100.0	127 581	22.2	
South Australia	5.0	4.2	4.9	88.3	100.0	25 556	18.6	
Western Australia	3.9	3.9	3.9	87.6	100.0	58 709	41.5	
Tasmania	5.2	5.9	5.2	90.7	100.0	16 766	3.5	
Northern Territory	3.6	3.2	3.3	86.8	100.0	53 662	80.2	
Australian Capital								
Territory	3.9	_	3.9	92.9	100.0	3 875	_	
<b>Australia</b> (d)	4.6	3.3	4.3	88.8	100.0	455 027	23.8	

- nil or rounded to zero (including null cells)
- (a) With core activities of self-care, mobility and/or communication.
- (b) Includes Indigenous persons in each state/territory who did not answer the need for assistance questions.
- (c) Components may not add to total due to perturbation of component data.
- (d) Includes Other Territories.

Source: ABS 2006 Census of Population and Housing

Living arrangements

In 2006, the majority of Aboriginal and Torres Strait Islander people identified as needing assistance with core activities (17,700 or 90%) were living in private dwellings, with around one in five (3,300 people) in households that required at least one additional bedroom. For more information on overcrowding, refer to Chapter 4 and the Glossary. The remaining 1,900 Indigenous people needing assistance (10%) were living in non-private dwellings—primarily nursing homes, accommodation for the retired or aged, hospitals and hostels for the disabled. Reflecting the different age structures of the two populations, a much smaller proportion of Indigenous people who needed assistance were living in nursing homes or accommodation for the retired or aged (5%) compared with non-Indigenous people (15%) (table 5.7).

Living arrangements continued

**5.7** PERSONS WHO NEEDED ASSISTANCE(a), by Indigenous status and living arrangements—2006

	INDIGENOUS		NON-INDIG	ENOUS
	no.	%	no.	%
Private dwellings	17 691	90.2	630 208	80.7
Non-private dwellings Hospital	380	1.9	15 797	2.0
Nursing home or accommodation for the	054	4.0	440.457	45.0
retired or aged (not self-contained)  Hostel for the disabled	954 194	4.9 1.0	119 157 7 655	15.3 1.0
Other non-private dwelling	391	2.0	7 934	1.0
Total	1 919	9.8	150 543	19.3
<b>Total</b> (b)	19 616	100.0	780 817	100.0

<sup>(</sup>a) With core activities of self-care, mobility and/or communication.

Source: ABS 2006 Census of Population and Housing

NEED FOR ASSISTANCE BY SOCIOECONOMIC INDICATORS

Highest year of school completed

According to the 2006 Census, there were 228,200 Indigenous people aged 15 years or over (excluding those still at school) who provided information on both their highest level of schooling and whether or not they needed assistance with core activities. Around 6% of them (13,600 people) needed assistance with core activities (table 5.8). While it is possible to examine the relationship between the need for assistance and highest year of school completed, causality cannot be determined as the Census did not collect information on age of onset of disability. It is likely that a need for assistance in childhood contributes to lower levels of educational attainment, but also, that lower levels of schooling, together with other risk factors, increase the likelihood of a person requiring assistance with core activities in their adult years. For more information about the relationship between educational attainment and health risk factors, see Chapter 3 of this report.

In 2006, Indigenous people not needing assistance with core activities were more likely to have completed school to at least Year 10 than those needing assistance, regardless of age. When overall attainment rates were compared, Indigenous people not needing assistance were twice as likely as those needing assistance to have completed Year 12 (24% compared with 12%), and around one-and-a-half times as likely to have completed school to at least Year 10 (44% compared with 27%) (table 5.8).

<sup>(</sup>b) Includes persons in offshore and migratory CDs.

Highest year of school completed continued

HIGHEST YEAR OF SCHOOL COMPLETED, by age and whether needs assistance—Indigenous persons(a)—2006

	Needs assi with core a		Does not ne assistance w core activitie	vith
	no.	%	no.	%
Age group (years)				
15–24				
Year 12 or equivalent	362	27.9	17 508	30.2
Year 10 or 11	440	33.9	25 889	44.7
Year 9 or below(b)	495	38.2	14 515	25.1
25–34				
Year 12 or equivalent	284	20.3	16 964	32.4
Year 10 or 11	511	36.5	23 232	44.4
Year 9 or below(b)	606	43.3	12 084	23.1
35–44				
Year 12 or equivalent	306	13.3	9 383	19.7
Year 10 or 11	930	40.4	25 268	53.0
Year 9 or below(b)	1 066	46.3	13 021	27.3
(,	1 000	.0.0	10 021	2.10
45–54		40.0	4 ==0	
Year 12 or equivalent	303	10.8	4 756	14.7
Year 10 or 11	935	33.3	14 751	45.5
Year 9 or below(b)	1 570	55.9	12 931	39.9
55–64				
Year 12 or equivalent	219	8.4	1 727	10.7
Year 10 or 11	515	19.8	4 316	26.8
Year 9 or below(b)	1 867	71.8	10 051	62.5
65 and over				
Year 12 or equivalent	141	4.4	742	9.0
Year 10 or 11	333	10.4	1 450	17.6
Year 9 or below(b)	2 727	85.2	6 045	73.4
15 and over				
Year 12 or equivalent	1 615	11.9	51 080	23.8
Year 10 or 11	3 664	26.9	94 906	44.2
Year 9 or below(b)	8 331	61.2	68 647	32.0
rear 5 or below(b)	0 001	01.2	00 041	52.0
<b>Total</b> (b)	13 610		214 633	

<sup>..</sup> not applicable

Source: ABS 2006 Census of Population and Housing

#### COMPARISON WITH NON-INDIGENOUS PEOPLE

In both the Indigenous and non-Indigenous populations, Year 12 completion rates were generally lower in older age groups. In addition, Indigenous people were considerably less likely than non-Indigenous people to have completed Year 12, regardless of whether or not they needed assistance with core activities.

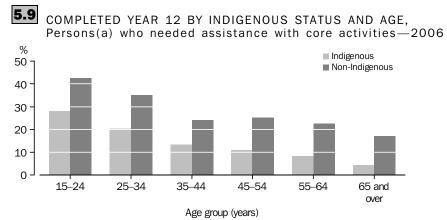
After adjusting for differences in the age structures of the two populations, Indigenous people who needed assistance were less likely than non-Indigenous people who needed assistance to have completed Year 12 (age standardised rate ratio of 0.8). Unadjusted age-specific Indigenous to non-Indigenous rate ratios ranged from 0.7 for people aged 15-24 years to 0.3 for people aged 65 years and over (graph 5.9). For more information on the calculation of rate ratios, see the Glossary.

<sup>(</sup>a) Aged 15 years and over excluding persons still at school and those for whom the highest year of school completed was not stated.

<sup>(</sup>b) Includes Indigenous persons who did not go to school.

Highest year of school completed continued

COMPARISON WITH NON-INDIGENOUS PEOPLE continued

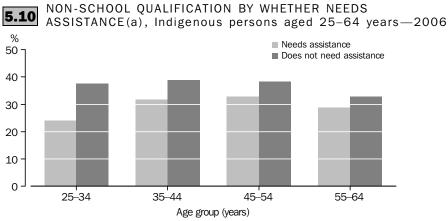


(a) Aged 15 years and over, excluding persons still at school and those for whom highest year of schooling was not stated.

Source: ABS 2006 Census of Population and Housing

Non-school qualifications

Among the 10,200 Aboriginal and Torres Strait Islander people aged 25–64 years identified as needing assistance in 2006, around 3,100, or 30% overall, reported that they had a non-school qualification. The proportion of Indigenous people with a non-school qualification was lower among those needing assistance than among those not needing assistance, for all age groups (graph 5.10).



(a) With core activities of self-care, mobility and/or communication. Source: ABS 2006 Census of Population and Housing

#### COMPARISON WITH NON-INDIGENOUS PEOPLE

Among Australians aged 25–64 years, Indigenous people were less likely than non-Indigenous people to have attained a non-school qualification. However, the difference in attainment rates between those who needed and didn't need assistance was much smaller among Indigenous people (30% compared with 38%) than non-Indigenous people (36% compared with 58%).

Labour force status

In the 2006 Census, around 12,100 Indigenous people aged 15–64 years (4%) needed assistance with core activities of daily living. Among those who needed assistance, 12% were employed, 3% were unemployed and looking for work, and 80% were not in the labour force. Aboriginal and Torres Strait Islander people who needed assistance were participating in the labour force at around one-quarter the rate of those not needing assistance (16% compared with 59%), and experienced higher unemployment rates (21% compared with 15%) (table 5.11).

F 44	LABOUR FORCE STATUS, by whether needs assistance—Indigenous persons aged 15–64 years—2006
<b>5.11</b>	assistance—Indigenous persons aged 15-64 years—2006

AGE GROUP (YEARS)						AGED 15 YEARS	-64	
	15–24	25–34	35–44	45–54	55–64	Percent	Number	
	%	%	%	%	%	%	no.	
•••••								
NEED	S ASSI	STANCI	E WITH	CORE	ACTIV	/ITIES		
Employed	13.3	16.9	16.2	12.2	6.7	12.5	1 502	
Unemployed	6.5	5.1	3.8	2.2	0.9	3.3	394	
In the labour force	19.8	22.0	20.0	14.4	7.6	15.7	1 896	
Not in the labour force	77.3	75.4	77.1	81.7	86.5	80.4	9 698	
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	12 058	
Unemployment rate(b)	33.0	23.0	18.9	15.6	11.8	20.8		
• • • • • • • • • • • • • • • • • • • •								
DOES NOT	NEED	ASSIST	ANCE	WITH	CORE	ACTIVITIES		
Employed	39.8	53.3	57.2	59.3	41.9	49.7	118 318	
Unemployed	11.4	9.9	8.8	6.2	3.6	9.1	21 690	
In the labour force	51.2	63.2	66.0	65.4	45.5	58.8	140 008	
Not in the labour force	45.7	33.9	31.2	31.5	50.9	38.1	90 714	
Total(a)	100.0	100.0	100.0	100.0	100.0	100.0	237 955	
Unemployment rate(b)	22.2	15.6	13.3	9.5	7.9	15.5		

<sup>..</sup> not applicable

Source: ABS 2006 Census of Population and Housing

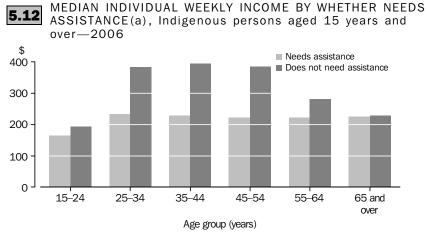
Individual weekly income

Just under half (49%) of Aboriginal and Torres Strait Islander people who needed assistance in 2006 reported weekly income in the range \$150–\$249, with median weekly income for males of \$218, and for females, \$221. Median weekly incomes for Indigenous males and females who needed assistance were lower than the corresponding incomes for those not needing assistance, across all age groups. However, the difference in median incomes was most pronounced among people of prime working age (i.e. aged 25–54 years), reflecting significantly lower employment and labour force participation rates among those needing assistance with core activities. Within these age groups, the median income for Indigenous people who needed assistance was equivalent to around 60% of the median income for those who did not need assistance (graph 5.12).

<sup>(</sup>a) Includes persons for whom labour force status was not known.

<sup>(</sup>b) Unemployed persons as a proportion of those in the labour force.

Individual weekly income continued



(a) With core activities of self-care, mobility and/or communication. Source: ABS 2006 Census of Population and Housing

### COMPARISON WITH NON-INDIGENOUS PEOPLE

Among Australians needing assistance with core activities, the median individual weekly income was lower for Indigenous than non-Indigenous people (\$220 per week compared with \$240 per week). However, this difference in median incomes was much smaller than that between Indigenous and non-Indigenous people not needing assistance (\$291 per week compared with \$499 per week).

Low resource households

Another income measure—equivalised gross weekly household income on a per person basis—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 this report, Indigenous people whose equivalised gross weekly household income was in the lowest quintile, i.e. less than \$315 per week, were considered to be living in low resource households. For more information on the definitions of low resource households and income quintiles, see Glossary.

Data from the 2006 census show that Indigenous people who needed assistance with core activities were more likely than those not needing assistance to be living in a low resource household (44% compared with 38%).

### COMPARISON WITH NON-INDIGENOUS PEOPLE

Indigenous people overall were almost five times as likely as non-Indigenous people to be living in a low resource household (39% compared with 8%). After adjusting for differences in the age structures of the two populations, Indigenous people who needed assistance were twice as likely as non-Indigenous people who needed assistance, to be living in a low resource household.

Language spoken at home

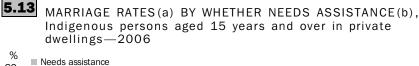
In the 2006 Census, around 16,300 Aboriginal and Torres Strait Islander people who needed assistance with core activities (83%) spoke English at home and a further 2,200 people (11%) spoke an Australian Indigenous language. Prevalence of need for assistance was the same among Indigenous people who only spoke English and those who spoke an Australian Indigenous language at home (both 4%).

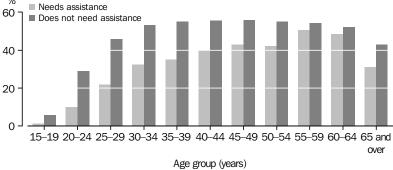
Social networks

Good support networks, friendships and relationships are positive social determinants of health. Conversely, disability and illness can lead to social exclusion and marginalisation (The Fred Hollows Foundation 2007). Information on the support provided by carers to people who need help because they are old and/or have disability is explored in some detail in later sections of this chapter. Complementary information about participation in social activities and sources of support for Indigenous people aged 15 years and over, including those with a profound/severe core activity limitation, are available from the 2002 NATSISS. These data show that Indigenous people with a profound/severe core activity limitation had been involved in social activities in the previous three months at similar rates to those without disability (88% compared with 92%). Similarly, access to support in times of crisis was reported by 87% of Indigenous people with a profound/severe core activity limitation, compared with 92% of those without disability.

### SOCIAL MARITAL STATUS

While data from the 2002 NATSISS suggest that disability is not necessarily a barrier to social participation, a person's need for assistance with core activities may impact on their chances of partnering. According to the 2006 Census, Indigenous people aged 15 years and over who needed assistance with core activities were less likely to be in a registered or de facto marriage than were people of the same age who did not need assistance (graph 5.13). The same pattern was evident in the non-Indigenous population.





- (a) Registered or de facto marriage.
- (b) With core activities of self-care, mobility and/or communication.

Source: ABS 2006 Census of Population and Housing

Living with a carer

In 2006, around 10,300 Aboriginal and Torres Strait Islander people (58% of those who needed assistance in private dwellings) were living in a household in which there was at least one identified carer (i.e. a person who provided unpaid care, help or assistance to another person because of their disability, long-term illness or problems related to old age). While the Census data do not link people who needed assistance to a specific caregiver, it may be reasonable to assume the existence of a caring relationship in most instances where both a person needing assistance and at least one carer were living in the same household.

Living with a carer continued

The proportion of Indigenous people needing assistance who were living with a carer was lower in older age groups—51% of those aged 65 years and over, compared with 74% of children aged 0–14 years (table 5.14). It is possible that some people with disability had a carer outside their immediate household, and also likely that not all carers will have been identified (see box 5.16), so it should not be assumed that the lack of an identified carer within the household is a measure of unmet need for care.

INDIGENOUS PERSONS WHO NEEDED ASSISTANCE(a), by whether living with a carer—2006

	HOUSEHOLDS WITH A			HOUSEHOLDS WITHOUT A		
	CARER(b)		CARER(I	o)	TOTAL(b)(c)	
Age group (years)	no.	%	no.	%	no.	%
0-14	2 655	74.1	682	19.0	3 584	100.0
15-24	1 216	67.2	435	24.0	1 809	100.0
25-34	778	56.2	503	36.3	1 384	100.0
35-44	1 225	53.2	892	38.7	2 304	100.0
45-54	1 484	51.6	1 117	38.8	2 877	100.0
55-64	1 387	51.9	1 002	37.5	2 670	100.0
65 and over	1 557	50.8	1 103	36.0	3 064	100.0
Total	10 302	58.2	5 734	32.4	17 692	100.0

- (a) Living in private dwellings.
- (b) Components may not add to total due to perturbation of component data.
- Includes persons living in households in which the carer status of resident(s) was not known.

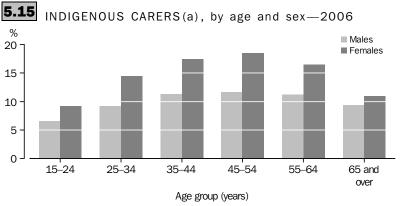
Source: ABS 2006 Census of Population and Housing

### CARERS

Prevalence by age and sex

In 2006, for the first time, the Census collected information on the number of carers aged 15 years or over in Australia. The analysis that follows is based on carers of people with disability, living in private dwellings.

There were 11,600 Indigenous male carers (9%) and 20,000 Indigenous female carers (14%) in 2006. The proportion of Indigenous carers ranged from 8% of those aged 15-24 years, increased to a peak of 15% of those aged 45-54 years, and then decreased to 10% of those aged 65 years and over (graph 5.15).



(a) Living in private dwellings. Persons who provided unpaid care, help or assistance to another person because of their disability, long-term illness or problems related to old age.

Source: ABS 2006 Census of Population and Housing

Prevalence by age and sex continued

### **5.16** 2006 CENSUS—CARER STATUS

### Carer status

The 2006 Census asked two questions about the provision of unpaid assistance which were then combined to produce the Unpaid Assistance to a Person with a Disability measure (see Appendix 1). Some carers may not have been identified as such due to the relative positioning of questions on Core Activity Need for Assistance and the provision of unpaid care (i.e. these question sets were not sequential). Appearing much later on the Census form, the carer questions used the word 'disability' to signify the Core Activity Need for Assistance concept, which may also have resulted in some people misunderstanding the intended connection between the two measures.

### Non-response

It should be noted that the proportion of carers in the Indigenous population is likely to be understated as around 11% of Aboriginal and Torres Strait Islander people aged 15 years and over in private dwellings did not answer these questions. The corresponding rate of non-response in the non-Indigenous population was 5%.

### COMPARISON WITH NON-INDIGENOUS CARERS

After adjusting for differences in the age structures of the Indigenous and non-Indigenous populations, Aboriginal and Torres Strait Islander people were more likely than non-Indigenous people to be caring for another person with disability, long-term illness or problems related to old age. The median age of Indigenous carers was 37 years; 12 years less than the median age of non-Indigenous carers (49 years). Reflecting higher birth rates at younger ages (younger parenting), and the earlier onset of many chronic diseases in the Aboriginal and Torres Strait Islander population, the Indigenous to non-Indigenous carer rate ratio was greatest among people aged 15-34 years (table 5.17).

Prevalence by age and sex continued

 ${\tt COMPARISON} \ \ {\tt WITH} \ \ {\tt NON-INDIGENOUS} \ \ {\tt CARERS} \ \ {\it continued}$ 

**5.17** CARERS(a), by Indigenous status, age and sex—2006

	Indigenous %	Non-Indigenous %	Indigenous to non-Indigenous rate ratio ratio			
Age group (years)						
15–24	7.9	4.5	1.7			
25–34	12.1	7.5	1.6			
35–44	14.7	11.2	1.3			
45–54	15.3	15.0	1.0			
55–64	14.0	16.5	0.9			
65 and over	10.4	10.4	1.0			
Total	11.9	10.8	1.1			
Males—Age standardised	9.8	8.3	1.2			
Females—Age standardised	14.5	12.6	1.2			
Total—Age standardised	12.4	10.5	1.2			
NUMBERS						
Total carers	31 600	1 532 057				

<sup>. . . . . . . . . . . .</sup> 

not applicable

Source: ABS 2006 Census of Population and Housing

State/territory and remoteness

At the state/territory level, similar proportions of Aboriginal and Torres Strait Islander people aged 15 years and over were carers—ranging from 11% in Queensland to 13% in the Australian Capital Territory. Carer rates were higher for females than males in all jurisdictions. There were no significant differences in the prevalence of carers according to remoteness areas.

Labour force status

For carers of working age, there can be opportunity and financial costs if their caring role prevents or makes it difficult for them to work in paid employment. Carers providing the intensive level of care associated with self-care tasks such as washing, dressing and toileting are often required to perform these tasks at short notice, making regular full-time paid employment outside the home difficult.

In 2006, Indigenous carers were participating in the labour force (i.e. either employed or unemployed and looking for work) at a similar rate to those who were not caregivers (54% compared with 58%). In both the Indigenous and non-Indigenous populations, carers were more likely than those who were not providing care, to be employed part-time. Among Indigenous people who were employed, 44% of carers were in part-time work compared with 37% of those who were not providing care.

<sup>(</sup>a) Persons aged 15 years or over living in private dwellings who provided unpaid care, help or assistance to another person because of their disability, long-term illness or problems related to old age.

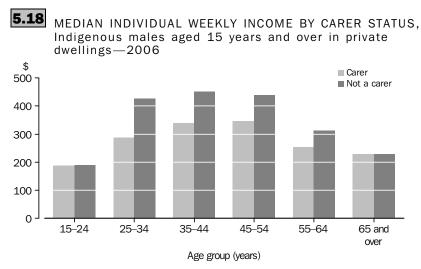
Labour force status continued

### COMPARISON WITH NON-INDIGENOUS CARERS

After adjusting for differences in the age structures of the Indigenous and non-Indigenous populations, non-Indigenous carers were around one-and-a-half times more likely to be employed than were Indigenous carers. Among those who were employed, rates of part-time work were similar for Indigenous and non-Indigenous carers.

Median individual weekly income

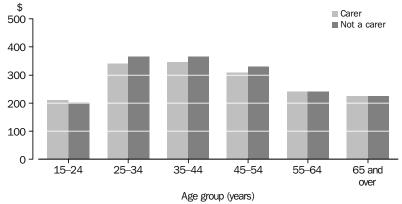
In the 2006 Census, the median individual weekly income for male carers was \$248, and for female carers, \$289. While the 2006 Census did not ask people whether their caring role prevented them from working, age-specific information on weekly income shows that among Indigenous people aged 25–64 years, the median income of carers was lower than the median income of those who were not providing care. Among people in this age group, the median weekly income for Indigenous male carers was between \$60 and \$140 lower than the corresponding income for males who were not providing care, while among Indigenous females, the median weekly income for carers was up to \$25 lower than the corresponding income for those who were not providing care (graphs 5.18 and 5.19).



Source: ABS 2006 Census of Population and Housing

Median individual weekly income continued





Source: ABS 2006 Census of Population and Housing

### COMPARISON WITH NON-INDIGENOUS CARERS

Reflecting lower employment rates, the median weekly income for Indigenous male carers was equivalent to 42% of the median weekly income for non-Indigenous male carers (\$248 compared with \$589). Although still considerable, the difference between the median weekly income for Indigenous and non-Indigenous female carers was much smaller (\$289 compared with \$356). The median weekly income for Indigenous male and female carers was lower than that for non-Indigenous carers of the same sex across all age groups.

Low resource households

In this report, Indigenous people whose equivalised gross weekly household income was in the lowest quintile, i.e. less than \$315 per week, were considered to be living in low resource households. Data from the 2006 Census show that Indigenous carers aged 15 years and over were more likely than those not providing care to be living in a low resource household (36% compared with 33%). For more information on the definitions of low resource households and income quintiles, see Glossary.

### COMPARISON WITH NON-INDIGENOUS CARERS

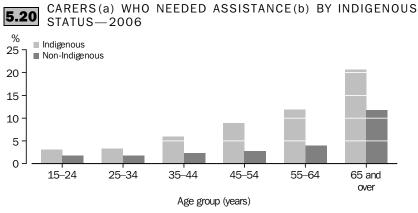
After adjusting for differences in the age structures of the Indigenous and non-Indigenous populations, Indigenous carers were four times as likely as non-Indigenous carers to be living in a low resource household. However, a similar degree of relative disadvantage was also evident between Indigenous and non-Indigenous people aged 15 years and over who were not carers.

Language spoken at home

In 2006, around 5,000 Aboriginal and Torres Strait Islander carers (16%) reported speaking an Australian Indigenous language at home and 25,300 (80%) spoke English only. A majority of those who spoke an Indigenous language at home reported that they were also proficient English speakers.

Carers' need for assistance

In the 2006 Census, around 2,100 Indigenous carers needed help with core activities themselves, of whom more than two-thirds (68%) were under 55 years of age. Indigenous carers were between one-and-a half and three times as likely as non-Indigenous carers to need assistance with core activities (graph 5.20).



- (a) Aged 15 years and over, living in private dwellings.
- (b) With core activities of self-care, mobility and/or communication.

Source: ABS 2006 Census of Population and Housing

SUMMARY

In the 2006 Census, around 19,600 Aboriginal and Torres Strait Islander Australians (4%) were identified as needing assistance with self-care (eating, washing, dressing or toileting), physical mobility or communication. After taking account of age differences between the Indigenous and non-Indigenous populations, Indigenous people were almost twice as likely as non-Indigenous people to require assistance with core activities.

The prevalence of disability among Indigenous people is higher at all ages. Among those needing assistance, the median age for Indigenous males was 41 years, and for females, 49 years. The corresponding median ages for non-Indigenous males and females who needed assistance were 61 years and 75 years respectively. The prevalence of need for assistance with core activities increased noticeably from about 35 years of age onwards for both Indigenous men and women. This is consistent with the patterns for chronic long-term health conditions such as heart/circulatory diseases and diabetes, which show onset some ten years earlier in the Indigenous population than in the non-Indigenous population (ABS 2006c).

While Indigenous people are generally disadvantaged when compared with non-Indigenous people, those needing assistance with core activities were likely to experience a further degree of social and economic disadvantage. When compared with Indigenous people who did not need assistance, they were, on average, half as likely to have completed Year 12 (12% compared with 24%), participating in the labour force at around one-quarter the rate (16% compared with 59%), and more likely to be living on lower incomes. In addition, Aboriginal and Torres Strait Islander people who needed assistance were less likely to be partnered than were those not needing assistance.

In 2006, for the first time, the Census collected information on the number of Australians aged 15 years and over who provided unpaid care, help or assistance to another person because of their disability, long-term illness or problems related to old age. Around

SUMMARY continued

11,600 Indigenous male carers (9%) and 20,000 Indigenous female carers (14%) were identified in 2006. The median age of Indigenous carers was 37 years, 12 years less than the median age of non-Indigenous carers (49 years). Around 2,100 Indigenous carers needed help with core activities themselves, of whom more than two-thirds (68%) were under 55 years of age. Indigenous carers were between one-and-a-half and three times as likely as non-Indigenous carers to need assistance with core activities, similar to the overall Indigenous to non-Indigenous rate ratios for those needing assistance.

### CHAPTER 6

### MOTHERS AND CHILDREN .....

### INTRODUCTION

Aboriginal and Torres Strait Islander females have higher fertility rates than other Australian females and are more likely to give birth at younger ages. Indigenous maternal mortality rates and the proportion of low birthweight babies born to Indigenous females are higher than for non-Indigenous females. The perinatal death rate for Indigenous babies is also higher than for non-Indigenous babies, but this rate has declined since the early 1990s. Mortality rates for Indigenous infants and children have also fallen in some jurisdictions over a similar period of time.

This chapter includes some background information on the circumstances of Indigenous families and communities to provide the broader context in which the health and welfare of Indigenous mothers and children is determined. The relatively poor socioeconomic status and social disadvantage experienced by many Indigenous families contributes to the generally poorer health and wellbeing of Indigenous children.

The data on Indigenous mothers and babies focus on the periods of pregnancy, childbirth and infancy. As well as data on fertility, the chapter includes information on the risk factors during pregnancy, and perinatal and child health outcomes. These outcomes include maternal mortality, gestational age, low birthweight and perinatal mortality. Data are also included on some of the factors that impact on healthy child development—breastfeeding, diet and nutrition, immunisation, and exposure to passive smoking and risky/high risk drinker(s) in the household. The health status of Indigenous children is then examined through data on the prevalence of long-term health conditions, burden of disease, hospitalisations and mortality.

The focus of the chapter is Indigenous mothers and Indigenous children aged 0–14 years, except where information for these ages was not available. For the first time, data on trends over time are provided for some of the measures.

# INDIGENOUS FAMILIES AND COMMUNITIES

Indigenous household and family structures

Data from the 2006 Census show that the majority of both Indigenous and other Australian households are single family households (76% and 70% respectively), however a larger proportion of Indigenous households are multi-family households (5% compared with 1%) and a smaller proportion are lone person households (14% compared with 25%). Indigenous households are more likely to be larger, with an average of 3.4 people compared with 2.6 for other Australian households.

In 2006, Indigenous single family households were three times more likely than other single family households to be one-parent families with dependent children or students (30% compared with 10%), but less likely to be families without dependents (33% compared with 54%). Indigenous and non-Indigenous single family households were equally likely to be couples with dependent children (around 37%).

The classifications used to describe Indigenous households and family structures in the ABS five-yearly Census do not fully capture the complexity of many Indigenous families

Indigenous household and family structures continued

and their living arrangements (Morphy 2006). The characteristics of Indigenous households differ from the majority of Australian households—they tend to be larger, non-nuclear and more fluid in composition. Indigenous families have overlapping and extensive kinship networks, with both adults and children commonly moving between different households (Smith 2001; Morphy 2006). These extensive and fluid family structures are more common in remote communities, but are also found in more settled areas of Australia (Smith 2000).

Socioeconomic status

The relatively poor socioeconomic status of Indigenous people and families has been well documented. Chapter 2, for example, outlines the lower employment rates, income levels and education attainment of Indigenous Australians when compared with non-Indigenous Australians. Indigenous people in remote areas have limited access to services and mainstream labour markets. This has important implications for Indigenous children born and raised in these environments, and impacts on their health and other life outcomes.

Daly and Smith (2005) identified a key set of statistical variables that they regarded as indicators of exclusion from mainstream social and economic opportunities. They analysed the 2001 Census and other data on these indicators of risk for Indigenous and non-Indigenous children and concluded that Indigenous children were among the most socially disadvantaged in Australia. Compared with other Australian children, children living in Indigenous households were:

- less likely to be living with a parent (88% of Indigenous children compared with 98% of non-Indigenous children);
- had lower weekly household incomes (median weekly incomes of households with Indigenous children were 67% of the median weekly incomes of households with other children (i.e. no Indigenous children));
- more reliant on income support (33% of Indigenous families with dependants were receiving Parenting Payment compared with 16% of non-Indigenous families);
- more likely to have parents who left school early (57% of children in Indigenous households were living with parents who had not completed Year 10 compared with 25% of children in other households); and
- less likely to have a parent in paid employment (47% of Indigenous families had no parent working compared with 20% of other families).

On a number of the indicators examined, Indigenous children living in very remote areas were more disadvantaged than those in less remote areas. Many Indigenous children experienced multiple risk factors and there was evidence that the damage caused by these compounded with each additional risk factor (Daly & Smith 2005).

Family and community functioning

Family functioning has been shown to have strong associations with the social, economic and psychological environment of the family and wider community (Silburn et al 2006). It is important because good family functioning is associated with positive child outcomes, while poor family functioning leads to poor emotional and behavioural outcomes for children. The impact of poor family functioning on child outcomes can be ameliorated by the level of community functioning. Recent data on Indigenous family and community functioning should be viewed in the context of the social disadvantage experienced by many Indigenous families and the life stresses they experience.

Family and community functioning continued The 2001-02 Western Australian Aboriginal Child Health Survey (WAACHS) examined life stresses, family functioning and community characteristics across geographical areas. WAACHS asked primary carers if any of 14 major life stressors had occurred in the family in the previous 12 months (see box 6.1). Families with Aboriginal children reported very high levels of life stresses, with 22% of children living in families in which 7–14 life stress events had occurred in the last 12 months. The survey found that similar levels of stress were reported across all levels of geographic isolation. Carers of Aboriginal children experienced an average of 3.9 life stress events, over three times the average experienced by carers of non-Aboriginal children (1.2 life stressors) (Silburn et al 2006).

The survey found that most Aboriginal families were functioning well, based on measures of family functioning developed for the survey (see box 6.1). Those in the lowest quarter of the measure of functioning were classified as having poor family functioning. Carers living in areas of extreme isolation were more likely to be living in families classified as having poor family functioning. Two of the major factors associated with poor family functioning in areas of extreme isolation were family financial strain and the quality of children's diets.

### WESTERN AUSTRALIAN ABORIGINAL CHILD HEALTH SURVEY **6.1** (WAACHS)

The Western Australian Aboriginal Child Health Survey (WAACHS) was a large scale investigation into the health of 5,289 Western Australian Aboriginal and Torres Strait Islander children aged 0-17 years. It was undertaken in 2001 and 2002 by the Telethon Institute for Child Health Research in conjunction with the Kulunga Research Network. The survey was the first to gather comprehensive health, educational and developmental information on a population based sample of Aboriginal and Torres Strait Islander children, their families and communities.

### Level of Relative Isolation (LORI)

LORI is a new classification of remoteness indicating the relative distance of localities from population centres of various sizes. The LORI is based on an extension of the ARIA (Accessibility/Remoteness Index of Australia) called ARIA++ which has an 18 point remoteness scale and gives a more detailed description of more remote areas by including more service centres in calculating remoteness scores. Based on the ARIA++ scores, five categories of isolation have been defined. These categories are referred to as LORIs and range from None (the Perth metropolitan area) to Low (e.g. Albany), Moderate (e.g. Broome), High (e.g. Kalumburu) and Extreme (e.g. Yiyili).

### Life stresses

Primary carers were asked if any of 14 major life stress events had occurred in their family in the preceding 12 months. These events included: a close family member had a medical problem and was in hospital; a close family member was in prison; your child/children was involved in or upset by family arguments; a parent/caregiver lost his or her job; a close family member had an alcohol or drug problem; an important family member passed away; and/or parents or carers had left because of a family split up.

Family and community functioning continued

### Family functioning

Family functioning was measured in the WAACHS using a nine-item scale based on key family recovery and family protective factors identified in international research and modified for Aboriginal families. The family protective factors include accord, communication, hardiness and acceptance. Based on these indicators, the authors concluded that the majority of families with Aboriginal children scored highly on the family functioning scale. But in order to produce a single measure of family functioning, responses were summed to produce an overall score and then split into quartiles, each representing one-quarter of the population. These quartiles were labelled Poor, Fair, Good and Very Good.

Source: Silburn et al 2006

The WAACHS also explored the characteristics of communities with Aboriginal children and found that there were significant differences across the spectrum of geographical isolation (Silburn et al 2006). The maintenance of Aboriginal languages and traditional cultures were much more common in areas of extreme isolation. Neighbourhood and community problems, such as being bothered by drug and alcohol abuse, break-ins and car stealing were most common in areas of moderate isolation.

A range of studies have found that the incidence of violence in Indigenous families and communities is significantly higher than in the Australian community as a whole, and this has particularly adverse impacts on the health and wellbeing of Aboriginal and Torres Strait Islander children (AIHW: Al-Yaman et. al. 2006; Gordon et. al. 2002). In 2002, some 41% of Indigenous people in remote areas and 14% of those in non-remote areas reported that family violence was a neighbourhood problem. In 2003–04 Indigenous females were hospitalised for family violence-related assaults at 35 times the rate of non-Indigenous females, while 7,950 Indigenous females and 350 Indigenous males sought assistance through the Supported Accommodation Assistance Program (SAAP) to escape domestic violence (AIHW: Al-Yaman et al 2006). In 2005–06 there were 11,600 Indigenous children who attended a SAAP service with their parent or guardian. Among Indigenous children aged four years or less, one in every 11 attended a SAAP service in 2005–06 (see Chapter 4). Chapter 11 provides data on the relatively high rates of Indigenous children in the child protection system.

INDIGENOUS MOTHERS

This section includes data on Indigenous mothers, mainly during the period of pregnancy. Data on female contraceptive practices are provided, followed by information on fertility rates, maternal age, risk factors during pregnancy and maternal mortality.

Female contraceptive practices

The 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) provides information on the contraceptive practices of Indigenous women aged 18–49 years. Overall, the most common forms of contraception used by Indigenous women were condoms (20%) followed by the contraceptive pill (14%) (ABS 2006e). Forms of contraceptive use differed according to remoteness. While 24% of Indigenous women living in non-remote areas reported using condoms and 17% were taking the contraceptive pill, only 9% of women in remote areas used condoms and less than 5% were taking the contraceptive pill. In contrast, Indigenous women in remote areas

Female contraceptive practices continued

were more than twice as likely as those in non-remote areas to report using contraceptive injections (14% compared with 5%) or implants (13% compared with 5%)

Mothers

During 2001–2004, Indigenous mothers comprised nearly 4% of all females who gave birth in Australia. The proportion of Indigenous mothers ranged from less than 1% of females who gave birth in Victoria to 39% in the Northern Territory. The number of Indigenous mothers was highest in Queensland (11,041), followed by New South Wales (8,734), Western Australia (6,164) and the Northern Territory (5,622) (table 6.2).

**6.2** INDIGENOUS MOTHERS, by state/territory—2001-2004

	Number	Proportion of all mothers(a)
	no.	%
New South Wales	8 734	2.6
Victoria	1 633	0.7
Queensland	11 041	5.6
South Australia	1 793	2.6
Western Australia	6 164	6.3
Tasmania(b)	na	na
Northern Territory	5 622	38.9
Australian Capital Territory(c)	277	1.5
Australia	35 264	3.5

- na not available
- Indigenous mothers as a proportion of all mothers in each jurisdiction.
- (b) Data for Tasmania are unavailable.
- (c) Data includes ACT and non-ACT residents who gave birth in the ACT.

Source: AIHW National Perinatal Data Collection

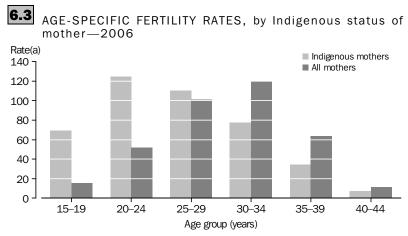
Fertility

The total fertility rate (TFR) represents the number of children a woman would have during her lifetime if she were to experience current age-specific fertility rates at each stage of her reproductive life. Measures of the fertility of Indigenous females account for only part of the impact of births on measures of the growth of the Indigenous population. This is because the Indigenous TFR is based on the Indigenous status of the mother, and about one-third of Indigenous babies have an Indigenous father and non-Indigenous mother. In addition, the fertility rate of Indigenous females is likely to be underestimated because the Indigenous status of the mother is not always recorded in birth registrations that are used to calculate fertility rates. The TFR for 2006 was derived using the numbers of births registered to Indigenous mothers in 2006 and the 30 June 2006 preliminary estimated resident population of Aboriginal and Torres Strait Islander females.

In 2006, the TFR for Indigenous females was estimated to be 2.1 babies, compared with 1.8 babies for all Australian females. Indigenous TFRs vary across the states and territories. The highest Indigenous TFR in 2006 occurred in South Australia (2.5 babies per female), followed by the Northern Territory (2.4) and Western Australia (2.3) (ABS 2007a).

Fertility continued

High fertility at younger ages contributes to the relatively high fertility of Indigenous females. Teenage births (i.e. births to females less than 20 years of age) are more common among Indigenous than non-Indigenous females. In 2006, the teenage birth rate for Indigenous females (69 babies per 1,000 females) was more than five times the teenage birth rate for non-Indigenous females (13 babies per 1,000 females). The peak age group for births to Indigenous females in 2006 was 20–24 years (125 babies per 1,000), followed by women aged 25–29 years (110 babies per 1,000 females). In contrast, the peak age group for births to non-Indigenous females was 30–34 years (120 babies per 1,000 females) (graph 6.3) (ABS 2007a).



(a) Number of babies per 1,000 females.

Source: ABS 2007a

Maternal age

The age of the mother can affect the development of the foetus, with the risk of foetal complications being higher for pregnancies that occur in the teenage years or among women over the age of about 35 years. Maternal age is also associated with perinatal health, with adverse outcomes more likely among younger and older mothers (Laws et al 2006a). The median age of Indigenous mothers in the period 2001–2004 was 25 years, some five years lower than the median age of non-Indigenous mothers (30 years) (AIHW: Leeds et al 2007).

In the period 2001–2004, approximately 23% of Indigenous females who gave birth were aged less than 20 years, compared with 4% of non-Indigenous females. The jurisdiction with the largest proportion of Indigenous females aged less than 20 years who gave birth during this period was the Northern Territory (29%), followed by Western Australia (24%), Victoria (22%) and South Australia (22%). The corresponding proportions for non-Indigenous females were 5% in the Northern Territory, 5% in Western Australia, 3% in Victoria and 5% in South Australia. Around 7% of Indigenous females who gave birth in the period 2001–2004 were aged 35 years or over compared with 19% of non-Indigenous females (table 6.4).

## **6.4** MOTHERS(a), by maternal age and Indigenous status—2001–2004

0/	20–34 years		35 years or over		Total(b)	
70	no.	%	no.	%	no.	%
04.4	0.400	70.0	070		0.704	400.0
						100.0 100.0
3.1	255 264	10.9	03 021	19.5	329 380	100.0
22.0	1 120	60.7	122	0.1	1 622	100.0
						100.0
2.0	10, 000	. 0.1	01 0 10	21.0	210 110	100.0
10.6	8 020	72.7	860	7.8	11 0/11	100.0
5.4		78.0	30 683	16.5	185 723	100.0
21.8	1 269	70.8	133	7.4	1 793	100.0
4.9	52 584	77.6	11 867	17.5	67 800	100.0
23.8	4 309	69.9	388	6.3	6 164	100.0
4.5	71 223	77.3	16 773	18.2	92 116	100.0
29.1	3 652	65.0	329	5.9	5 622	100.0
5.2	6 787	77.4	1 519	17.3	8 773	100.0
14.8	210	75.8	26	9.4	277	100.0
2.9	13 921	75.8	3 896	21.2	18 357	100.0
22.5	24 785	70.3	2 541	7.2	35 264	100.0
4.0	730 288	77.0	180 010	19.0	948 573	100.0
	21.8 4.9 23.8 4.5 29.1 5.2 14.8 2.9	21.4 6 186 3.7 253 284  22.0 1 139 2.9 187 560  19.6 8 020 5.4 144 929  21.8 1 269 4.9 52 584  23.8 4 309 4.5 71 223  29.1 3 652 5.2 6 787  14.8 210 2.9 13 921	21.4       6 186       70.9         3.7       253 284       76.9         22.0       1 139       69.7         2.9       187 560       76.1         19.6       8 020       72.7         5.4       144 929       78.0         21.8       1 269       70.8         4.9       52 584       77.6         23.8       4 309       69.9         4.5       71 223       77.3         29.1       3 652       65.0         5.2       6 787       77.4         14.8       210       75.8         2.9       13 921       75.8         22.5       24 785       70.3	21.4       6 186       70.9       672         3.7       253 284       76.9       63 627         22.0       1 139       69.7       133         2.9       187 560       76.1       51 645         19.6       8 020       72.7       860         5.4       144 929       78.0       30 683         21.8       1 269       70.8       133         4.9       52 584       77.6       11 867         23.8       4 309       69.9       388         4.5       71 223       77.3       16 773         29.1       3 652       65.0       329         5.2       6 787       77.4       1 519         14.8       210       75.8       26         2.9       13 921       75.8       3 896          22.5       24 785       70.3       2 541	21.4       6 186       70.9       672       7.7         3.7       253 284       76.9       63 627       19.3         22.0       1 139       69.7       133       8.1         2.9       187 560       76.1       51 645       21.0         19.6       8 020       72.7       860       7.8         5.4       144 929       78.0       30 683       16.5         21.8       1 269       70.8       133       7.4         4.9       52 584       77.6       11 867       17.5         23.8       4 309       69.9       388       6.3         4.5       71 223       77.3       16 773       18.2         29.1       3 652       65.0       329       5.9         5.2       6 787       77.4       1 519       17.3         14.8       210       75.8       26       9.4         2.9       13 921       75.8       3 896       21.2          22.5       24 785       70.3       2 541       7.2	21.4       6 186       70.9       672       7.7       8 734         3.7       253 284       76.9       63 627       19.3       329 386         22.0       1 139       69.7       133       8.1       1 633         2.9       187 560       76.1       51 645       21.0       246 418         19.6       8 020       72.7       860       7.8       11 041         5.4       144 929       78.0       30 683       16.5       185 723         21.8       1 269       70.8       133       7.4       1 793         4.9       52 584       77.6       11 867       17.5       67 800         23.8       4 309       69.9       388       6.3       6 164         4.5       71 223       77.3       16 773       18.2       92 116         29.1       3 652       65.0       329       5.9       5 622         5.2       6 787       77.4       1 519       17.3       8 773         14.8       210       75.8       26       9.4       277         2.9       13 921       75.8       3 896       21.2       18 357         22.5       24 785

<sup>(</sup>a) Excludes mothers whose Indigenous status was not stated.

Source: AIHW National Perinatal Data Collection

Risk factors during pregnancy

Smoking and alcohol use during pregnancy are both major risk factors for poor perinatal and child health.

### SMOKING

Smoking during pregnancy increases the risk of complications and is associated with poorer perinatal outcomes, such as low birthweight, preterm birth and perinatal death (Graham et al 2007). Maternal factors that have been found to be associated with smoking during pregnancy include maternal age, marital status, socioeconomic status and number of children (Ventura et al 2003; Kahn et al 2002).

The National Perinatal Data Collection (NPDC) contains data on smoking during pregnancy from New South Wales, Western Australia, South Australia, the Australian Capital Territory and the Northern Territory for the period 2001–2004. During this period, half (51%) of Indigenous females in these states and territories reported smoking during pregnancy. Indigenous mothers were around three times as likely to smoke during pregnancy as non-Indigenous mothers (Laws et al 2006b).

### ALCOHOL CONSUMPTION

Excessive alcohol intake during pregnancy is associated with an increased risk of alcohol withdrawal symptoms in the baby, Foetal Alcohol Syndrome, and perinatal mortality (Walker, Rosenberg & Balaban-Gil 1999 in Zubrick et al 2004). In the 2001–02 WAACHS,

<sup>(</sup>c) Excludes Tasmania.

Includes mothers for whom age was not stated.

Risk factors during pregnancy continued

the mothers of an estimated 23% of Aboriginal children in Western Australia reported that they had consumed alcohol during pregnancy (Zubrick et al 2004).

Maternal mortality

Maternal mortality is defined as the death of a woman while pregnant or within 42 days of the termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes (Sullivan & King 2006). For the period 2000–2002 there were 13 maternal deaths of Aboriginal and Torres Strait Islander females (Sullivan & King 2006). For 2000–02, the maternal mortality rate for Indigenous females (45.9 per 100,000 females who gave birth) was five times the rate for non-Indigenous females (8.7 per 100,000 females who gave birth). The Indigenous maternal mortality rate is likely to be an underestimate because of incomplete ascertainment of Indigenous status in deaths data.

BABIES AND CHILDREN

This section provides the latest data on Indigenous babies and children. It begins with data on the length of pregnancy and births, including birthweight and perinatal mortality. This is followed by data on some of the factors that impact on child development—breastfeeding, diet and nutrition, immunisation and passive smoking. The final section provides information on the health status of Indigenous children, that is, the prevalence of long-term health conditions, hospitalisation and deaths.

Births

Information on births is published annually by the ABS from birth registration data and through the National Perinatal Data Collection (NPDC). The number of Indigenous births in both data collections is likely to be an underestimate as the Indigenous status of the parents is not always recorded, or recorded correctly.

In 2006, there were around 12,300 live births registered in Australia where at least one parent was of Indigenous origin, accounting for around 5% of total births (ABS 2007a). Around one-third (30%) of these babies had both an Indigenous mother and an Indigenous father, and 41% had an Indigenous mother and a non-Indigenous father—a total of 8,735 babies (71%) born to Indigenous mothers. The remaining 29% of babies had a non-Indigenous mother and an Indigenous father.

In the 2004 NPDC there were 9,004 births to Aboriginal and Torres Strait Islander mothers (8,905 live births and 99 foetal deaths). This represented 4% of all births in Australia in 2004 where maternal Indigenous status was known (251,597) (Laws et al 2006b). Over the period 2001–2004, the number of live births to Indigenous mothers increased and the number of foetal deaths decreased (table 6.5).

Births continued

## **6.5** BIRTHS TO INDIGENOUS FEMALES, by birth status—2001–2004

All births	8 791	8 929	8 958	9 004
Foetal deaths	116	102	107	99
Live births	8 675	8 827	8 851	8 905
Birth status	2001	2002	2003	2004

Source: AIHW National Perinatal Data Collection

The main reason for the difference in the number of Indigenous births identified in the ABS Births Registration Collection and the NPDC is that the latter does not collect paternal information and therefore only births to Indigenous mothers are identified as Indigenous births. Other differences between the two collections include the different methodologies used to collect information, and delays in the registration of, or failure to register, some live births (AIHW: Leeds et al 2007).

Gestational age

Gestational age is the length of a pregnancy in completed weeks. The gestational age at birth for term pregnancies is between 37 and 41 weeks; for preterm births it is less than 37 weeks. Preterm birth is associated with neonatal problems that cause significant morbidity and mortality in newborn babies. In the period 2001–2004, there were 4,962 preterm babies born to Indigenous mothers, representing 14% of all births to Indigenous mothers. This was almost double the rate of preterm births among non-Indigenous mothers (8%) in the same period (AIHW: Leeds et al 2007).

Birthweight

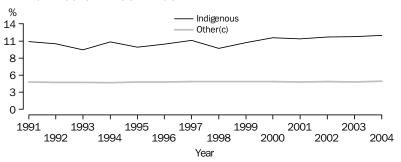
A baby's birthweight is a key indicator of health status. Babies born with a birthweight of less than 2,500 grams are classified as 'low birthweight'. Low birthweight may be a result of preterm birth, foetal growth restriction, or a combination of the two. Low birthweight babies are at greater risk of poor health and death, require longer periods of hospitalisation after birth, and are more likely to develop significant disabilities (Goldenberg & Culhane 2007). Some factors that contribute to low birthweight are socioeconomic disadvantage, size of parents, age of the mother, number of babies previously born, mother's nutritional status, smoking and alcohol intake, and illness during pregnancy (Ashdown-Lambert 2005; Moshin et al 2003).

In 2001–04 there were 4,578 low birthweight babies born to Indigenous mothers, representing 13% of liveborn babies to Indigenous mothers. This was more than double the proportion of low birthweight live born babies with non-Indigenous mothers (6%) (AIHW: Leeds et al 2007).

Data from 1991 to 2004 show a significant increase in the rate of low birthweight babies among singleton live births to Indigenous mothers, from 11.1 to 12.1 per 100 live births (graph 6.6). There was also a significant, but much smaller increase in the proportion of low birthweight babies born to non-Indigenous mothers over this period from 4.5 to 4.6 per 100 live births (AIHW Leeds et al 2007). Some of the increase in the proportion of low birthweight babies born to Indigenous mothers may be the result of improved identification of Indigenous mothers over time.

Birthweight continued

RATE OF LOW BIRTHWEIGHT BABIES(a)(b), by Indigenous status of mother—1991–2004



- (a) Excludes data for Tasmania and the Australian Capital Territory.
- (b) Rates have been directly age standardised using all Australian mothers who gave birth in 2001 as the standard population.
- (c) Comprises non-Indigenous mothers and mothers for whom Indigenous status was not stated.

Source: AIHW National Perinatal Data Collection

Perinatal mortality

Perinatal deaths include both foetal deaths (stillbirths) and deaths of liveborn babies within the first 28 days after birth. These deaths are almost all due to factors during pregnancy and childbirth. Perinatal mortality reflects the health status of the population as well as their access to quality health care.

Data on perinatal deaths are available from the ABS Deaths Registration Collection and the NPDC. Data from the ABS Deaths Registration Collection have been presented here, as babies born to both Indigenous mothers and fathers are identified in this dataset. The identification of Indigenous status in deaths registration data has been assessed by the ABS and AIHW as having a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced in four jurisdictions—Queensland, Western Australia, South Australia and the Northern Territory (ABS & AIHW 2005). Long-term mortality trend data are limited to three jurisdictions—Western Australia, South Australia and the Northern Territory, which have over 10 years of adequate identification of Indigenous deaths in their recording systems.

Over the period 2003–2005, there were 350 perinatal deaths of Indigenous infants in the four jurisdictions. The 2003–2005 rate of perinatal deaths in the four jurisdictions was 15.7 per 1,000 births for Indigenous babies compared with 10.3 per 1,000 births for non-Indigenous babies.

There was a significant decline in the perinatal death rate for Aboriginal and Torres Strait Islander babies in Western Australia from 20 per 1,000 births in the period 1991–1993 to 13 per 1,000 births in 2003–2005 (table 6.7).

Perinatal mortality continued

## PERINATAL MORTALITY RATES(a), by Indigenous status— 1991–1993 to 2003–2005

	1991–1993	1994–1996	1997–1999	2000–2002	2003–2005
Indigenous rate					
Western Australia	20.2	20.2	19.8	12.3	12.6
South Australia	23.3	14.3	12.2	16.1	14.4
Northern Territory	28.5	24.5	27.5	15.3	21.2
Other rate(b)					
Western Australia	9.2	8.8	7.2	7.4	9.0
South Australia	9.0	9.0	7.3	7.9	8.9
Northern Territory	13.3	11.3	8.5	8.3	9.9
Ratio(c)					
Western Australia	2.2	2.3	2.7	1.7	1.4
South Australia	2.6	1.6	1.7	2.1	1.6
Northern Territory	2.1	2.2	3.2	1.8	2.1

<sup>(</sup>a) Rate per 1.000 births.

HEALTHY CHILD DEVELOPMENT Breastfeeding Breastfeeding has many positive effects on the survival, growth, development and health of infants. Many studies have shown that breastfeeding has a protective effect against conditions such as diarrhoea and respiratory infections and has benefits for children's growth, cognitive development and immunological functioning (Kramer 2001; Oddy et al. 2003; Lawton & Shortridge 1997: all cited in Zubrick et al 2004). Other studies have shown a protective effect against sudden infant death syndrome, asthma and other allergic diseases (Hoffman 1988; Oddy et al 1999; Merrett 1988).

The 2004–05 NATSIHS provides information on the breastfeeding status of infants and young children. In 2004–05, approximately 79% of Indigenous children aged 0–3 years in non-remote areas had been breastfed compared with 88% of non-Indigenous children. A higher proportion of non-Indigenous children (aged 0–3 years) than Indigenous children had been breastfed for 12 months or more (14% compared with 11%) (ABS 2006c).

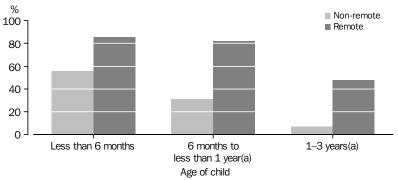
Among Aboriginal and Torres Strait Islander children aged 0–3 years, 85% of those in remote areas and 79% of those in non-remote areas were currently breastfeeding or had previously been breastfeed in 2004–05 (AIHW 2007a). The proportions of Indigenous infants aged less than 12 months who were breastfeeding in 2004–05 were particularly high in remote areas (85% of those aged less than six months and 82% of those aged 6–12 months (graph 6.8).

<sup>(</sup>b) Other includes deaths of non-Indigenous people and those for whom Indigenous status was not stated.

<sup>(</sup>c) Mortality rate for Indigenous Australians divided by the mortality rate for other Australians. Source: ABS Deaths Registration Collection

Breastfeeding continued





(a) Non-remote estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: ABS 2004-05 NATSIHS

Diet and nutrition

Poor diet and nutrition in the early years of life can affect childhood development, growth, functioning and health (Tomkins 2001). It is also a principal cause of many of the health conditions suffered by Aboriginal and Torres Strait Islander people. A diet high in carbohydrates and saturated fats, for example, is associated with high levels of obesity, Type 2 diabetes and renal disease, while consumption of fresh fruit and vegetables can be a protective factor against many of these diseases (NPHP 2001). Aboriginal and Torres Strait Islander families living in isolated areas, however, face particular challenges in providing their children with fresh, affordable food on a regular basis.

The National Health and Medical Research Council Dietary Guidelines recommend consuming a wide variety of nutritious foods, including a high intake of plant food such as fruit and vegetables, while also recommending moderating total fat and saturated fat intake (NHMRC 2003b). The daily food consumption guidelines for fruit and vegetable intake recommend:

- one serve of fruit and two serves of vegetables for children aged 4–7 years
- one serve of fruit and three serves of vegetables for children aged 8–11 years
- three serves of fruit and three serves of vegetables for adolescents aged 12–18 years.

The 2004–05 NATSIHS collected information on the dietary behaviour of Indigenous people aged 12 years and over, including the number of daily serves of fruit and vegetables usually eaten by those living in non-remote areas. Among Indigenous children aged 12–14 years in non-remote areas, 24% met the recommended daily fruit intake of three or more serves, and 59% met the recommended daily vegetable intake of three or more serves. Among teenagers aged 15–17 years, 20% met the daily fruit consumption guidelines and 61% met the daily vegetable consumption guidelines (table 6.9). There were no significant differences between the proportion of Indigenous and non-Indigenous children whose fruit and vegetable consumption met the recommended daily guidelines.

Diet and nutrition continued

# 6.9 CHILDREN'S USUAL DAILY INTAKE OF FRUIT AND VEGETABLES IN NON-REMOTE AREAS, by Indigenous status—2004–05

	12-14 YEAR	RS	15–17 YEARS
	Indigenous	Non-Indigenous	Indigenous Non-Indigenous
	%	%	% %
Number of serves of fruit			
Does not eat fruit	5.4	4.7	12.5 7.8
1 serve or less	40.8	39.1	41.8 40.4
2 serves	30.0	29.8	25.4 25.3
3 serves	15.9	15.3	12.9 15.6
4 or more serves	8.0	11.1	7.4 11.0
Total	100.0	100.0	100.0 100.0
Number of serves of			
vegetables			
Does not eat			
vegetables	1.7	1.2	1.0 1.1
1 serve or less	20.4	22.6	25.2 23.9
2 serves	18.6	21.5	(a) 12.8 (a) 19.5
3 serves	29.0	27.9	34.4 30.0
4 or more serves	30.2	26.9	26.6 25.5
Total	100.0	100.0	100.0 100.0

(a) Difference between Indigenous and non-Indigenous data is statistically significant. Source: AIHW analysis of 2004–05 NATSIHS and 2004–05 NHS

Immunisation

The Australian Childhood Immunisation Register (ACIR), managed by the Health Insurance Commission, holds information on childhood immunisation coverage. All children under seven years of age, enrolled in Medicare, are automatically included on the ACIR. Children who are not eligible to enrol in Medicare can be added to the ACIR when details of a vaccination are received from a doctor or immunisation provider. It should be noted that coverage estimates for Aboriginal and Torres Strait Islander children include only those who are identified as such and are registered on the ACIR. Children identified as Indigenous on the ACIR may not be representative of all Aboriginal and Torres Strait Islander children, and thus coverage estimates should be interpreted with caution.

Vaccination coverage rates for children aged one year, two years and six years at 31 December 2005 for New South Wales, Victoria, Western Australia, South Australia and the Northern Territory combined are shown in table 6.10. Aboriginal and Torres Strait Islander children had lower coverage compared with non-Indigenous children for all vaccines at 12 months of age (82% compared with 91%), while at two years of age the difference in vaccination coverage between Indigenous and non-Indigenous children was not as large (90% and 92% respectively). Immunisation rates at six years of age were similar for Indigenous and non-Indigenous children. This suggests that there may be a delay in the receipt of vaccines by Indigenous children, or in the transfer of data for Indigenous children to ACIR (AIHW 2007a).

### VACCINATION COVERAGE ESTIMATES FOR CHILDREN AT 1, 2 AND 6 YEARS OF AGE, by 6.10 Indigenous status—31 December 2005(a)(b)

	ONE YEAR OLD		TWO YEARS	OLD	SIX YEARS	OLD
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous
	%	%	%	%	%	%
Hepatitis B	93.9	94.8	97.9	95.9		
DTP (diphtheria, tetanus and						
pertussis)	86.0	92.6	94.9	95.2	85.3	85.5
OPV (oral polio vaccine)	85.6	92.5	94.7	95.2	85.6	85.7
Hib (Haemophilius influenzae type b)	93.1	94.5	91.6	93.6		
MMR (measles, mumps and rubella)			93.1	93.8	85.4	85.7
Total	82.2	91.1	89.9	92.1	84.3	84.6

- . . not applicable
- (a) Three-month cohorts, for cohorts born between 1 July and 30 September 2004, 1 July and 30 September 2003, and 1 July and 30 September 1999 respectively.
- (b) Data for NSW, Vic., WA, SA and NT only as data on Indigenous status from other jurisdictions were incomplete.

Source: AIHW 2007a

Immunisation continued

The 2004-05 NATSIHS also provides information on the immunisation status of Indigenous children aged 0-6 years in non-remote areas of Australia. Among Indigenous children for whom immunisation records were available, 93% were fully immunised according to the recommended course of vaccinations at a specific age. In particular, 78% of Indigenous children in non-remote areas were fully immunised against diphtheria/tetanus, 74% against whooping cough, 82% against Hepatitis B, 78% against polio, 72% against Hib and 84% against measles, mumps and rubella (AIHW 2007a).

Selected environmental risk factors

### PASSIVE SMOKING

Exposure to environmental tobacco smoke, commonly referred to as passive smoking, has been shown to be a significant cause of morbidity and mortality, and children are the most vulnerable to its effects. For babies, passive smoking is one of the significant risk factors for sudden infant death syndrome (AMA 1999). Exposure to second hand smoking also increases children's risk of ear infections and respiratory illnesses, such as asthma (Strachan & Cook 1997). Children living with parents and relatives who smoke indoors are particularly at risk.

In 2004-05, an estimated 119,000 Aboriginal and Torres Strait Islander children lived with a regular smoker. This represents two-thirds (66%) of all Indigenous children aged 0-14 years. In comparison, around one-third (35%) of non-Indigenous children aged 0-14 years lived with a regular smoker. Regular smokers may or may not smoke at home indoors. Some 28% of Aboriginal and Torres Strait Islander children were living in households with a regular smoker who smoked at home indoors, three times the comparable rate for non-Indigenous children (9%) (table 6.11).

Selected environmental risk factors continued

PASSIVE SMOKING continued

**6.11** WHETHER LIVING WITH REGULAR SMOKER(S), by Indigenous status—Children aged 0–14 years—2004–05

REGULAR SMOKERS IN HOUSEHOLD

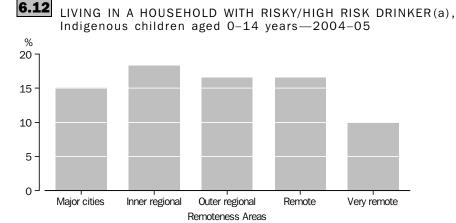
	Smokes indoors at home	Does not smoke indoors at home	No regular smokers in household	Total(a)
	%	%	%	%
Indigenous Non-Indigenous	28.5 9.2	37.6 26.2	31.4 64.6	100.0 100.0

(a) Includes children in households in which the smoker status of the resident adults was not known.

Source: ABS 2004-05 NATSIHS, AIHW 2007a

### EXPOSURE TO RISKY/HIGH RISK DRINKER(S)

According to the 2004–05 NATSIHS, an estimated 27,900 Indigenous children (15%) were living in a household in which there was at least one risky/high risk drinker, compared with 11% of non-Indigenous children aged 0–14 years. The proportion of Indigenous children exposed to risky/high risk drinking within their household ranged from 10% of those in very remote areas to 18% of those in inner regional areas (graph 6.12).



(a) Risk level based on Australian Alcohol Guidelines 2000 for risk of harm in the long-term. Source: ABS 2004–05 NATSIHS

Health status of children

### LONG-TERM HEALTH CONDITIONS

The 2004-05 NATSIHS and 2004-05 NHS collected data on the prevalence of long-term health conditions among children 0-14 years of age, based on information provided by the person with main caring responsibility for the child. Similar proportions of Indigenous and non-Indigenous children had at least one long-term condition (44% compared with 42%) in 2004–05. The most common long-term health conditions reported for Indigenous children were respiratory diseases (19%), diseases of the ear (10%) and diseases of the eye (8%) (ABS 2006c).

While the same proportion of Indigenous and non-Indigenous children had respiratory disease(s) in 2004-05, Indigenous children were more likely than non-Indigenous children to have asthma (14% compared with 11%) and/or bronchitis (2% compared with 1%). Indigenous children were also more likely than non-Indigenous children to have ear/hearing problems, especially partial deafness (5% compared with 1%) and/or otitis media (4% compared with 2%) (table 6.13).

CHILDREN AGED 0-14 YEARS WITH A LONG-TERM HEALTH 6.13 CONDITION, by Indigenous status and type of condition-2004-05

	Indigenous	Non-Indigenous
Type of condition	%	%
Diseases of the respiratory system Asthma Bronchitis Chronic sinusitus Diseases of the ear and mastoid	19.1 (a) 13.9 (a) 2.2 (a) 2.2 (a) 9.5	19.4 (a)11.4 (a)1.2 (a)3.2 (a)3.0
Deafness (complete/partial) Otitis media	(a) 4.5 (a) 4.4	(a) 1.2 (a) 1.5
Diseases of the eye and adnexa Short-sighted Long-sighted	8.5 (a) 1.9 3.9	10.5 (a)3.5 3.7
Diseases of the skin and subcutaneous tissue Diseases of the nervous system Diseases of the musculoskeletal system and	2.8 2.2	3.1 2.1
connective tissue Congenital malformations, deformations and	1.9	1.8
chromosomal abnormalities	1.6	1.1
Diseases of the heart and circulatory system  Other(b)	1.5 (a)13.0	1.3 (a)9.7
Conditions not elsewhere classified	(a) 13.0 7.7	(a) 9.1 8.4
Total with a long-term condition(c)	44.0	41.2

<sup>(</sup>a) Difference between Indigenous and non-Indigenous data is statistically

Source: ABS 2006c

<sup>(</sup>b) Includes diseases of the digestive system, infectious and parasitic diseases, diseases of the blood and blood forming organs, diseases of the genitourinary system, neoplasms/cancer, mental and behavioural disorders and endocrine, nutritional and metabolic diseases.

<sup>(</sup>c) Sum of components may be more than total as persons may have reported more than one type of condition.

Health status of children continued

### BURDEN OF DISEASE AND INJURY

The burden of disease and injury among Indigenous Australians was assessed using Disability Adjusted Life Years (DALYS)—the sum of years of life lost due to premature death and years lived with disability (Vos et al 2007). In 2003 it was estimated that the burden of disease and injury for Indigenous Australians aged 0–14 years was 20,187 DALYS, representing 21% of the total burden of disease and injury for all Indigenous Australians (95,976 DALYS). The leading causes of this burden were neonatal (20%), mental disorders (19%), acute and chronic respiratory infections (18%) and congenital anomalies (12%).

Four major risk factors (tobacco, alcohol, illicit drugs and unsafe sex) attributed around 5% of the total burden of disease among Aboriginal and Torres Strait Islander children in this age group. Tobacco was by far the largest contributor to the disease burden in this age group due to the association between smoking during pregnancy and the increased risk of having a low birthweight baby (Vos et al 2007).

### HOSPITALISATIONS OF INFANTS AND CHILDREN

Hospitalisations data provide a measure of a population's use of health services, but are not a direct measure of health status (see box 7.7 in Chapter 7). The quality of Indigenous identification in hospitalisations data varies across jurisdictions, with 2005–06 data presented for the six jurisdictions with adequate Indigenous identification—New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory (see box 7.9 in Chapter 7).

In 2005–06, Aboriginal and Torres Strait Islander infants (aged less than one year) were hospitalised at a rate 1.4 times that of other Australian infants. Conditions originating in the perinatal period were the leading cause of hospitalisation of Indigenous infants, followed by diseases of the respiratory system and infectious and parasitic diseases. For skin diseases, diseases of the respiratory system and infectious and parasitic diseases, Indigenous infant hospitalisation rates were around three to four times the rates for other infants (table 6.14).

## **6.14** REASONS FOR HOSPITALISATIONS OF INFANTS(a), by Indigenous status—2005–06

	NUMBER		RATE(b)		
	Indigenous	Other(d)	Indigenous	Other(d)	Rate ratio(c)
Conditions originating in the perinatal period (P00–P96)	2 584	49 141	215.7	204.2	1.1
Diseases of the respiratory system (J00–J99)	2 416	15 056	201.7	62.6	3.2
Infectious and parasitic diseases (A00–B99)	1 174	8 344	98.0	34.7	2.8
Contact with health services (Z00–Z99)	622	13 197	51.9	54.8	0.9
Symptoms not elsewhere classified (R00-R99)	524	11 953	43.7	49.7	0.9
Congenital malformations (Q00–Q99)	427	7 731	35.6	32.1	1.1
Diseases of the skin (L00–L99)	227	1 144	18.9	4.8	4.0
Injury and poisoning (S00–T98)	219	2 636	18.3	11.0	1.7
Diseases of the digestive system (K00–K93)	172	4 382	14.4	18.2	0.8
Diseases of the genitourinary system (N00–N99)	121	2 560	10.1	10.6	0.9
Subtotal	8 486	116 144	708.4	482.6	1.5
Other(e)	343	9 568	28.6	39.8	0.7
<b>Total</b> (f)	8 838	125 813	737.8	522.7	1.4

- (a) Data for NSW, Vic., Qld, WA, SA and NT combined. Excludes private hospitals in NT. Hospitalisations are based on state of usual residence.
- (b) Per 1,000 population aged less than one year.
- (c) Rate for Indigenous persons divided by the rate for other
- (d) Comprises hospitalisations of non-Indigenous infants and hospitalisations of infants whose Indigenous status was not
- (e) Includes diseases of the ear and mastoid process, endocrine, nutritional and metabolic diseases, diseases of the nervous system, diseases of the eye and adnexa, diseases of the circulatory system, diseases of the blood and blood forming organs, diseases of the musculoskeletal system, neoplasms, and mental and behavioural disorders.
- (f) Includes hospitalisations for which no principal diagnosis was recorded.

Source: AIHW National Hospital Morbidity Database

Health status of children continued

### HOSPITALISATIONS OF INFANTS AND CHILDREN continued

In 2005-06, Aboriginal and Torres Strait Islander children aged 1-14 years were hospitalised at a rate 1.3 times that of other children of the same age. Diseases of the respiratory system were the leading cause of hospitalisation among Indigenous children, followed by injury and poisoning and infectious and parasitic diseases. Aboriginal and Torres Strait Islander children were hospitalised for skin diseases at more than three times the rate of other Australian children, and were hospitalised for infectious and parasitic diseases at around twice the rate of other children (table 6.15).

6.15

## REASONS FOR HOSPITALISATIONS OF CHILDREN AGED 1–14 YEARS(a), by Indigenous status—2005–06

	NUMBER		RATE(b)	RATE(b)	
	Indigenous	Other(d)	Indigenous	Other(d)	Rate ratio(c)
	no.	no.	%	%	%
Diseases of the respiratory system (J00–J99)	4 412	68 505	27.1	19.8	1.4
Injury and poisoning (S00–T98)	3 583	58 799	22.0	17.0	1.3
Infectious and parasitic diseases (A00–B99)	2 229	28 097	13.7	8.1	1.7
Diseases of the digestive system (K00–K93)	2 081	45 306	12.8	13.1	1.0
Diseases of the skin (L00–L99)	1 526	9 583	9.4	2.8	3.4
Symptoms not elsewhere classified (R00–R99)	1 349	22 554	8.3	6.5	1.3
Diseases of the ear and mastoid process (H60–H95)	1 204	25 026	7.4	7.2	1.0
Contact with health services (Z00–Z99)	1 099	20 410	6.8	5.9	1.1
Diseases of the genitourinary system (N00–N99)	661	11 367	4.1	3.3	1.2
Diseases of the nervous system (G00–G99)	577	12 910	3.5	3.7	1.0
Subtotal	18 721	302 557	115.1	87.4	1.3
Other(e)	2 593	59 350	15.9	17.1	0.9
<b>Total</b> (f)	21 321	362 008	131.1	104.5	1.3

- (a) Data for NSW, Vic., Qld, WA, SA and NT combined. Excludes private hospitals in NT. Hospitalisations are based on state of usual residence.
- (b) Per 1,000 population aged 1–14 years.
- (c) Rate for Indigenous persons divided by the rate for other persons.
- (d) Comprises both hospitalisations of non-Indigenous children and hospitalisations of children whose Indigenous status was not stated
- (e) Includes diseases of the nervous system, congenital malformations and deformations, diseases of the circulatory system, endocrine, nutritional and metabolic diseases, neoplasms, mental and behavioural disorders, diseases of the blood and blood forming organs, diseases of the eye and adnexa, pregnancy, childbirth and the puerperium and conditions originating in the perinatal period.
- Includes hospitalisations for which no principal diagnosis was recorded.

Source: AIHW National Hospital Morbidity Database

Infant and child mortality

Identification of Indigenous Australians is incomplete in all states and territories however current mortality data are considered to have a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced for four jurisdictions—Queensland, Western Australia, South Australia and the Northern Territory (see Chapter 9).

For analysis of trends over time in Indigenous and child mortality from 1991–2005, only three jurisdictions have a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced—Western Australia, South Australia and the Northern Territory. Ideally, the trends data would compare rates for Indigenous and non-Indigenous infant and child mortality. The 'not stated' category for Indigenous status, however, was only included from 1998 onwards (before which, deaths with Indigenous status 'not stated' were included with non-Indigenous deaths). Indigenous mortality rates have therefore been compared with the mortality rates for 'other' Australians (i.e. deaths of both non-Indigenous people as well as those for whom Indigenous status was not stated).

Due to the incompleteness of Indigenous identification in mortality data, the number of deaths registered as Indigenous is an underestimate of the actual number of deaths that occur in the Indigenous population. Identification of Indigenous Australians may also differ between death registrations, birth registrations and the Census. Identification may also vary over time, and at different rates in states and territories. Therefore trends in

Infant and child mortality continued

infant and child mortality rates for Aboriginal and Torres Strait Islander children should be treated with caution.

### INFANT MORTALITY

Infant deaths are deaths of live-born babies who die before reaching their first birthday. For the period 2001–2005, the infant mortality rate for Aboriginal and Torres Strait Islander infants living in Queensland, Western Australia, South Australia and the Northern Territory combined was almost three times that of non-Indigenous infants (table 6.16). The leading causes of death for Indigenous infants were conditions originating in the perinatal period (mainly foetus and newborn babies affected by complications of placenta, cord and membrane, and foetus and newborn babies affected by maternal complications of pregnancy), symptoms, signs and ill-defined conditions (mainly sudden infant death syndrome), congenital malformations, respiratory diseases (mainly pneumonia), injury and poisoning (mainly accidental suffocation and strangulation in bed) and infectious and parasitic diseases (such as septicaemia, meningococcal infection and congenital syphilis).

Mortality rates for respiratory diseases and infectious and parasitic diseases were particularly high for Aboriginal and Torres Strait Islander infants. For these two conditions, mortality rates were 11 and 5 times the rates for non-Indigenous infants.



**6.16** MAIN CAUSES OF INFANT DEATHS(a), by Indigenous status—2001–2005

	NUMBER		RATE(b)	RATE(b)	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Rate ratio(c)
Conditions originating in the perinatal period (P00–P96)	204	955	562.9	218.8	2.6
Symptoms, signs and ill-defined conditions (R00-R99)	99	213	273.2	48.8	5.6
Congenital malformations (Q00–Q99)	57	451	157.3	103.3	1.5
Respiratory diseases (J00–J99)	36	38	99.3	8.7	11.4
External causes (Injury/poisoning) (V01–Y98)	20	67	55.2	15.4	3.6
Infectious and parasitic diseases (A00-B99)	16	36	44.2	8.2	5.4
All other causes(d)	28	144	77.3	33.0	2.3
Total	460	1 904	1 269.3	436.2	2.9

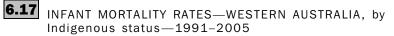
- (a) Data for Qld, WA, SA and NT. Deaths are based on state of usual residence and year of registration of death. Excludes a total of 61 deaths for which Indigenous status was not stated.
- (b) Per 100,000 population aged less than one year.
- Rate for Indigenous persons divided by the rate for non-Indigenous persons.
- (d) Includes neoplasms, endocrine, nutritional and metabolic diseases, mental and behavioural disorders, diseases of the musculoskeletal system, diseases of the ear and mastoid process, diseases of the eye and adnexa, diseases of the circulatory system, diseases of the skin and subcutaneous tissues, diseases of the genitourinary system, diseases of the nervous system, diseases of the digestive system, diseases of the blood and blood forming organs.

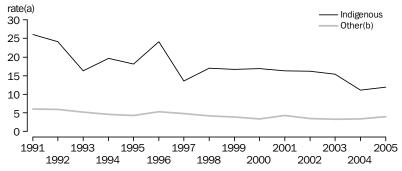
Source: AIHW National Mortality Database

Infant and child mortality continued

### Trends in infant mortality

Infant mortality rates for Aboriginal and Torres Strait Islander infants decreased significantly in Western Australia, South Australia and the Northern Territory over the period 1991 to 2005. In Western Australia the infant mortality rate fell from 26 per 1,000 live births in 1991 to 12 per 1,000 live births in 2005, with corresponding decreases for South Australia (from 20 to 10 per 1,000 live births) and for the Northern Territory (from 25 to 16 per 1,000 live births). The mortality rate for other Australian infants also declined over this period, but to a lesser extent, so the difference between the two has decreased significantly (graphs 6.17, 6.18 and 6.19). Infant mortality rates in single years for each of these jurisdictions are presented in Chapter 9.

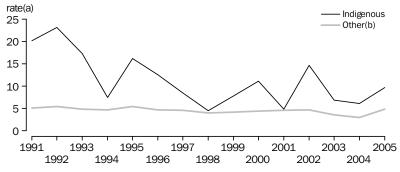




- (a) Infant deaths per 1,000 live births.
- (b) Comprises deaths of non-Indigenous infants and those for whom Indigenous status was not stated.

Source: AIHW National Mortality Database

# **6.18** INFANT MORTALITY RATES—SOUTH AUSTRALIA, by Indigenous status—1991–2005

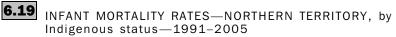


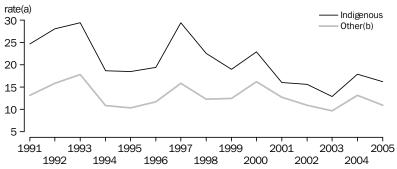
- (a) Infant deaths per 1,000 live births.
- (b) Comprises deaths of non-Indigenous infants and those for whom Indigenous status was not stated.

Source: AIHW National Mortality Database

Infant and child mortality continued

Trends in infant mortality continued





- (a) Infant deaths per 1,000 live births
- (b) Comprises deaths of non-Indigenous infants and those for whom Indigenous status was not stated.

Source: AIHW National Mortality Database

### CHILD MORTALITY

In the period 2001–2005, the mortality rate for Aboriginal and Torres Strait Islander children aged 1–14 years in Queensland, Western Australia, South Australia and the Northern Territory combined, was almost three times the mortality rate for non-Indigenous children in these jurisdictions (table 6.20).



MAIN CAUSES OF DEATH FOR CHILDREN AGED 1-14 YEARS(a), by Indigenous status—2001-2005

	NUMBER		RATE(b)	RATE(b)	
	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Rate ratio(c)
External causes (V01–Y98)	90	417	17.9	6.3	2.9
Diseases of the nervous system (G00–G99)	20	102	4.0	1.5	2.6
Diseases of the circulatory system (I00–I99)	18	43	3.6	0.6	5.6
Neoplasms (C00–D48)	16	194	3.2	2.9	1.1
Congenital malformations (Q00–Q99)	12	64	2.4	1.0	2.5
Symptoms, signs and abnormal findings (R00–R99)	12	45	2.4	0.7	3.5
Infectious and parasitic diseases (A00-B99)	10	39	2.0	0.6	3.4
Diseases of the respiratory system (J00–J99)	10	38	2.0	0.6	3.5
All other causes(d)	10	75	2.0	1.1	1.8
Total	198	1 017	39.5	15.3	2.6

- (a) Data from Qld, WA, SA and NT. Data based on state of usual residence and year of registration of death. Excludes a total of 29 deaths of children for whom Indigenous status was not stated.
- (b) Per 100,000 population aged 1-14 years.
- (c) Rate for Indigenous children divided by the rate for non-Indigenous children.
- (d) Includes endocrine, nutritional and metabolic diseases, mental and behavioural disorders, diseases of the musculoskeletal system, diseases of the ear and mastoid process, diseases of the eye and adnexa, diseases of the skin and subcutaneous tissues, diseases of the genitourinary system, diseases of the digestive system, diseases of the blood and blood forming organs, certain conditions originating in the perinatal period.

Source: AIHW National Mortality Database

External causes (such as transport accidents, assault and intentional self-harm) were the leading cause of death among Aboriginal and Torres Strait Islander children, and occurred at three times the rate for non-Indigenous children. Indigenous children died

Infant and child mortality continued

### CHILD MORTALITY continued

from infectious and parasitic diseases, diseases of the respiratory system and circulatory diseases at three to six times the rate of non-Indigenous children.

### Trends in child mortality

Childhood mortality rates should be interpreted with caution due to the small number of deaths each year for Indigenous and other Australian children. The data indicate that the child mortality rate for Aboriginal and Torres Strait Islander children decreased significantly in the Northern Territory from 86 per 100,000 children in the period 1991–1993 to 52 per 100,000 children in the period 2003–2005. The child mortality rate for other Australian children decreased significantly in Western Australia and South Australia over this period—from 19 to 15 per 100,000 children in Western Australia—and from 19 to 13 per 100,000 children in South Australia (table 6.21).

**6.21** CHILD MORTALITY RATES(a)(b), by Indigenous status—1991–1993 to 2003–2005

1991–1993	1994–1996	1997–1999	2000–2002	2003–2005
71.7	74.6	46.6	49.0	54.1
40.0	32.0	33.8	36.5	28.8
86.4	69.1	74.2	60.2	51.9
18.8	19.0	17.0	16.2	15.0
19.2	18.7	16.8	14.6	13.2
33.1	29.6	17.7	16.4	24.2
3.8	3.9	2.7	3.0	3.6
2.1	1.7	2.0	2.5	2.2
2.6	2.3	4.2	3.7	2.1
	71.7 40.0 86.4 18.8 19.2 33.1 3.8 2.1	71.7 74.6 40.0 32.0 86.4 69.1 18.8 19.0 19.2 18.7 33.1 29.6 3.8 3.9 2.1 1.7	71.7 74.6 46.6 40.0 32.0 33.8 86.4 69.1 74.2 18.8 19.0 17.0 19.2 18.7 16.8 33.1 29.6 17.7 3.8 3.9 2.7 2.1 1.7 2.0	71.7 74.6 46.6 49.0 40.0 32.0 33.8 36.5 86.4 69.1 74.2 60.2 18.8 19.0 17.0 16.2 19.2 18.7 16.8 14.6 33.1 29.6 17.7 16.4 3.8 3.9 2.7 3.0 2.1 1.7 2.0 2.5

<sup>(</sup>a) Deaths are based on year of registration of death.

Source: AIHW National Mortality Database

SUMMARY

Many Indigenous mothers and children live in environments of relative socioeconomic disadvantage and this has adverse impacts on their health and wellbeing. Overall, Indigenous mothers and babies have poorer outcomes in relation to pregnancy and childbirth compared with other Australian mothers and babies. The maternal mortality rate for Indigenous females was five times the corresponding rate for non-Indigenous females, the proportion of low birthweight babies born to Indigenous mothers was double the rate for non-Indigenous mothers, and the perinatal death rate for Indigenous babies was 1.5 times the rate for other babies. The perinatal death rate for Indigenous babies has, however, decreased significantly in Western Australia since the early 1990s, falling from 20 per 1,000 births in 1991–1993 to 13 per 1,000 births in 2003–2005.

<sup>(</sup>b) Per 100,000 population aged 1–14 years.

<sup>(</sup>c) Comprises deaths of non-Indigenous children and those for whom Indigenous status was not stated.

<sup>(</sup>d) Mortality rate for Indigenous children divided by the mortality rate for other Australian children.

SUMMARY continued

There were some positive findings in relation to the factors affecting childhood development. The proportion of Indigenous children aged less than 12 months who were breastfeeding in 2004–05 was particularly high in remote areas (85% of those aged less than six months and 82% of those aged six to 12 months). A much higher proportion of Indigenous children (28%), however, lived in households with regular smokers who smoked indoors compared with non-Indigenous children (9%).

The prevalence of at least one long-term health condition was similar among Indigenous and non-Indigenous children (44% compared with 41%). Indigenous children had, however, higher rates of asthma, partial deafness and otitis media. Among Aboriginal and Torres Strait Islander infants, conditions originating in the perinatal period were the leading cause of both hospitalisation and death. Diseases of the respiratory system were the leading cause of hospitalisations for Indigenous children aged 1–14 years, while external causes, such as injury and poisoning, were the leading causes of death.

Indigenous mortality rates for infants have fallen in Western Australia, South Australia and the Northern Territory, and for children, have fallen in the Northern Territory. There has been a narrowing of the gap between Indigenous and non-Indigenous infant mortality rates in South Australia and the Northern Territory.