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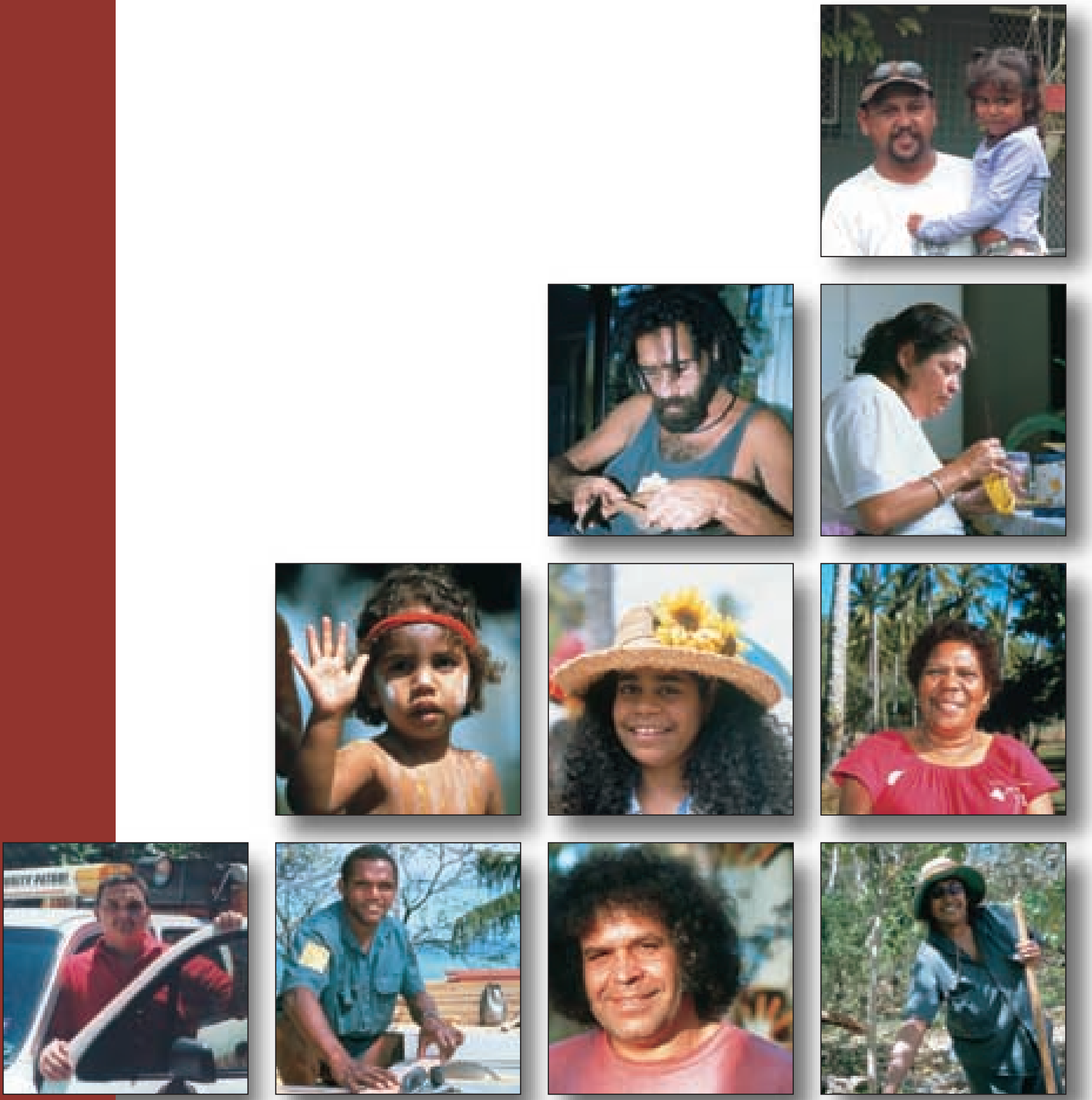

The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples

2003

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AUSTRALIAN BUREAU OF STATISTICS

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PREFACE

The fourth edition of *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* provides a unique overview of the health and welfare of Australia's Indigenous population. The report draws on the extensive surveys and censuses conducted by the Australian Bureau of Statistics and the range of data held by the Australian Institute of Heath and Welfare. The result is a publication that covers topics as diverse as population statistics, housing and infrastructure, community services and housing assistance, health status, death and sickness, and the availability, resourcing and use of services.

It is becoming increasingly apparent that the physical and social environments in which people live determine to a large degree whether they live productive lives relatively free of serious illness. This is particularly the case for Indigenous people who still suffer disproportionately from some of the consequences of European settlement, in particular the impact of new infectious and chronic diseases and social dislocation. Many Indigenous people live today in conditions of clear economic disadvantage due in large part to their lower education and employment levels. All of these things interact to contribute to poor health in many groups of Indigenous people.

Aboriginal and Torres Strait Islander peoples live in all parts of the nation, from the large cities to small country towns, from remote tropical coasts to the fringes of the central deserts. They speak a multitude of languages and belong to hundreds of distinct descent groups. The determinants of the health and welfare of people living in the big cities are different to those of people living in the Torres Strait, which will be different again to those living on the outskirts of Alice Springs. Commonly, however, the information available does not reflect this diversity. Sometimes it is difficult even to identify Indigenous people from other Australians in the information flowing from surveys and sources such as hospitals and other places where health and welfare services are delivered. This report focuses on national issues, but the diversity of the Indigenous population must always be kept in mind.

Reports on the health and welfare of Australia's Aboriginal and Torres Strait Islander peoples frequently make gloomy reading. This report seeks to balance this by presenting a number of examples of initiatives where improvements are apparent.

We believe that this report will inform all those interested in the health and welfare of Australia's Aboriginal and Torres Strait Islander peoples and will assist in ongoing efforts to understand and improve their situation.

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SUMMARY

PURPOSE AND SCOPE

This report updates and extends information available about the health and well-being of Australia's Aboriginal and Torres Strait Islander peoples. It uses the latest data from the Australian Bureau of Statistics (ABS) Census of Population and Housing, Community Housing and Infrastructure Needs Survey, and National Health Survey, all collected during 2001. It also incorporates improved administrative data in a number of areas to provide a current statistical overview of the health and wellbeing of Indigenous Australians.

The focus is generally at a national level. Therefore the analysis, comparisons and trends that are highlighted here and in the specific chapters will not capture stories about health and well-being that are particular to any community or geographic area. Some information of this kind has been chosen for presentation in boxed text inserted at appropriate locations. This is to encourage users to look beyond the data and to see the broad-based statistics as benchmark information, not the full picture.

Some of the gaps that users will find in this report are due to limitations that remain in the data. Identification of persons of Aboriginal and Torres Strait Islander origin in data collections remains incomplete and is often of unknown quality. While this point is drawn out comprehensively in Chapter 11 and need not be laboured here, it is important for readers to understand that much of what is reported may represent under-estimates of numbers of Aboriginal and Torres Strait Islander peoples.

THE ABORIGINAL AND TORRES STRAIT ISLANDER POPULATIONS

At 30 June 2001, the Aboriginal and Torres Strait Islander population of Australia was estimated to be 458,520, or 2.4% of the total population. Persons identifying as 'Aboriginal origin' comprised about 90% of this estimated resident Indigenous population; persons of 'Torres Strait Islander origin' comprised 6%, and those with both Aboriginal and Torres Strait Islander origin comprised 4%.

The age structures of Aboriginal and Torres Strait Islander populations are very similar to each other but both are strikingly different from that of the non-Indigenous population of Australia. Much greater proportions of the Indigenous population are found in age groups under 20 years, compared with corresponding proportions in the non-Indigenous population, and noticeably lower proportions are found in age groups from 40 years upwards. The median age of the Indigenous population is 20 years, compared with 36 years for the non-Indigenous population.

THE ABORIGINAL AND TORRES STRAIT ISLANDER POPULATIONS *continued*

Over half of the estimated resident Indigenous population lives in New South Wales (29% at June 2001) or Queensland (27%), with a further 14% in Western Australia and 12% in the Northern Territory. One in four Indigenous persons lives in regions of Australia described as Remote or Very Remote, compared with just 2% of the non-Indigenous population. Almost one third (30%) of Aboriginal and Torres Strait Islander peoples live in Major Cities. While Indigenous Australians comprise 2.4% of the total population, this proportion varies from 1% of the population in Major Cities to 45% in Very Remote areas.

HOUSING AND COMMUNITY INFRASTRUCTURE

Aboriginal and Torres Strait Islander peoples are less likely than other Australians to own their homes. Less than a third of households with Indigenous person(s) (32%) were home owners compared with more than two-thirds (69%) of Other households. Households with Indigenous person(s) (63%) were more than twice as likely as Other households (27%) to be living in rented accommodation.

Using the Canadian National Occupancy Standard definition of overcrowding, 15% of households with Indigenous person(s) were considered overcrowded (i.e. requiring at least one extra bedroom), compared to 4% of Other households. In households with Indigenous person(s), overcrowding increased with remoteness. In Major Cities, about 11% of all households with Indigenous person(s) require at least one extra bedroom, compared with 42% of households with Indigenous person(s) in Very Remote areas of Australia. In Other households, overcrowding varied only slightly with the level of remoteness, fluctuating between 3% to 4%.

Many Aboriginal and Torres Strait Islander peoples, especially those living in remote communities, do not have adequate quality housing, reliable supplies of water and electricity or adequate sewerage and drainage systems, all of which are relevant to health.

In 2001, four times as many discrete Indigenous communities used bore water as their main source of drinking water than used a town water supply. In communities with a population of 50 or more that were not connected to the town water supply, over a quarter had failed water quality tests at least once during the previous 12 months. A fifth of communities had water supplies that had not been tested in the last 12 months. More than one in three communities with 50 or more people experienced water restrictions in the previous 12 months.

Just under half the communities with a population of 50 or more reported that sewerage system overflows or leakages had occurred in the previous 12 months. Ponding of stagnant water occurred in 42% of communities with a population of 50 or more.

HEALTH SERVICES

Overall, expenditure on health services estimated to have been provided to Aboriginal and Torres Strait Islander peoples during 1998–1999 was $3,065 per head. This was 22% higher (ratio 1.22:1) than the estimated expenditure on services delivered to non-Indigenous persons. However this differential is less than might be expected, given the much poorer health status that is evident for Indigenous Australians.

The ratio of per capita expenditure on Indigenous to non-Indigenous Australians varies considerably by type of service. Aboriginal and Torres Strait Islander peoples were more intense users of community health centres, where the per capita expenditure ratio was 5.1:1, and the acute care services of the public hospital system (2:1) than Medicare (0.4:1) and the Pharmaceutical Benefits Scheme (0.3:1).

Access to services and the mixture of services that are offered within reach of a community affect utilisation. Outside of capital cities, other metropolitan areas and large rural centres, the ratio of primary care practitioners to population is much less than in the urban areas. Remote centres and rural areas outside of large and small centres had fewer than 80 primary care practitioners per 100,000 persons, compared with over 120 in Capital Cities. A much higher discrepancy exists for medical specialists and, in remote areas, for nurses and pharmacists. The higher proportion of Aboriginal and Torres Strait Islander peoples living in more remote areas of Australia leaves them more exposed to difficulties of access to professional services.

People living in discrete Indigenous communities have better access to a health centre than a hospital. In 2001, about 57,000 people living in discrete Indigenous communities lived 100 kilometres or more from a hospital but most had a community health centre in the community. There were 174 communities (3,255 people) which were located 100 kilometres or more away from either a hospital or a community health centre. A much higher proportion of households with Indigenous person(s) in remote areas (and to a lesser extent elsewhere) are without vehicles for transport.

Indigenous adults were about half as likely as non-Indigenous adults to be employed in health-related occupations. Nearly one-quarter (23%) of such Aboriginal and Torres Strait Islander peoples worked as Indigenous health workers. Large proportions of the remainder worked as nursing professionals (24%) or personal care and nursing assistants (21%). The 2001 Census recorded 90 Indigenous Australians working as medical practitioners. Aboriginal and Torres Strait Islander peoples remained under-represented among persons completing graduate courses in health and welfare in 2000 — 1.3% and 1.2% respectively. However, higher proportions of Indigenous Australians were evident in persons commencing health and welfare courses in 2001 (2.0% and 2.6% respectively).

HEALTH SERVICES *continued*

Despite likely under-counting of Aboriginal and Torres Strait Islander peoples in hospital separation statistics, Indigenous separation rates were higher than non-Indigenous rates for all age groups except 75 years and over, with the highest rate differences for both males and females being in the age groups between 35 and 64 years. Principal diagnoses for which high rate ratios were evident in 2000–01 were 'Care involving dialysis' (6.6:1 for males, 12.6:1 for females), 'Endrocrine, nutritional and metabolic diseases' (3.5:1 for males, 3.8:1 for females) and 'Diseases of the respiratory system' (2.6:1 for males, 3.1:1 for females). For 'Neoplasms' (cancer), the Indigenous rate ratio was less than 1 (0.5:1 for males, 0.6:1 for females), indicating lower rates of hospitalisation than for the non-Indigenous population.

COMMUNITY SERVICES

Almost 12,000 Indigenous households were tenants in state–territory owned and managed Indigenous housing in 2001–02 and a further 16,674 rented mainstream public housing. Almost 10% of new renters of mainstream public housing in that year were Indigenous households. The proportion of Indigenous new occupants of accommodation provided under Commonwealth State Housing Agreements was higher, at 15%.

The Supported Accommodation Assistance Program (SAAP) provides temporary accommodation and support services for homeless people. In 2001–02, nearly 17% of the adults assisted under SAAP were Indigenous Australians. The main reason given for the use of SAAP services by 33% of the Indigenous clients was to escape from domestic violence, compared with 19% for other SAAP clients. Other reasons were accommodation difficulties (18%) and relationship/family breakdown (16%).

In 2001–02, Aboriginal and Torres Strait Islander children were under-represented in children using Commonwealth-supported child care services, being 1.8% of children using the services but 4.6% of the population aged 0–12 years.

Aboriginal and Torres Strait Islander children were over-represented in child protection systems across most of Australia, with an overall rate ratio of 3.2:1. The incidence of Indigenous children being placed under care and protection orders and in out-of-home care was around six times that for non-Indigenous Australian children. Almost two-thirds of children in out-of-home care were placed with Indigenous relatives/kin (43%) or with other Indigenous caregivers (21%). These are the preferred placements under the Aboriginal Child Placement Principle that has been adopted by all jurisdictions.

The Aboriginal Child Placement Principle also applies when Indigenous children are adopted, but formal adoption of Aboriginal and Torres Strait Islander children has not been a common practice in recent years. There were just 15 adoptions of Indigenous children in the years 1998–99 to 2001–02, five of which were 'known' child adoptions where the adoptive parents had a pre-existing relationship with the child.

COMMUNITY SERVICES *continued*

Despite limitations of the available data, rates of incarceration in juvenile detention centres for Indigenous Australians aged 10–17 years are evidently far higher than those for non-Indigenous Australians. Aggregated data from most states and territories in 2000–01 show that 43% of 10–17 year olds in detention centres were Indigenous Australians.

From the information that is available it appears that Aboriginal and Torres Strait Islander peoples use disability services at about the same rate as the rest of the population. On the 2002 'snapshot day', 1,670 people, 2.5% of those receiving Commonwealth–State Disability Agreement funded services were identified as Indigenous. The Indigenous status of 3,451 consumers (5.2%) was not known. The proportion of Indigenous Australians receiving services varied by service type. Respite (5.1%) and community support (3.8%) services had an above-average proportion of Indigenous consumers, whereas employment (1.8%) and community access (1.9%) services had a smaller proportion of Indigenous consumers.

Aboriginal and Torres Strait Islander peoples utilise aged care services at a younger age, consistent with poorer health status and shorter life expectancy. Of all Indigenous Australians receiving Community Aged Care Packages at 30 June 2002, 7% were aged below 45 years, while in the non-Indigenous population the comparable figure was 1%. Half of the Indigenous and non-Indigenous care recipient populations were in the 75 and over age group. There was a larger proportion of Indigenous recipients in the age groups below 65 years of age.

MOTHERS AND BABIES

The average age of an Indigenous mother having a baby in the period 1998–2000 was 24.7 years. In contrast, the average age of a non-Indigenous mother was 29.2 years. Of Indigenous mothers who gave birth, 79% were aged less than 30 compared with 52% of non-Indigenous mothers.

Babies weighing less than 2,500 grams at birth are classified as being of low birthweight and babies of Indigenous mothers were twice as likely to be of low birthweight (13% of births) than babies of non-Indigenous mothers (6%). Comparative rates of perinatal deaths in 1998–2000 were similar, with the perinatal death rate for births to Aboriginal and Torres Strait Islander mothers being 20 per thousand live births and stillbirths, compared with 10 per thousand where the mother was non-Indigenous.

ILL HEALTH

In 2001, similar proportions of Indigenous and non-Indigenous Australians (78%) reported in the National Health Survey that they had at least one long-term health condition. Reports of a long-term condition increased with age from 34% of Aboriginal and Torres Strait Islander children aged under 5 years to 99% of Indigenous Australians aged 55 years and over. Eye/vision problems were the most commonly reported conditions (29%), followed by asthma (16%), back problems (15%) and ear/hearing problems (15%).

ILL HEALTH *continued*

However, similar proportions reporting long-term health conditions does not reflect marked differentials in incidence and prevalence of ill health. For instance, the National Notifiable Diseases Surveillance System reports disease rates for Indigenous Australians that are many times those among non-Indigenous Australians. Rate ratios are particularly high for gonococcal infection (69:1), syphilis (42:1) and chlamydia (18:1). For most other communicable diseases reported to the surveillance system the incidence rates for Indigenous persons are generally in the range 5 to 10 times higher than for non-Indigenous persons.

Hospitalisation rates are also several times higher among Aboriginal and Torres Strait Islander peoples, and are affected by likely under-identification in hospital data systems. Rate ratios for 'Ischaemic heart disease' hospitalisations are 1.4:1 for males and 2.4:1 for females; for 'Respiratory diseases' 2.6:1 for males and 3.1:1 for females; for 'Infectious and parasitic diseases' 2.7:1 for males and 3.1:1 for females; and for 'Injury and poisoning', 1.9:1 for males and 2.3:1 for females. Among the latter group, hospitalisations that are attributed to 'Assault' are at a rate 8 times higher for Indigenous males and 28 times higher for Indigenous females, compared with non-Indigenous males and females respectively.

HEALTH RISK FACTORS

The 2001 National Health Survey indicates that in non-remote areas Aboriginal and Torres Strait Islander children aged under four years were as likely to have been breastfed (78%) as non-Indigenous children. However Indigenous children living in non-remote areas were less likely than non-Indigenous children to have been breastfed for more than six months.

Cross-population comparisons against nutritional guidelines show varying results. Higher proportions of Indigenous Australians in non-remote areas reported medium to high vegetable intake (two or more serves per day) but more non-Indigenous Australians reported medium to high fruit intake. Aboriginal and Torres Strait Islander peoples were more likely to consume whole (full cream) milk rather than reduced fat alternatives and to add salt to meals after cooking. The percentage of Indigenous adults classified as overweight or obese was 61% compared with 48% of non-Indigenous adults.

Indigenous persons aged 18 years and over were twice as likely as non-Indigenous persons to be current smokers (51% compared with 24%) with higher proportions applying to both sexes and across all age groups.

Indigenous adults aged 18 years and over were less likely (42%) than non-Indigenous adults (62%) to have consumed alcohol in the week prior to interview for the 2001 National Health Survey. However, those who consumed alcohol were more likely to have consumed at risky/high levels than non-Indigenous consumers (29% compared with 17%).

MORTALITY

Registered deaths of persons identified as Aboriginal and/or Torres Strait Islander in Queensland, South Australia, Western Australia and the Northern Territory are used in this report for the period 1999–2001. For all age groups below 75 years the age-specific death rate for persons identified as Indigenous in the selected jurisdictions was at least double that for the total Australian population. The largest differences occurred at ages 35–54 years where the Indigenous death rates in the selected jurisdictions were five times those of the total Australian population.

Over the period 1999 to 2001, the overall standardised mortality ratio (SMR) for deaths to both male and female Indigenous persons was three, based on all-Australian age and sex-specific death rates. That is, after adjusting for different population composition, Aboriginal and Torres Strait Islander peoples are shown to be dying at three times the total population rates. SMRs for each major cause of death group were greater than one, reflecting across the board disadvantage for the Indigenous population. The cause of death group with the highest SMR for both males (8) and females (12) was 'Endocrine, nutritional and metabolic diseases', the group that contains diabetes.

CHAPTER 1 INTRODUCTION

AIM

This publication is the fourth in the biennial series of reports on the health and welfare of Australia's Aboriginal and Torres Strait Islander peoples. It draws on recent data available from a number of different sources to provide a single volume 'snap shot' of the health and welfare of Aboriginal and Torres Strait Islander peoples. The topics covered are consistent with research themes identified as critical to achieving health gains for Aboriginal and Torres Strait Islander peoples (NHMRC 2002). Notwithstanding the difficulties in monitoring trends in these data (see Data Quality below), the underlying aim of the series is to be able to provide a broad picture of the change in the health and welfare of Indigenous Australians over time.

DEFINING HEALTH AND WELFARE

The World Health Organisation (1946) defines health as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity'. The 1989 National Aboriginal Health Working Party described 'health' from an Indigenous perspective as:

> '…a matter of determining all aspects of their life, including control over their physical environment, of dignity, of community self-esteem and of justice. It is not merely the absence of disease and incapacity' (A National Aboriginal Health Strategy 1989).

This publication also draws on the definition of health put forward in The National Aboriginal Health Strategy Working Party report, and later reiterated in the draft review of this strategy (National Aboriginal and Torres Strait Islander Health Council 2001):

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

The term 'welfare' is also a wide-ranging term, encompassing the wellbeing of both the individual and the society of which they are a part, as well as the system of welfare services and support systems available to individuals and committees (AIHW 2001a).

SCOPE

This publication updates information presented in the previous three editions of the *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* (ABS & AIHW 1997, 1999, 2001). The data used were drawn from key national statistical collections including the latest information from both the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW). Important information about Aboriginal and Torres Strait Islander health and welfare was collected in 2001 by the ABS, including the Census of Population and Housing, the Community Housing and Infrastructure Needs Survey and the National Health Survey (NHS). In addition, results from the Indigenous Social Survey (ISS) will be available in late 2003 (Chapter 11).

SCOPE *continued*

Throughout this publication, the term 'Indigenous Australians' refers to all persons who identify as being of Aboriginal, Torres Strait Islander, or both Aboriginal and Torres Strait Islander origin. The term 'non-Indigenous' includes records identified as non-Indigenous and records where Indigenous status was not stated (unless otherwise indicated). This terminology assumes that Indigenous identification in all data collections is based on self-identification.

This publication begins by examining the demographic, social and economic context of health and wellbeing for Indigenous Australians (Chapter 2), as well as the range of environmental factors which also affect health (Chapter 3). Aboriginal and Torres Strait Islander people's access to and use of health services are then examined, including physical, economic and cultural barriers (Chapter 4). This is followed by discussion on the delivery of community services to Aboriginal and Torres Strait Islander clients in the areas of housing assistance, child care, child protection, adoptions, juvenile justice, disability services and aged care (Chapter 5).

Information on a range of health indicators is presented in the Chapters on Mothers and babies (Chapter 6), Ill-health (Chapter 7), Health risk factors (Chapter 8), and Mortality (Chapter 9). Separate information about people of Torres Strait Islander origin is often difficult to obtain, so a short chapter is included which presents some of the available information about this population group, including comparisons between Torres Strait Islanders living in the Torres Strait and those living elsewhere (Chapter 10). The publication ends with a discussion of recent developments, in data collections, data quality issues and future directions relating to health and welfare statistics about Indigenous Australians (Chapter 11).

Many important underlying social and economic issues are not directly addressed in this publication, either because of a lack of adequate information or because they are beyond its scope. In addition, there is a lack of reliable and available data on many important aspects of health and welfare. A lack of reporting on a particular topic should not therefore be equated with lack of importance.

The information that is presented in this publication generally refers to single aspects or dimensions of health and does not take into account the multiple illnesses and conditions which are experienced by some Indigenous Australians. Although it is important to understand the impact of multiple illnesses, the dimensions and consequences of such a burden are not easily captured using available data.

Health and other issues confronting the Aboriginal and Torres Strait Islander population are neither uniformly spread nor uniformly experienced, a fact that is often not apparent in the national level data presented. Insets have been used throughout the publication to draw attention to a variety of local experiences and health initiatives that exist across Australia.

DATA QUALITY

The availability and quality of data about the Aboriginal and Torres Strait Islander population are limited by a number of factors. Three of the more important are outlined below.

Indigenous population estimates

Estimating the size and composition of Aboriginal and Torres Strait Islander peoples is difficult for a number of reasons. One reason is the uncertainty in interpreting Indigenous population counts from the five-yearly Census of Population and Housing which provide the basis for estimating the population. The Census count for the total Indigenous population increased by 16% from 1996 to 2001. Natural increase (births minus deaths) accounted for a 12% increase, with a further 4% increase due to other factors, such as an increasing propensity for people to identify as Indigenous on Census forms (ABS 2002g). ABS plans to examine this issue in more detail in the near future, updating work undertaken based on the 1996 Census (Ross 1999) using 2001 Census results.

While factors such as the propensity to identify as Indigenous in the Census can be identified, it is not possible to estimate how these factors are likely to change over time. In addition accurate births and deaths data, required to estimate the natural growth in the Indigenous population between Censuses, are not available nationally. These uncertainties affect the quality of the population estimates which in turn affect the comparison of rates from year to year and limit the potential for assessment of trends in health status and events.

Rates presented in this publication are calculated from the low series of experimental projections based on the 1996 Census, published for the years 1996–2006 (ABS 1998b).

Indigenous identification

Administrative collections such as hospital records, birth and death registrations, and data collected by community service providers are major sources of information about Aboriginal and Torres Strait Islander peoples. Indigenous Australians, however, are not completely identified in many of these data collections. Reasons for this include: different methods of data collection and failure to record clients' Indigenous status. The ABS and AIHW, in partnership with state and territory authorities, are making considerable efforts to improve the completeness of Indigenous identification in a number of key data collections (Chapter 11). Significantly, an Indigenous identifier is now included in new Medicare registrations.

National household surveys

The sampling methods generally applied to national household surveys are designed to provide aggregate information about the total Australian population. Additionally, these surveys often exclude people living in remote areas of Australia. Aboriginal and Torres Strait Islander peoples make up a relatively small proportion of the total population and are more likely to live in remote areas than other Australians (Chapter 2). Because of these factors, the random selection of participants for a national survey usually results in the Indigenous sample size being too small to enable separate results to be published. Where separate results have been produced, such as those from the 2001 NHS, an enhanced sample of Aboriginal and Torres Strait Islander peoples has been applied. In the 2004–05 Indigenous Health Survey (IHS) and six-yearly thereafter, the enhanced Indigenous sample will be designed to produce results at the state–territory as well as national level.

The Indigenous Social Survey (ISS), first conducted in 2002 and expected to be conducted six yearly in future, provides a range of information about the health and welfare of Australia's Indigenous population, including: self-assessed health status, disability, smoking, alcohol consumption, substance use, childcare, income and housing.

Other issues which affect the availability of data about the Indigenous population from surveys include the relevance of the questions and concepts used and the quality and the comparability of self-reported information (Chapter 11).

Despite these limitations in the availability of information and issues of data quality, regular reporting on the health and welfare of Aboriginal and Torres Strait Islander peoples is a high priority for governments, and plays an important role in informing community debate. Work to improve the quality and availability of the statistics is ongoing and progress is being made in many sectors and at all levels of government (Chapter 11).

CHAPTER 2

THE DEMOGRAPHIC, SOCIAL AND ECONOMIC CONTEXT

INTRODUCTION

The relationship between socioeconomic status and health is well established, with people at the lowest socioeconomic levels experiencing the highest rates of illness and death (Lynch & Kaplin in Berkman and Kawachi (eds) 2000). As socioeconomic position improves, health status also improves. This gradient from poorest to wealthiest has been observed for most of the major causes of death (Turrell et al. 1999).

This Chapter provides information on the demographic, social and economic characteristics of Aboriginal and Torres Strait Islander peoples, using experimental estimates of the resident Indigenous and non-Indigenous populations as well as Census counts. Estimated resident population (ERP) adjusts the count from Census night, 7 August 2001, to 30 June 2001, making allowance for net Census undercount, Australian residents temporarily overseas on Census night, and for instances in which Indigenous status was not reported in the Census.

This data provides a context for the health and welfare information in later Chapters.

DEMOGRAPHIC CHARACTERISTICS

Census counts

The number of people identified as being of Aboriginal and/or Torres Strait Islander origin in the 2001 Census was 410,000. This represented an increase of 16% since the 1996 Census, and followed increases of 17% between 1986 and 1991, and 33% between 1991 and 1996. The count of non-Indigenous persons increased by 4% between the 1996 and 2001 Censuses.

Three-quarters of the intercensal increase over the five years to 2001 (12% out of 16%) can be explained by demographic factors (births and deaths), with the remaining increase attributable to other factors such as improvements in Census collection methods and an increased propensity to identify as being of Aboriginal or Torres Strait origin. In the intercensal period from 1991 to 1996, less than half (14% out of 33%) of the Indigenous population growth could be explained by demographic factors.

The largest increases in the Indigenous population at the state and territory level were recorded for the Australian Capital Territory (25%), New South Wales and Queensland (each 18%) (ABS 2002g).

Experimental Indigenous estimated resident population

At 30 June 2001, the final rebased experimental estimates of the resident Indigenous population of Australia was 458,500, or 2.4% of the total population. Persons identifying as of ‘Aboriginal origin’ comprised about 90% of the estimated resident Indigenous population; persons of ‘Torres Strait Islander origin’ comprised 6%, and those with dual Aboriginal and Torres Strait Islander origin comprised 4%.

2.1 POPULATION CONCEPTS

The Australian Bureau of Statistics publishes two types of data on the population of Australia; counts from the Census of Population and Housing, and estimates and projections of the population. Counts are only available every five years from the Population Census, but estimates and projections are generally available for each year:

Census counts

There are two main types of Census counts. The Census can provide counts of people where they are on Census night (place of enumeration) as well as where they usually live (usual residence). Both counts can be used for analysis although the usual residence count is preferred in geographical analyses because it classifies people who are away from home at Census time to the area in which they usually live, as long as usual residential address details are provided. Counts on a usual residence basis therefore correct for the effect of seasonal fluctuations in holiday/resort areas and, in remote areas, for the effect of visitation and mobility issues and events such as festivals or funerals.

Appendix 1 — Using Indigenous Census data, provides information on the appropriate use of Census data.

Experimental estimates of the resident Indigenous population

To arrive at an estimate of the size and composition of the Aboriginal and Torres Strait Islander population using the Census count (on a usual residence basis), allowance is made for net undercount, and for instances in which Indigenous status is unknown. While each Census aims to count every person in Australia once, some people are inevitably missed and some are counted more than once; the net effect is referred to as undercount. In addition, Indigenous status is unknown in some cases, due to the Indigenous origin question not being answered. A proportion of records in both categories will represent Indigenous Australians. Furthermore, population estimates for periods other than the Census date must also take account of births, deaths and migration in the intervening period (ABS 2002g).

Records where Indigenous status is unknown result from question non-response. During the 2001 Census there were 767,757 records for whom Indigenous status was unknown, which is equivalent to 4.1% of the total Australian population. This was an increase from the 1996 Census, where Indigenous status 'unknown' represented 3.0% of the total population (ABS 2002g). The question on Indigenous status was unanswered for only about 2.0% of people in 2001 (up from 1.7% in the 1996 Census). Most of the increase in the number of records for which Indigenous status was not recorded related to imputed records. In compiling Indigenous population estimates very few of the imputed records will have an Indigenous status imputed due to the predominate non-Indigenous status of the population in the areas where most imputed records were required to be created.

Table 2.2 illustrates the variation that can occur in the size and distribution of the Indigenous population at the Australian, state and territory level, depending on which population measure is used. For more information about the different methods of calculating the Indigenous population refer to Appendices 2 and 3 in ABS 2002g.

...continued

2.2 POPULATION MEASURES — 30 JUNE 2001

	Census place of enumeration, 7 August 2001		*Census usual residence, 7 August 2001*		*Experimental estimated resident population(a) at 30 June 2001*	
	Indigenous	*Total*	*Indigenous*	*Total*	*Indigenous*	*Total*
	no.	*no.*	*no.*	*no.*	*no.*	*no.*
New South Wales	119 865	6 311 168	120 047	6 326 579	134 888	6 575 217
Victoria	25 078	4 612 097	25 059	4 660 991	27 846	4 804 726
Queensland	112 772	3 585 639	112 575	3 522 044	125 910	3 628 946
South Australia	23 425	1 458 912	23 377	1 470 057	25 544	1 511 728
Western Australia	58 496	1 832 008	58 467	1 828 294	65 931	1 901 159
Tasmania	15 773	454 841	15 856	460 672	17 384	471 795
Northern Territory	50 785	202 729	50 845	188 075	56 875	197 768
Australian Capital Territory	3 576	309 184	3 548	309 998	3 909	319 317
Australia(b)	**410 003**	**18 769 249**	**410 003**	**18 769 249**	**458 520**	**19 413 240**

(a) Final rebased experimental Indigenous estimated resident population as at 30 June 2001.

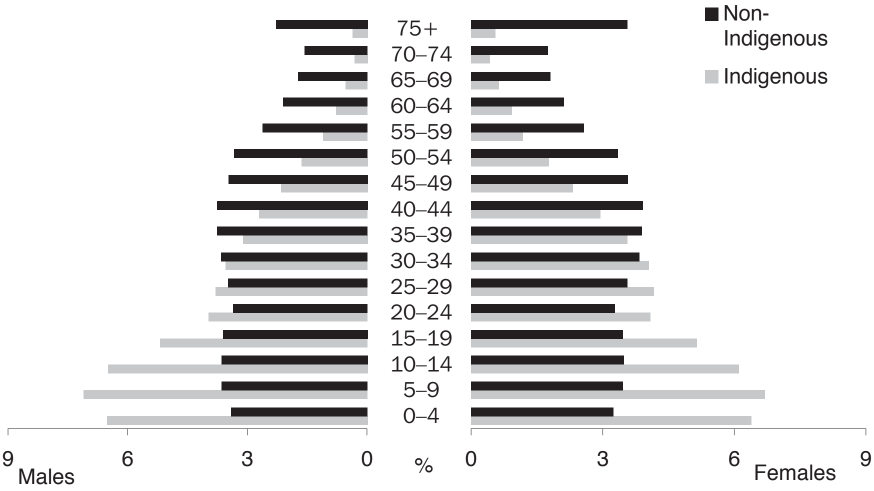
(b) Includes Other Territories.

Source: ABS 2002g, ABS data available on request, 2001 Census of Population and Housing.

Age

The Aboriginal and Torres Strait Islander population has a younger age structure than the non-Indigenous population. The following age pyramid shows the proportion of the total Australian population in five-year age groups for the Indigenous and non-Indigenous populations (graph 2.3). The graph reflects higher rates of fertility in the Indigenous population and deaths occurring at younger ages. This can be seen by the higher proportions of younger people and the lower proportion of aged people compared to the non-Indigenous population. At 30 June 2001, half the Indigenous population was aged less than 20.5 years, while for the non-Indigenous population, the corresponding figure was 36 years. Because age is closely associated with health status, any comparisons between the Indigenous and non-Indigenous populations are age standardised or presented as separate results for age groups.

2.3 POPULATION PROFILE, BY AGE AND SEX — 2001



Source: Final rebased experimental Indigenous estimated resident population as at 30 June 2001, ABS data available on request, 2001 Census of Population and Housing.

Where Indigenous persons live

State and territory

In the 2001 Census, over half of the estimated resident Indigenous population lived in either New South Wales (29%) or Queensland (27%); 14% were in Western Australia and 12% in the Northern Territory. More than one in four people in the Northern Territory (29%) were estimated to be of Indigenous origin. In all other states and territories, Indigenous Australians were estimated to comprise less than 4% of those populations, with the proportion in Victoria being the lowest (table 2.4) (ABS 2002g).

2.4 EXPERIMENTAL ESTIMATED RESIDENT POPULATION(a) — 30 JUNE 2001

	Indigenous population	*Proportion of the total Australian Indigenous population*	*Proportion of the total state or territory population*
	no.	*%*	*%*
New South Wales	134 888	29.4	2.1
Victoria	27 846	6.1	0.6
Queensland	125 910	27.5	3.5
South Australia	25 544	5.6	1.7
Western Australia	65 931	14.4	3.5
Tasmania	17 384	3.8	3.7
Northern Territory	56 875	12.4	28.8
Australian Capital Territory	3 909	0.9	1.2
Australia(b)	**458 520**	**100.0**	**2.4**

(a) Final rebased experimental Indigenous estimated resident population as at 30 June 2001.

(b) Includes Other Territories.

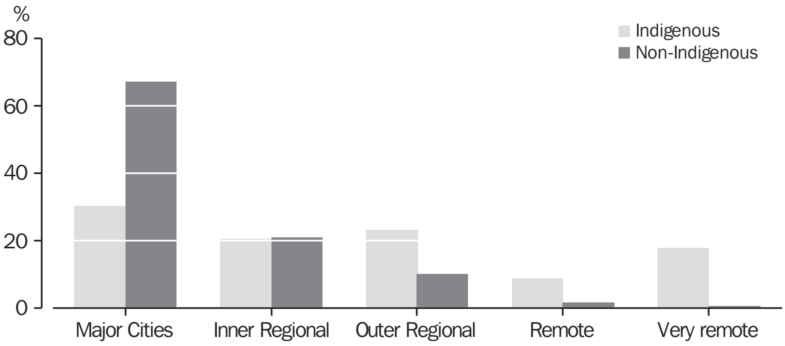
Source: ABS data available on request, Demography, 2003.

Remoteness Areas

The geographic concept of Remoteness Areas, based on the Accessibility/Remoteness Index of Australia (ARIA), was included for the first time in the 2001 edition of the Australian Standard Geographical Classification (ASGC). Remoteness Areas are designed to provide statistics which compare, on the one hand the major cities, and, at the other extreme, very remote areas (see Glossary for further information).

Distance is often a factor in accessing services for Australians in remote or rural areas. Results from the 2001 Census indicate that one in four Indigenous Australians were living in Remote or Very Remote areas, compared to only 2% of non-Indigenous Australians. While the highest proportion of the Indigenous population was living in Major Cities (30%), there was a much higher proportion of the non-Indigenous population in Major Cities (67%) (graph 2.5). The distribution of discrete Indigenous communities by Remoteness Areas is shown in Appendix 2.

2.5 ESTIMATED RESIDENT POPULATION BY REMOTENESS AREAS(a) — 2001



(a) Final rebased experimental Indigenous estimated resident population as at 30 June 2001.

Source: ABS data available on request, 2001 Census of Population and Housing.

As a result of these differences in population distribution, the Indigenous proportion of the total population rose with increasing geographic remoteness, from 1% of the total population living in Major Cities to 45% in Very Remote areas.

Aboriginal and Torres Strait Islander Commission (ATSIC) Regions

The experimental estimated resident Indigenous populations for ATSIC Regions for 1996 and 2001 are shown in table 2.6. The high Indigenous population increases were mainly associated with more urbanised regions. The smallest increases occurred in the Torres Strait area (6%), Warburton (6%), and Aputula (4%).

2.6 EXPERIMENTAL INDIGENOUS ESTIMATED RESIDENT POPULATION(a), BY ATSIC REGION

	2001	*1996*	*Change between 1996 and 2001*
ATSIC region	*no.*	*no.*	*%*
New South Wales			
Bourke	8 867	7 951	12
Coffs Harbour	36 118	27 127	33
Queanbeyan(b)	12 415	9 855	26
Sydney	43 145	37 117	16
Tamworth	14 413	11 595	24
Wagga Wagga	24 055	19 535	23
Victoria			
Ballarat	14 427	11 660	24
Wangaratta	13 419	10 938	23
Queensland			
Brisbane	38 986	30 325	29
Cairns	18 879	16 144	17
Cooktown	7 326	6 184	19
Mount Isa	8 223	7 306	13
Rockhampton	14 529	12 436	17
Roma	12 256	9 661	27
Torres Strait Area	7 078	6 654	6
Townsville	18 633	16 107	16
South Australia			
Adelaide	16 236	13 686	19
Ceduna	2 251	2 014	12
Port Augusta	7 057	6 351	11
Western Australia			
Broome	4 712	3 760	25
Derby	5 349	4 347	23
Geraldton	6 491	5 497	18
Kalgoorlie	4 052	3 462	17
Kununurra	5 378	4 887	10
Narrogin	8 155	6 814	20
Perth	23 214	19 765	18
South Hedland	5 463	4 721	16
Warburton	3 117	2 952	6
Tasmania			
Hobart	17 384	15 322	14
Northern Territory			
Alice Springs	5 625	4 986	13
Aputula	8 758	8 427	4
Darwin	11 375	10 078	13
Jabiru	9 444	8 685	9
Katherine	9 085	7 986	14
Nhulunbuy	8 829	7 848	13
Tennant Creek	3 759	3 866	–3
Australia(c)	458 520	386 049	19

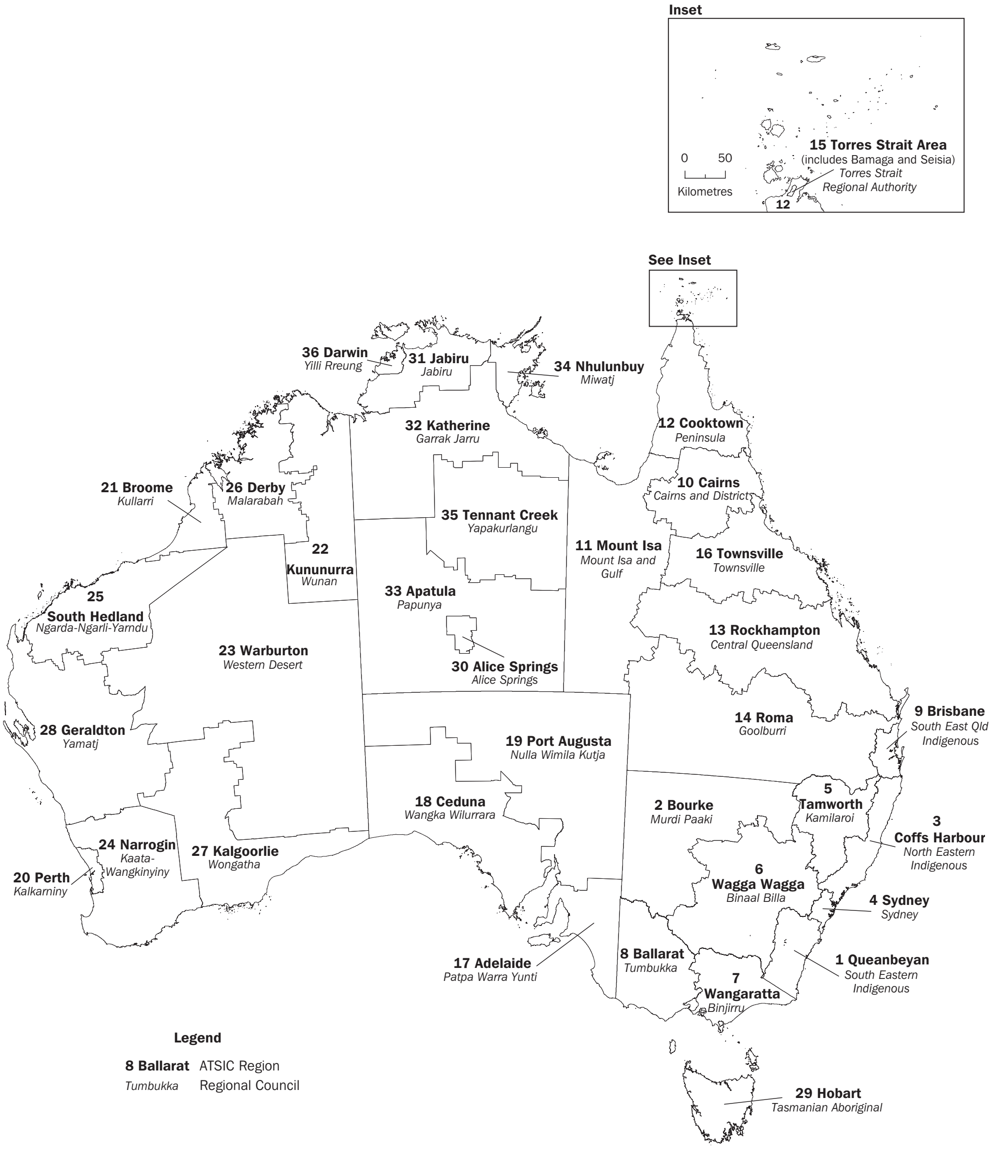
(a) Final rebased experimental Indigenous estimated resident population as at 30 June 2001.

(b) Included Jervis Bay Territory in 2001.

(c) Included Christmas Island and Cocos (Keeling) Island in 2001, and Christmas Island, Cocos (Keeling) Island and Jervis Bay Territory in 1996.

Source: ABS data available on request, 1996 and 2001 Census of Population and Housing.

2.7 ATSIC REGIONS — 2001



Note: Boundaries based on Aboriginal and Torres Strait Islander Commission regions.

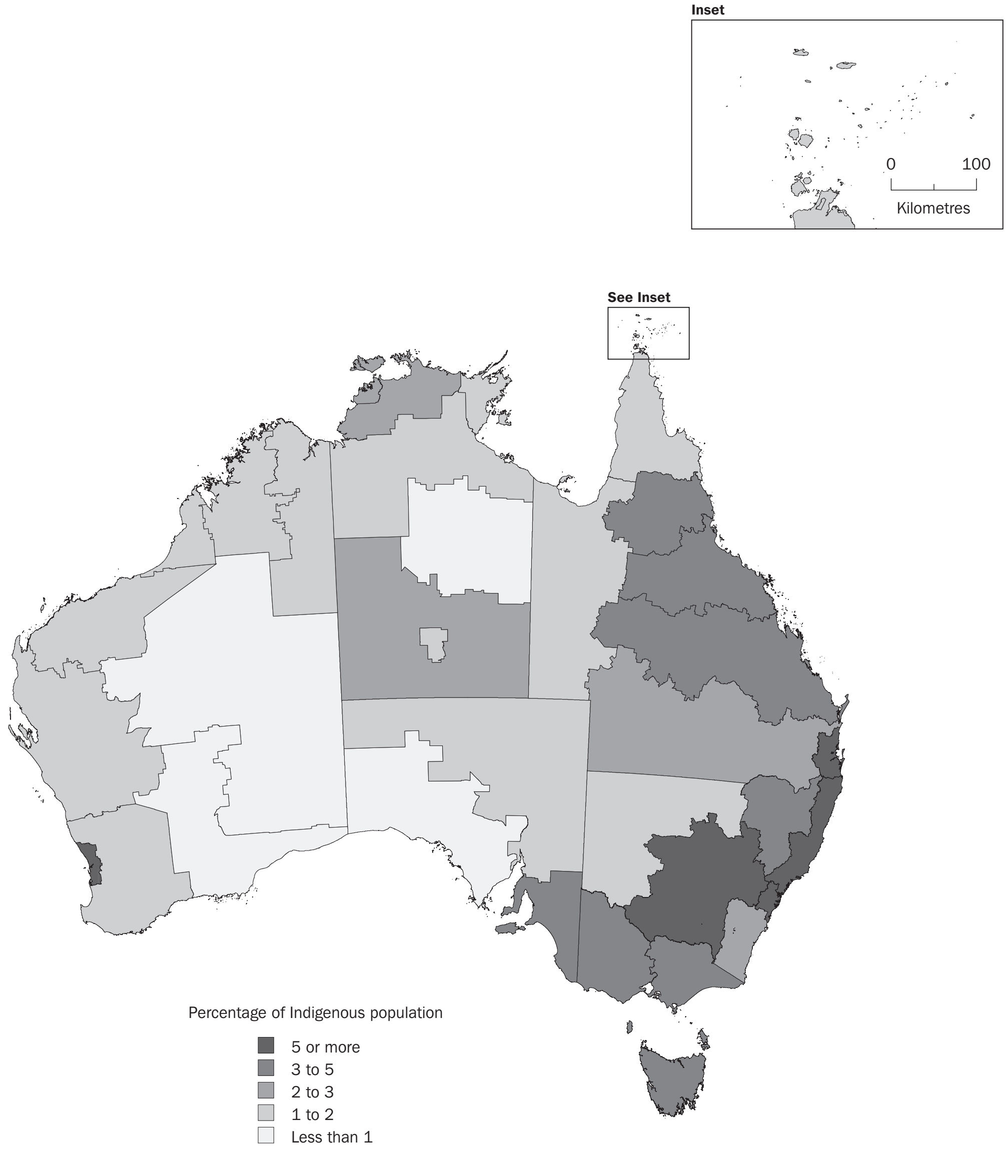
Source: ABS 2002g.

Maps 2.8 and 2.9 show the distribution of the Indigenous population across Australia at the 2001 Census by ATSIC regions (see map 2.7). While the shadings in these maps display area-based patterns in average population characteristics, the size of regions varies widely and may distort the visual impression. Characteristics attributed to a large geographic area may actually derive mainly from a population concentration that covers just a small portion of the total area.

Remoteness Areas *continued*

The majority of the Indigenous population reside in south-eastern regions of Australia (map 2. 8). However, in the northern and eastern regions of the country, Indigenous persons made up a larger proportion of the population and were more likely to be living in urban areas (map 2.9). In five of the 36 ATSIC Regions Indigenous persons account for more than half of the population: the Torres Strait Area (74%); Jabiru (65%); Apatula (64%); Nhulunbuy (61%); and Tennant Creek (51%).

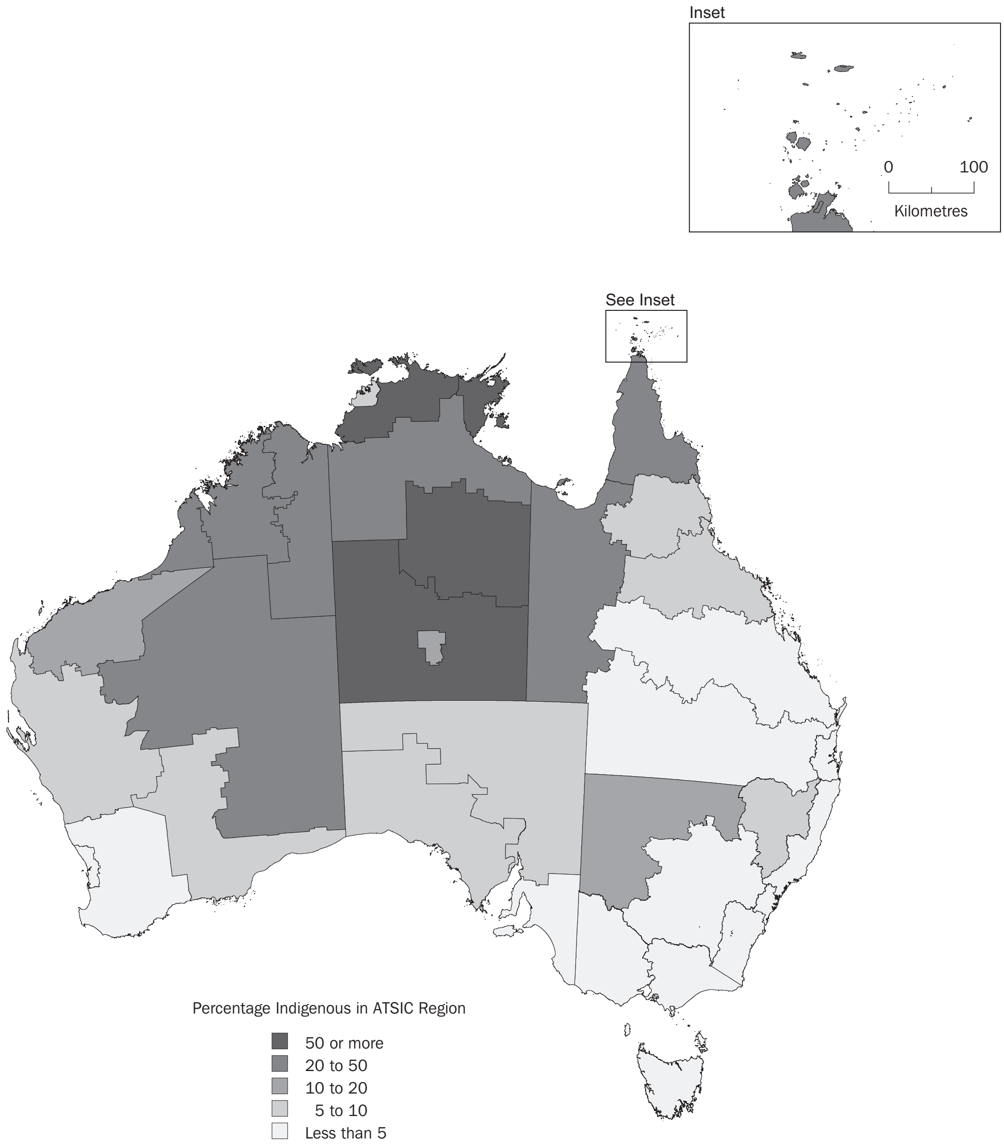
2.8 INDIGENOUS REGIONAL POPULATION AS A PROPORTION OF THE TOTAL INDIGENOUS POPULATION — 2001



Note: Boundaries are based on Aboriginal and Torres Strait Islander Commission regions.

Source: ABS data available on request, 2001 Census of Population and Housing.

2.9 INDIGENOUS POPULATION AS A PROPORTION OF THE REGIONAL POPULATION — 2001



Note: Boundaries are based on Aboriginal and Torres Strait Islander Commission regions.

Source: ABS data available on request, 2001 Census of Population and Housing.

POPULATION CHARACTERISTICS

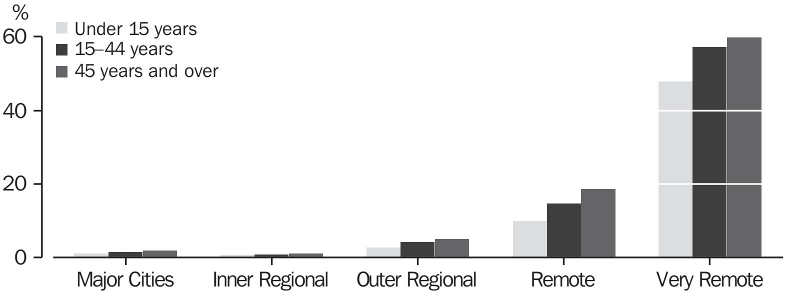
Language

The vast majority of Indigenous Australians (about 80%) reported that at home they spoke English only, similar to the level reported by non-Indigenous Australians. About one in eight Indigenous persons (12%), reported that they spoke an Aboriginal or Torres Strait Island (Australian Indigenous) language at home. Indigenous languages were much more likely to be spoken in geographically remote areas. More than half (55%) of Indigenous Australians living in Very Remote areas reported an Indigenous language compared with about 1% of Indigenous Australians in Major Cities and Inner Regional areas (ABS 2003b).

Language *continued*

In 2001, the pattern of Indigenous language use by age was consistent with that reported in 1996. Older Aboriginal and Torres Strait Islander persons (aged 45 and over) were more likely than those in younger age groups, to have reported speaking an Indigenous language. Of Indigenous children under 15 years of age, 10% were identified as Indigenous language speakers compared with 15% of Indigenous Australians aged 45 years or older. Among Indigenous Australians aged 45 years and over, the proportion who spoke an Indigenous language at home increased with geographic remoteness, from about 1% in Major Cities and Inner Regional areas, to 61% in Very Remote areas (graph 2.10). A discussion of proficiency in spoken English as a barrier to health services is in Chapter 4.

2.10 INDIGENOUS PERSONS WHO SPOKE AN INDIGENOUS LANGUAGE AT HOME(a) — 2001



(a) Excludes 4,854 Torres Strait Islander persons classified as speaking 'Oceanic Pidgin and Creoles n.f.d'. See Explanatory Notes for further details.

Source: ABS data available on request, 2001 Census of Population and Housing.

Education

Level of schooling

Data from the 2001 Census indicate that Indigenous Australians were less likely than non-Indigenous Australians to have completed Year 10 or equivalent. Of Indigenous persons aged 15 years and over who were no longer at school, 32% had not completed Year 10 or equivalent, compared to 18% of non-Indigenous persons.

In addition, Indigenous Australians were less likely than non-Indigenous Australians to have completed higher levels of schooling. Of Indigenous persons aged 15 years and over who were no longer at school, 18% reported that they had completed school to Year 12, compared to 41% of non-Indigenous persons.

Indigenous males were less likely to have completed Year 12 or equivalent than Indigenous females (16% to 19% respectively). No such gender difference was apparent for non-Indigenous persons (table 2.11).

For Indigenous persons, highest level of schooling completed generally declined with increasing geographic remoteness. As a result, the disparity between Indigenous and non-Indigenous persons was greatest in Very Remote areas, where Indigenous persons were only one-third as likely as non-Indigenous persons to have completed Year 12 (ABS 2003a).

2.11 HIGHEST LEVEL OF SCHOOLING COMPLETED(a) — 2001

	Indigenous		*Non-Indigenous*	
	no.	*%(b)*	*no.*	*%(b)*
MALES				
Still at school	6 101	. .	238 532	. .
Did not go to school	3 638	3.2	60 630	0.9
Year 8 or equivalent	21 646	19.1	632 426	9.6
Year 9 or equivalent	16 992	15.0	529 273	8.0
Year 10 or equivalent	31 784	28.0	1 687 288	25.5
Year 11 or equivalent	10 170	9.0	695 277	10.5
Year 12 or equivalent	18 705	16.5	2 702 361	40.9
Total(c)	*119 529*	*100.0*	*6 845 389*	*100.0*
FEMALES				
Still at school	6 563	. .	246 971	. .
Did not go to school	3 759	3.1	77 423	1.1
Year 8 or equivalent	20 195	16.4	689 840	10.0
Year 9 or equivalent	17 384	14.1	537 404	7.8
Year 10 or equivalent	35 389	28.8	1 747 747	25.3
Year 11 or equivalent	12 667	10.3	693 555	10.0
Year 12 or equivalent	23 218	18.9	2 827 520	40.9
Total(c)	*129 545*	*100.0*	*7 161 598*	*100.0*

(a) Persons aged 15 years and over. Excludes persons not applicable, and persons for whom Indigenous status was not stated.

(b) Excludes persons still at school.

(c) Includes persons for whom highest level of schooling was not stated.

Source: ABS, data available upon request, 2001 Census of Population and Housing.

Non-school qualifications

Among Aboriginal and Torres Strait Islander peoples aged 15 years and over in 2001, 18% reported having a non-school qualification. This was an increase from 14% in 1996. Over the same period, there was a corresponding increase in the proportion of non-Indigenous persons who reported having a non-school qualification (from 36% to 40%). Indigenous Australians continued to be about half as likely as non-Indigenous Australians to have a non-school qualification.

For Indigenous persons, the likelihood of having a non-school qualification declined with increasing geographic remoteness. In Major Cities Indigenous persons were around half as likely as non-Indigenous persons to have a non-school qualification; in Very Remote areas they were only one-sixth as likely.

In the 2001 Census, a higher proportion of males than females reported having a non-school qualification, with the disparity more marked in the non-Indigenous population. About one in five (19%) of Indigenous males reported a non-school qualification compared with 16% of Indigenous females. In comparison, almost half (46%) of non-Indigenous males and about one-third (34%) of non-Indigenous females reported a non-school qualification (table 2.12).

2.12 HIGHEST NON-SCHOOL EDUCATIONAL QUALIFICATION COMPLETED(a) — 2001

	Indigenous	*Non-Indigenous*
	%	%
MALES		
Has qualification		
Degree or higher	2.3	13.2
Diploma level	1.9	5.7
Certificate level	12.3	24.1
Level not determined	2.5	2.8
Total	*18.9*	*45.7*
No non-school qualification	70.2	49.9
Not stated	11.0	4.3
Total	100.0	100.0
FEMALES		
Has qualification		
Degree or higher	3.5	14.0
Diploma level	3.1	6.9
Certificate level	6.7	9.1
Level not determined	3.0	4.2
Total	*16.3*	*34.2*
No non-school qualification	74.0	60.5
Not stated	9.8	5.3
Total	100.0	100.0

(a) Persons aged 15 years and over.

Source: ABS data available on request, 2001 Census of Population and Housing.

Labour force

Employment

At the 2001 Census, 42% of Indigenous Australians aged 15 years and over were in employment (employment to population ratio), compared with a non-Indigenous employment rate of 58%. Adjusting for the differing age structures of the two populations would widen the gap in employment ratios. In 1996, 41% of Indigenous Australians were employed. A higher proportion of Indigenous males (47%) than females (36%) were in employment, with a similar pattern observed for non-Indigenous persons in this group (66% of males and 52% of females). About one in six Indigenous persons classified as employed was participating in Community Development Employment Projects (CDEP). There were 17,800 Indigenous CDEP participants identified in the 2001 Census, accounting for 20% of Indigenous male employment and 15% of Indigenous female employment (graphs 2.13 and 2.14).

The labour force participation rate was higher for total Australian males than for total Australian females. Indigenous males had a participation rate of 61% compared with 71% for non-Indigenous males, while the participation rate for Indigenous females was 44% compared to 56% for non-Indigenous females (ABS data available upon request, 2001 Census).

CDEP

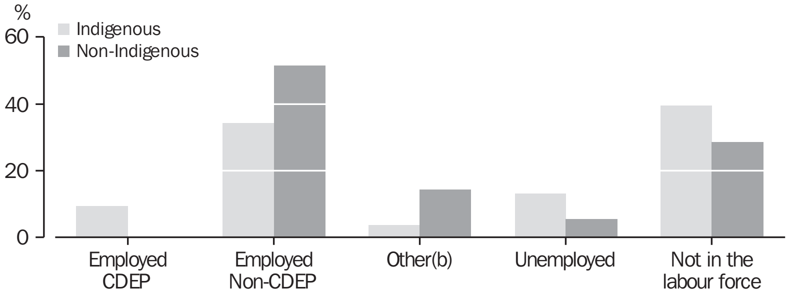
The Aboriginal and Torres Strait Islander Commission (ATSIC) provides access to the CDEP scheme to (mainly) Indigenous persons across Australia. The main aim of CDEP is to create local employment opportunities in remote Indigenous communities where the labour market might not otherwise offer employment. The CDEP scheme involves a trade off of individual 'dole' entitlements for a community entitlement that is managed through community based work. Most CDEP organisations continue to be located in regional and remote areas of Australia. Of those Indigenous persons counted in the 2001 Census as CDEP participants, the majority (69%) were in Very Remote areas and a further 10% were in Remote areas.

The Census count of CDEP participants was equivalent to about 60% of the number of participants (32,000) recorded for administrative purposes by ATSIC at the same time. The majority of CDEP participants identified in the Census were counted on Special Indigenous Forms. These forms contained explicit references to CDEP and were often used in Remote and Very Remote areas. The standard Census form (used in less remote areas) was not specifically designed to collect information on CDEP participation so it is likely that not all participants were identified.

Unemployment

Unemployed persons are those who during the week prior to the Census, did not have a job but were available and actively looking for work (ABS 2001d). Indigenous males had an unemployment rate of 22% compared to 8% for non-Indigenous males (graph 2.13), while the unemployment rate for Indigenous females was 18% compared with 7% for non-Indigenous females (graph 2.14). The labour force participation rate was higher for males than for females. Indigenous males had a participation rate of 61% compared with 71% for non-Indigenous males, while the participation rate for Indigenous females was 44% compared to 56% for non-Indigenous females.

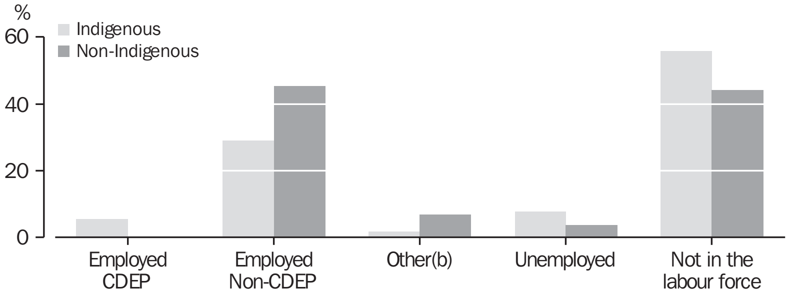
2.13 LABOUR FORCE STATUS, MALES(a) — 2001



(a) Persons aged 15 years and over. Excludes persons for whom Indigenous status and/or labour force status was not stated.
(b) Includes employers, own account workers and contributing family workers.

Source: ABS data available on request, 2001 Census of Population and Housing.

2.14 LABOUR FORCE STATUS, FEMALES(a) — 2001



(a) Persons aged 15 years and over. Excludes persons for whom Indigenous status and/or labour force status was not stated.
(b) Includes employers, own account workers and contributing family workers.

Source: ABS data available on request, 2001 Census of Population and Housing.

Occupation

Among Indigenous Australians employed in 2001, Indigenous persons were most likely to be categorised as labourers and related workers (24% of employed Indigenous persons), which included occupations such as factory workers, electrical and telecommunication trades assistants, and agricultural labourers. Non-Indigenous Australians were more likely to be categorised as professionals (18%). For both Indigenous and non-Indigenous persons, the second most common occupational group was intermediate clerical, sales and service workers (18% and 16% respectively) (table 2.15). This category included occupations such as receptionists, carers and aides, and hospitality workers (ABS 2001d).

2.15 OCCUPATION(a) — 2001

	Indigenous	*Non-Indigenous*
	%	%
Managers and administrators	3.8	9.3
Professionals	11.1	18.4
Associate professionals	8.5	11.8
Tradespersons and related workers	10.2	12.3
Advanced clerical and service workers	1.8	3.8
Intermediate clerical, sales and service workers	18.1	16.5
Intermediate production and transport workers	9.6	8.1
Elementary clerical, sales and service workers	8.6	9.6
Labourers and related workers	23.5	8.4
Inadequately described	2.0	0.8
Not stated	2.8	1.1
Total	100.0	100.0

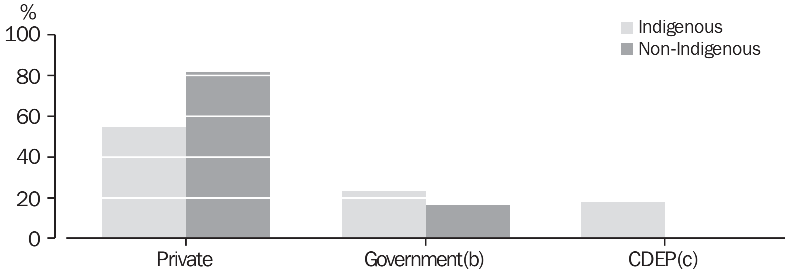
(a) Employed persons aged 15 years and over. Excludes persons for whom Indigenous status was not stated.

Source: ABS data available on request, 2001 Census of Population and Housing.

Occupation *continued*

In 2001, Indigenous Australians were less likely to be employed in the private sector than non-Indigenous Australians (55% to 82% respectively). Commonwealth, state–territory, and local governments provided 23% of Indigenous employment and 16% of non-Indigenous employment. The CDEP scheme accounted for an additional 18% of reported Indigenous employment (graph 2.16).

2.16 EMPLOYMENT SECTOR(a) — 2001



(a) Employed persons aged 15 years and over. Excludes persons for whom Indigenous status was not stated.
(b) Includes Commonwealth, state/territory and local governments.
(c) Not applicable for non-Indigenous persons.

Source: ABS data available on request, 2001 Census of Population and Housing.

Income

While income is usually received by individuals, it is normally shared among household members. Even when there is no transfer of income among members of a household, nor provision of free or cheap accommodation, members are still likely to benefit from the economies of scale that arise from the sharing of a dwelling. The comparison of income measures is therefore, where possible, related to household income to reflect the sharing of income, and adjusted by equivalence factors to standardise the income estimates with respect to household size and composition. Equivalence factors are based on the assumption that large households generally require a greater level of income than smaller households to maintain the same material standard of living. Equivalence scales also assume that the living costs of adults are normally greater than the costs of children. Therefore the equivalised income estimate for any household, other than a lone person household, will not accord with the amounts that households actually receive. See Glossary for a more detailed explanation of equivalised income. In comparing incomes, as a proxy for direct comparisons of the economic wellbeing of individuals, it would also be desirable to take account of the taxation paid on those incomes. However, the available data sources do not allow the presentation of disposable (after tax) incomes for Indigenous Australians, so that household income comparisons between the Indigenous and non-Indigenous populations in this Chapter are made generally using equivalised gross weekly household incomes.

Income *continued*

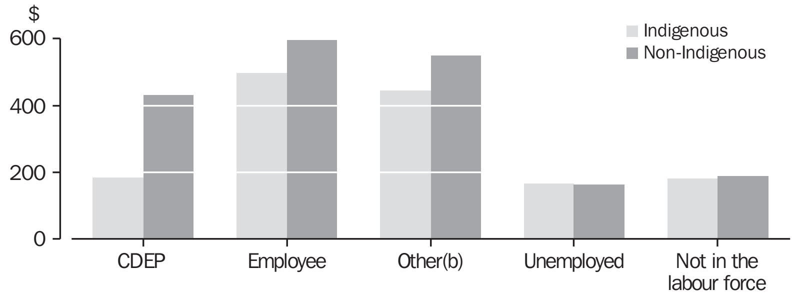
Also, the income data used for comparison in this Chapter are derived from the Census, which may differ from that reported in a survey specifically designed to collect income information. Further, some people do not answer the Census question on income. In the 2001 Census, 10% of the Indigenous population and 5% of the non-Indigenous population did not provide a response to the question on income. The characteristics of people who did not answer the income question may differ from those who did.

In 2001, the mean (average) equivalised gross household income for Indigenous persons was $364 per week, or 62% of the corresponding income for non-indigenous persons ($585 per week). This disparity reflects the lower household incomes received by households with Indigenous person(s), and the tendency for such households to be larger than Other households.

For Indigenous persons, income levels generally declined with increasing geographic remoteness, although the average equivalised income in outer Regional areas was slightly lower than that in Remote areas. In Major Cities, the average equivalised income for Indigenous persons was one and a half times higher than the corresponding income in Very Remote areas.

For non-Indigenous persons income levels were highest in Major Cities and Very Remote areas alike, lower in Remote areas and lowest in Regional areas. As a consequence, in Major Cities and Regional areas, average equivalised incomes for Indigenous persons were equal to about 70% of corresponding incomes for non-Indigenous persons. In Remote areas they were equal to about 60% and in Very Remote areas about 40%.

2.17 MEDIAN WEEKLY INCOME(a) BY LABOUR FORCE STATUS — 2001



(a) Persons aged 15 years and over. Excludes persons for whom Indigenous status and/or income was not stated.
(b) Includes employers, own account workers and contributing family workers.

Source: ABS data available on request, 2001 Census of Population and Housing.

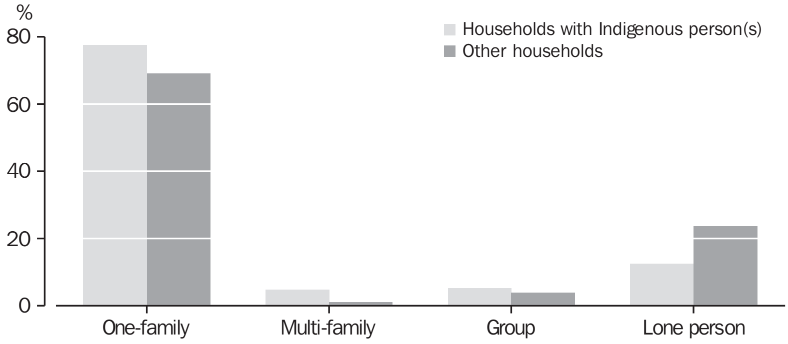
HOUSEHOLD CHARACTERISTICS

This section presents information on the living arrangements of Aboriginal and Torres Strait Islander peoples in terms of households and families as recorded in the Census. It focuses on households in which at least one Indigenous person, of any age, was resident on Census night. In this publication, these households are called 'households with Indigenous person(s)' and may be further classified as family, group or lone person households. Households with no identified Indigenous person(s) present are called 'Other households' for purposes of comparison.

Household size

A family is defined by the ABS as two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, who are usually resident in the same household. Family households can contain non-family members. A multiple family (multi-family) household contains up to three families (ABS 2001d). At the 2001 Census, households with Indigenous person(s) were more likely than Other households to be family households (82% compared with 70%) and less likely to be lone person households (13% compared with 24%) (graph 2.18).

2.18 HOUSEHOLD TYPE — 2001(a)



(a) See Glossary for definition of households with Indigenous person(s) and Other households.

Source: ABS data available on request, 2001 Census of Population and Housing.

Households with Indigenous person(s) were larger on average (3.5 persons) than Other households (2.6 persons). The major factor contributing to this difference is the higher number of dependent children in households with Indigenous person(s). The largest households were those with two or more families (multi-family households). Multi-family households with Indigenous person(s) had an average of 7.7 persons, compared with 5.4 persons in Other households.

2.19 CAPE YORK INDIGENOUS COMMUNITIES MAKING A DIFFERENCE WITH FAMILY INCOME MANAGEMENT

Health, living standards, education, employment, family well being and capacity building issues are all being targeted by the Cape York Family Income Management (FIM) project with great results being achieved. This Indigenous project is funded under the Stronger Families and Communities Strategy and commenced on-ground operations in July 2002.

Background

The lack of access to and capacity to use financial services and products coupled with a lack of money management skills affects the family budget and contributes to family stress, conflict and poor health. The FIM project involves working with the family to maximise the use of their total income to meet their needs and aspirations, to better discharge their responsibilities to each other and to increase social and economic participation. Indigenous families have signed up to this project entirely voluntarily and participants keep control of their money at all times.

On the ground operations

This project centres around the communities of Aurukun, Coen and Mossman Gorge in far north Queensland. Skilled workers and local family facilitators in each community help families work through their financial situation and negotiate a family budget plan which takes into account debt repayments, living costs and savings for agreed purposes. The negotiation process requires families to consider much broader issues than just their financial situation, and workers ensure appropriate referrals are made to other services as required. Workers are also:

- conducting a Junior FIM program in schools
- helping set up nutrition and pharmacy accounts in cooperation with local stores for people to use to buy food and purchase medications
- working with community justice groups in local substance abuse reduction strategies.

How does it work?

Centrelink and ATSIC's CDEP organisations direct deduct amounts from a participant's income support or wages payments to FIM sub-accounts, operated by each FIM Office. A person may have several such accounts for different purposes, including group accounts. Participants' bills are paid through the FIM Office, out of the person's or family group's relevant sub-account.

...continued

2.19 CAPE YORK INDIGENOUS COMMUNITIES MAKING A DIFFERENCE WITH FAMILY INCOME MANAGEMENT *continued*

Partnerships at work

For the success of this project, a number of people have come together to develop a practical working partnership with obvious dedication to producing real outcomes for Indigenous communities. FIM has an active working group oversighting project management and evaluation, comprised of community representatives; the Cape York Partnerships Office; Family and Community Services; Centrelink; Westpac and ATSIC. Westpac provides skilled secondees for one month every quarter to help FIM workers. So far they have helped with developing information products, budgeting tools and the accounts management system, administrative work and community education activities.

The results speak for themselves

There are now nearly 500 active participants, and more than 200 have already achieved their first savings goals. Goods purchased so far include many fridges, washing machines, freezers, TVs, CD players, furniture, clothing and a car. Others are stabilising their debt situations and covering essential bills before starting to save. The new whitegoods and the operation of nutrition and pharmacy accounts are contributing to health improvements. Participants report that being able to cover living costs and buy furniture and leisure goods is also reducing family conflict, increasing time families spend together and increasing motivation to work. The direct deductions system reduces cash on hand vulnerable to 'humbugging' (a practice derived from the strong cultural value of resource sharing), and indications are that less money is being spent on alcohol, drugs and gambling.

FIM is also encouraging local enterprise — due to demand from FIM participants now able to buy their products, the Aurukun CDEP furniture-making team has just put on 10 apprentices and is growing into a thriving business. Also in Aurukun, a group of young people are using FIM to manage money for their business enterprise (running video nights and selling chips and soft drinks) and to save profits for a larger enterprise.

Where to from here?

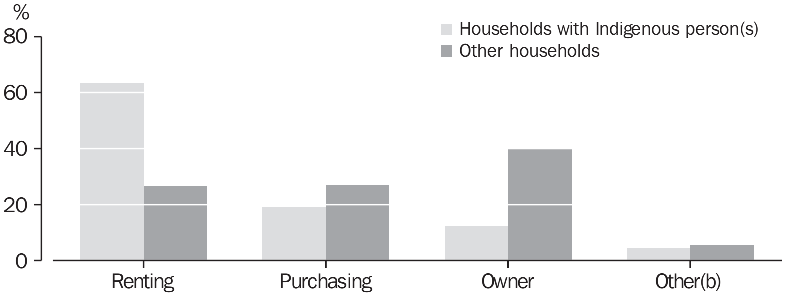
The project will continue to aim for stronger Indigenous families and communities by working together with Indigenous people, government, private enterprise, CDEPs and local organisations. An interim evaluation report is being prepared, and options for extending the project to other Cape York communities are being developed for further consideration.

Source: Indigenous Policy Unit, North Australia Office, Commonwealth Department of Family and Community Services.

Type of tenure

Census results show that the levels of home ownership and home purchasing for households with Indigenous person(s) (32%) were well below those for Other households (69%). At the 2001 Census, households with Indigenous person(s) were much more likely to report renting their home (63%), than purchasing (19%) or owning their home outright (13%). Households with Indigenous person(s) were more than twice as likely as Other households to be living in rental accommodation (graph 2.21). This pattern of housing tenure is similar to that observed in the 1996 Census.

2.20 TENURE TYPE(a)—2001



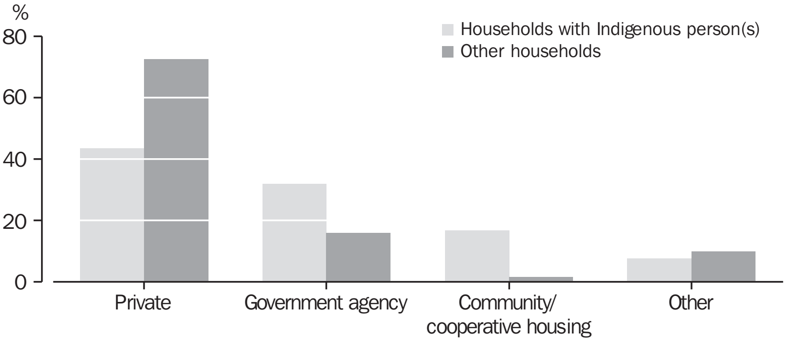
(a) Households in occupied private dwellings. See Glossary for definition of households with Indigenous person(s) and Other households.
(b) Includes those households where tenure was not known.

Source: ABS data available on request, 2001 Census of Population and Housing.

In 2001, 63% of households with Indigenous person(s) were renting, compared with 65% in 1996.

Among renters, fewer households with Indigenous person(s) were renting privately (43%) compared with Other households (73%). Government agencies and community/cooperative housing (Indigenous housing organisations) provided significant shares of the rental accommodation for households with Indigenous person(s) (32% and 17%, respectively). In Very Remote areas, 73% of renter households with Indigenous person(s) were renting from Indigenous Housing Organisations (IHOs) (graph 2.22).

2.21 LANDLORD TYPE AMONG RENTER HOUSEHOLDS(a) —2001



(a) See Glossary for definition of households with Indigenous person(s) and Other households.

Source: ABS data available on request, 2001 Census of Population and Housing.

Weekly rent

Median rents for Households with Indigenous person(s) declined with increasing geographic remoteness, from $135 per week in Major Cities to $42 per week in Very Remote areas, reflecting, in part, the provision of low-cost accommodation by IHOs in remote areas. Median rents for Other households followed a similar pattern, but tended to be higher than those for households with Indigenous person(s) (table 2.23).

2.22 MEDIAN WEEKLY RENT(a) — 2001

	Households with Indigenous person(s)	*Other households*
	$	*$*
Major Cities	135	165
Inner Regional	110	125
Outer Regional	100	105
Remote	80	80
Very Remote	42	49
Total	100	150

(a) See Glossary for definition of households with Indigenous person(s) and Other households.

Source: ABS 2003b.

SUMMARY

The 2001 Census data presented in this Chapter indicate that, compared with non-Indigenous Australians, Aboriginal and Torres Strait Islander peoples are disadvantaged with regard to a range of socioeconomic indicators. Indigenous Australians experienced lower incomes than the non-Indigenous population, higher rates of unemployment, poorer educational outcomes and lower rates of home ownership, all of which can impact upon a person's health and sense of wellbeing.

CHAPTER 3 HOUSING AND ENVIRONMENTAL HEALTH

INTRODUCTION

This Chapter focuses on the role the physical environment plays in the health of individuals and communities. For this purpose, the physical environment is defined as housing and health-related essential infrastructure, including the supply of electricity, safe drinking water and sewage removal. This group of topics are also collectively referred to as ‘health hardware’ (Commonwealth Department of Family and Community Services (FaCS) 1999, Territory Health Services (THS) 1999).

Not all Aboriginal and Torres Strait Islander persons, particularly those living in more remote areas, have access to the same basic level of housing and essential infrastructure, such as the supply of power and safe drinking water, and effective sewerage systems, that is generally taken for granted by the majority of the Australian population. A large body of international research supports the relationship between inadequate housing and essential infrastructure, and poor health outcomes, both historically, and within the Australian Indigenous context (Bailie & Runcie 2001; House of Representatives Standing Committee on Family and Community Affairs 2000; Commonwealth Grants Commission (CGC) 2001). The absence of functioning health hardware can result in a variety of infectious and parasitic diseases, including skin infections and infestations, eye and ear infections, respiratory infections, diarrhoeal diseases and rheumatic fever (FaCS 1999; Menzies School of Health Research 2000). There are also links between housing and essential infrastructure and other aspects of well-being, including mental health and so called ‘lifestyle diseases’, such as diabetes (Menzies School of Health Research 2000).

This Chapter describes the health hardware available to the Aboriginal and Torres Strait Islander population, in relation to tenure, accommodation adequacy (persons per dwelling), affordability, dwelling condition and essential infrastructure. Related information on access to housing services is provided in Chapter 4, and Chapter 11 outlines recent developments in the coordination of Indigenous housing and environmental health information. Data in this Chapter are drawn largely from the 2001 Census and the 2001 Community Housing and Infrastructure Needs Survey (CHINS). Box 3.1 provides a more detailed description of the CHINS, which collected information from all discrete Indigenous communities in Australia.

For the purpose of analysing Census information in this publication, households are separated into those containing at least one Indigenous person, and Other households. ‘Households with Indigenous person(s)’ include households in occupied private dwellings with at least one resident who has been identified as Indigenous, and who was enumerated at home on Census night. The other residents of the household may have been identified as Indigenous, non-Indigenous, or have Indigenous status unknown. Other households include households in occupied private dwellings where no resident was identified as Indigenous on Census night.

3.1 COMMUNITY HOUSING AND INFRASTRUCTURE NEEDS SURVEY (CHINS) — 2001

Background

The 2001 Community Housing and Infrastructure Needs Survey (CHINS) was the second CHINS to be conducted by the Australian Bureau of Statistics (ABS) on behalf of, and with funding from, the Aboriginal and Torres Strait Islander Commission (ATSIC). In common with the first CHINS conducted in 1999, the 2001 survey sought to collect data about all Aboriginal and Torres Strait Islander housing organisations and discrete Aboriginal and Torres Strait Islander communities in Australia. The CHINS is intended to assist in the evaluation of policies and programs designed to improve housing and infrastructure services for Aboriginal and Torres Strait Islander peoples living in both discrete communities and in other housing managed by Indigenous organisations.

The survey was conducted throughout Australia and collected details of the housing stock, management practices and financial arrangements of organisations that provided housing to Aboriginal and Torres Strait Islander peoples. Other information collected related to housing and infrastructure services such as water, electricity and sewerage systems, and the extent of community access to facilities such as education and health services.

Data quality issues

One of the principal information requirements of the 2001 CHINS was to provide information that could be used to assess changes since the 1999 CHINS in the housing situation in the Indigenous community housing sector as well as in the infrastructure in discrete Indigenous communities. Therefore, the 2001 CHINS content was kept as close as possible to the 1999 CHINS, with only minor changes which arose from the evaluation of the 1999 survey.

While comparisons of aggregate data between the two CHINS are considered to be satisfactory at a broad level of geography (including most ATSIC regions) to support the principal information requirements of the CHINS, the 2001 input validation processes revealed a degree of misunderstanding by respondents in the 1999 CHINS, or in the 2001 CHINS, or both, regarding the meaning of some items and response categories. Where identified, these misunderstandings were corrected in the 2001 data. Therefore, caution should be exercised in making comparisons for CHINS items at a fine level of geographic detail, or when only small numbers of discrete Indigenous communities or Indigenous Housing Organisations are involved.

Data quality issues are presented in more detail along with the summary results from the 2001 CHINS, in (ABS 2002d). Results of the 1999 CHINS are provided in (ABS 2000).

HOUSING

Homelessness

Aboriginal and Torres Strait Islander peoples generally do not have the same levels of access to affordable, secure housing as non-Indigenous Australians. The higher levels of mobility resulting from the need for many Indigenous persons to leave their home to access services, or to observe cultural obligations, coupled with the absence of adequate temporary accommodation contribute to homelessness for Indigenous Australians (FaCS 1998).

Homelessness *continued*

Homelessness for Aboriginal and Torres Strait Islander peoples needs to be viewed in the context of the broader socioeconomic and health status of Indigenous Australians. However, the concept of homelessness is to some extent subjective, and depends on the prevailing community standards (Chamberlain 1999), and to date there has been no agreement on a single definition of homelessness. Measuring the extent of homelessness among Aboriginal and Torres Strait Islander peoples depends on both the definition used and the quality of the data collected about homeless people.

Although further work is required to refine concepts of homelessness for use within an Indigenous context, the Supported Accommodation Assistance Program (SAAP) National Coordination and Development Committee (CAD) recently agreed on a working model based on prevailing Australian community standards that encompasses three levels of homelessness:

- 'sleeping rough', for those people without shelter (primary homelessness)
- 'stop gap accommodation', for those in crisis but temporarily sheltered (secondary homelessness)
- 'marginal accommodation', for those in insecure accommodation (tertiary homelessness) (AIHW 2001a).

One measure of homelessness can be obtained from ABS Census of Population and Housing data which records people as living in 'improvised dwellings', a category which includes sheds, tents, humpies, caravans located in roadside parking areas and people sleeping on park benches or in other 'rough' accommodation (ABS 2001d). It should be noted that Census data are likely to underestimate the number of people without adequate housing because people staying with friends or relatives, or in shelters are not counted as 'homeless'. On the night of the 2001 Census, there were 7,782 households in improvised dwellings, of which 19% were households with Indigenous person(s).

The Census also provides other information that can, to some extent, be used to measure homelessness, such as people staying in boarding houses and using SAAP services (secondary homelessness) and persons staying with other families (tertiary homelessness). Research is currently being undertaken by recipients of Australian Census Analytic Program awards to provide further analysis of homelessness, using the wider range of data available from the 2001 Census. Use of SAAP services by Indigenous clients is examined in further detail in Chapter 5.

Homelessness *continued*

The 2001 CHINS used slightly different dwelling definitions than these used in the Census (see Glossary), and identified a total of 1,882 'occupied temporary dwellings', including caravans, tin sheds without dividing walls, 'humpies', 'dongas' and other makeshift shelters, within discrete Indigenous communities. These temporary dwellings were occupied by 5% of the usual population of discrete Indigenous communities. Almost all (91%) of the 5,602 people living in temporary dwellings in 2001 CHINS were reported as being in need of permanent housing (ABS 2002d).

Accommodation adequancy

Results from the 2001 Census show that households with Aboriginal and Torres Strait Islander person(s) are larger, on average, than Other households. The disparity increases with remoteness, with the average size of households with Indigenous person(s) increasing from 3.2 persons per household in Major Cities, to 5.3 persons per household in Very Remote Australia. By comparison, the size of Other households remains relatively constant across the geographic categories (table 3.2).

3.2 AVERAGE HOUSEHOLD SIZE, BY REMOTENESS(a) — 2001

	Households with Indigenous person(s)		*Other households*	
	Dwellings	*Average persons per dwelling*	*Dwellings*	*Average persons per dwelling*
Major Cities	54 916	3.2	4 550 931	2.6
Inner Regional	33 347	3.3	1 409 792	2.5
Outer Regional	32 756	3.4	689 503	2.5
Remote	10 193	3.6	100 839	2.5
Very Remote	13 520	5.3	32 434	2.5
Total	**144 732**	**3.5**	**6 783 499**	**2.6**

(a) Based on usual residence. Excludes non-private dwellings and visitor households. See Glossary for definition of households with Indigenous person(s) and Other households.

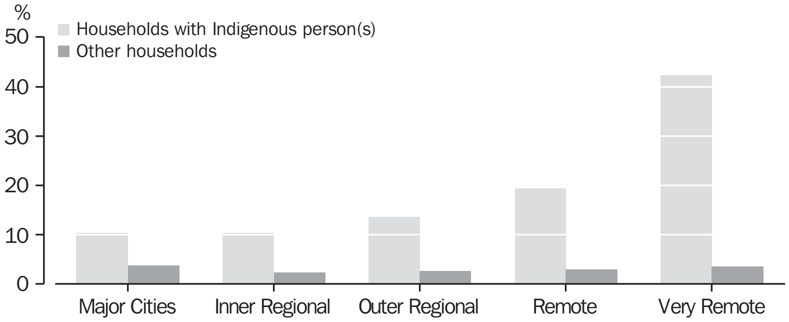
Source: ABS data available on request, 2001 Census of Population and Housing.

Inadequate accommodation remains a key health issue for some Aboriginal and Torres Strait Islander peoples. Crowded living conditions increase the risk of the spread of infectious diseases such as meningococcal disease, rheumatic fever, tuberculosis and respiratory infections (Waters 2001 in ABS & AIHW 2001).

Although there is no universally accepted definition of what constitutes adequate accommodation, data presented below use the Canadian National Occupancy Standard (see Glossary). This standard specifies who should reasonably be expected to share bedrooms, dependent on age and sex. Based on this definition, 15% of households with Indigenous person(s) were considered to be living in dwellings requiring at least one additional bedroom, compared to 4% of Other households.

The likelihood of needing additional bedrooms increased with remoteness for households with Indigenous person(s). In Major Cities, 11% of all households with Indigenous person(s) require at least one extra bedroom, compared with 42% of households with Indigenous person(s) in Very Remote Australia. The likelihood of needing additional bedrooms for Other households varied only slightly with the level of remoteness, fluctuating between 3% to 4% (graph 3.3).

3.3 HOUSEHOLDS REQUIRING AN EXTRA BEDROOM(a) — 2001



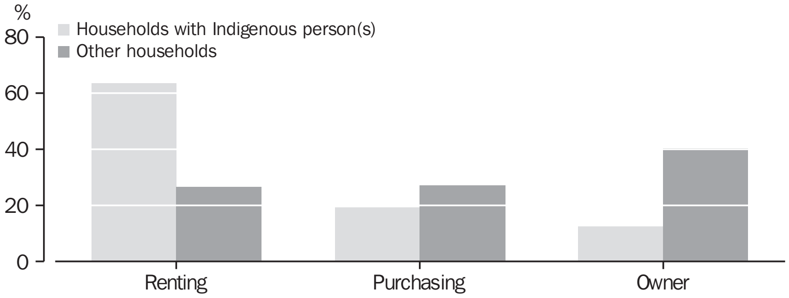
(a) In occupied private dwellings. See Glossary for definition of households with Indigenous person(s) and Other households.

Source: ABS data available on request, 2001 Census of Population and Housing.

Housing tenure

Home ownership provides the most secure housing tenure and is a common goal for many Australians. The 2001 Census results show that households with Indigenous person(s) were less likely than Other households to be in homes owned or being purchased by household members (graph 3.4).

3.4 HOUSEHOLDS, BY TENURE TYPE(a)(b) — 2001



(a) Households living in occupied private dwellings.
(b) Excludes those households where tenure was not known. See Glossary for definition of households with Indigenous person(s) and Other households.

Source: ABS data available on request, 2001 Census of Population and Housing.

Households with Indigenous person(s) were over twice as likely as Other households to be living in rental accommodation (63% compared with 27%). Among those renting their dwellings, 43% of households with Indigenous person(s) were renting privately, 32% were renting from a government agency and 17% were renting from community/cooperative housing agencies. The majority (73%) of Other households were rented privately.

The proportion of households with Indigenous person(s) that were renting increased with geographic remoteness, from 60% in Major Cities to 84% in Very Remote areas. The inverse was true for owner/purchaser households. The small proportion of owner/purchaser households in Very Remote areas (8%) reflects in part the types of tenure available on traditional Aboriginal and Torres Strait Islander lands.

Housing tenure *continued*

The 2001 CHINS reported a total of 16,960 permanent dwellings located in 1,216 discrete Indigenous communities, an increase of 5% since the 1999 survey. Those permanent dwellings which were managed by Indigenous Housing Organisations (IHOs) and rented to tenants accounted for 90% of all permanent dwellings located in discrete communities, with the remainder being government owned and managed, privately owned, or owned by other organisations (ABS 2002d).

Housing affordability

The cost of securing accommodation varies, in part, according to tenure type. The lowest housing costs are likely to be experienced by people owning their homes outright. In 2001, only 13% of of households with Indigenous person(s) owned their home outright, compared with 40% of Other households. The following analysis of housing affordability focuses on households that are either renting their home or making housing loan payments.

In 2001, for households with Indigenous person(s) that were renting, the median weekly rent being paid was $100, or two-thirds the median weekly rent being paid by Other households. In part, the lower rents paid, on average, by households with Indigenous person(s) reflects the greater proportion of such households in remote areas of Australia where rents are lower. The lower average rents also reflect the lower proportion of such households in the private rental market. For households with Indigenous person(s) the median monthly housing loan repayment was $767, compared with $867 for Other households. Again, the higher repayments for Other households reflects, in part, the higher proportion of these households in less remote areas where loan repayments are higher.

Housing affordability also takes into account income capacity to meet housing costs. Housing-related financial stress results when housing costs are high relative to household income. When a high proportion of income is needed to secure housing, the ability to purchase other essential goods or services is reduced. Analysis of housing affordability therefore generally focuses on lower income households, defined here as those people with equivalised household weekly incomes in the lowest 40% of all such household incomes in Australia (see Chapter 2 for a discussion of equivalised incomes). Housing-related stress (affordability problem) in this analysis is defined as housing costs in excess of 30% of gross household income.

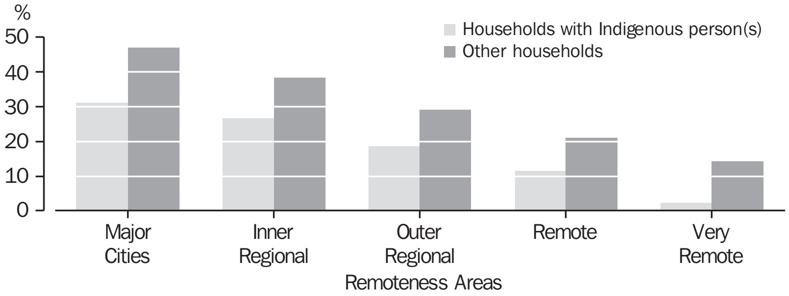
At the 2001 Census, among residents that were renting, 80% of households with Indigenous person(s) were lower income households, compared to 54% of Other households.

Housing affordability
continued

However, lower income households with Indigenous person(s) were less likely to be experiencing 'housing-related financial stress' (19%) than were lower income Other households (43%). This difference, in part, reflects the relatively greater proportion of Other households (64%) renting in Major Cities, where rent costs are higher, than were households with Indigenous person(s) (28%). Similarly, very few Other households (less than 1%) were renting in Very Remote areas where rents are much lower than in other areas, compared with 22% of households with Indigenous person(s). The difference will also reflect, in part, the higher average size of households with Indigenous person(s), where the gross incomes of these households available to pay rent are boosted by the greater numbers of people receiving incomes in these households.

For lower income households with Indigenous person(s) reporting housing costs to be greater than 30% of income, the proportion was higher in Major Cities (31%) than in Remote and Very Remote areas, reflecting in part the greater availability of low cost accommodation in remote areas through Indigenous housing organisations. For other households there was a similar pattern of declining housing affordability problems as remoteness increased, declining from 47% of such households in Major Cities reporting housing costs above 30% of income, to 14% in Very Remote areas (graph 3.5).

3.5 HOUSING AFFORDABILITY(a) FOR RENTERS, Lower income households(b)

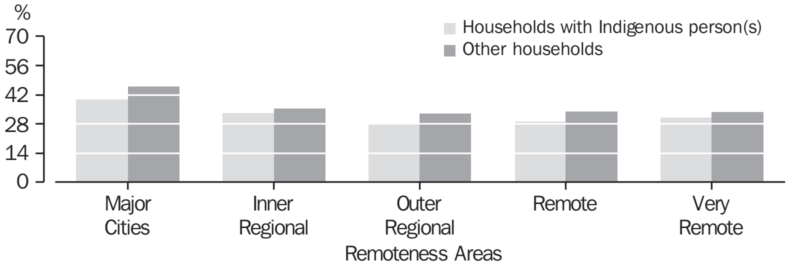


(a) Households in which residents were paying more than 30% of gross household income in rent payments.
(b) Households in the lowest or second income quintiles.

Source: ABS data available on request, 2001 Census of Population and Housing.

Among the residents of the 19% of households with Indigenous person(s) that were making housing loan repayments, 43% were in the bottom 40% of equivalised gross household incomes, compared with 29% of residents in Other housholds making housing loan repayments. Among these lower income households, 34% of those with Indigenous person(s) reported mortgage payments greater than 30% of their gross houshold incomes, compared with 41% for other households. The proportion of mortgagor households in such housing affordability problems declined with increasing geographic remoteness.

3.6 HOUSING AFFORDABILITY(a) FOR HOME PURCHASERS, Lower income households(b)



(a) Households in which residents were paying more than 30% of gross household income on loan repayments.
(b) Households in the lowest or second income quintiles.

Source: ABS data available on request, 2001 Census of Population and Housing.

While in both renter and mortgagor households the proportion of residents experiencing housing affordability problems was lower in households with Indigenous persons, average measures of housing affordability across the Indigenous and non-Indigenous populations will reflect the much higher proportion of full home ownership in the non-Indigenous population. When all full ownership, renter and mortgagor households are considered, 13% of residents in households with Indigenous person(s) are considered to be experiencing housing affordability problems, compared with 9% of residents in Other households.

Dwelling condition

While rents and mortgage repayments may be lower on average for households with Indigenous person(s), a key consideration is the standard of accommodation obtained, compared to housing payments made. Results from the 1999 Australian Housing Survey (AHS) (conducted in non-remote areas) show that Indigenous households (see Glossary for definition) were almost three times more likely than non-Indigenous households to report their homes to be in high need of repair (19% to 7% respectively) and a higher proportion of non-Indigenous households reported no need for repair (44% to 34% respectively) (ABS & AIHW 2001).

In the 2001 CHINS, 21,287 dwellings were identified as permanent dwellings, managed by Indigenous Housing Organisations (IHOs). The majority (70%) of these dwellings were located in Remote or Very Remote areas of Australia, of which 2,914 dwellings (19%) required major repair, and 1,461 (10%) required replacement (table 3.7). Housing condition has improved slightly since the 1999 survey, with the proportion of IHO managed permanent dwellings requiring major repair or replacement decreasing from 33% to 31% over that time (ABS 2002d).

3.7 CONDITION OF PERMANENT DWELLINGS(a), BY REMOTENESS — 2001

	Minor or no repair		*Major repairs*		*Replacement*		*Total(b)*	
	no.	*%*	*no.*	*%*	*no.*	*%*	*no.*	*%*
Major Cities	678	82.9	107	13.1	33	4.0	818	100.0
Inner Regional	1 417	77.5	370	20.2	41	2.2	1 828	100.0
Outer Regional	2 761	75.7	633	17.3	255	7.0	3 649	100.0
Remote	1 720	64.7	702	26.4	236	8.9	2 658	100.0
Very Remote	8 414	68.2	2 212	17.9	1 225	9.9	12 334	100.0
Australia	**14 990**	**70.4**	**4 024**	**18.9**	**1 790**	**8.4**	**21 287**	**100.0**

(a) All permanent dwellings managed by Indigenous housing organisations.

(b) Includes ‘dwelling condition’ not stated.

Source: ABS data available on request, 2001 Community Housing and Infrastructure Needs Survey.

INFRASTRUCTURE

This section presents information from the 2001 CHINS on the health hardware (infrastructure) in discrete Indigenous communities in Australia. About a quarter of the Aboriginal and Torres Strait Islander population live in such communities.

Community size

A total of 1,216 discrete Indigenous communities were enumerated in the 2001 CHINS. Of these, 1,030 (85%) were located in Very Remote regions of Australia, with only five communities being located in Major Cities (table 3.8).

3.8 COMMUNITY SIZE, BY REMOTENESS — 2001

	Communities with a population of						
	Less than 20	*20 to 49*	*50 to 99*	*100 to 199*	*200 or more*	*All communities*	*Reported usual population*
Major Cities	—	—	1	3	1	5	645
Inner Regional	—	1	7	5	6	19	2 776
Outer Regional	6	8	13	12	14	53	11 838
Remote	33	36	17	9	14	109	12 146
Very Remote	577	228	64	51	110	1 030	80 680
Australia	**616**	**273**	**102**	**80**	**145**	**1 216**	**108 085**

Source: ABS 2002d.

The size and duration of temporary increases in a community’s population can create stress on the infrastructure which is required to support visitors in addition to the usual population. Nearly three-quarters (73%) of discrete Indigenous communities with a usual population of 50 or more reported that, for a period of two weeks or more in the 12 months prior to the 2001 CHINS, and for a variety of reasons, the number of people staying in the community increased. The most common factors contributing to population increases were cultural reasons (71%), visitors over holiday periods (45%) and sporting/recreational events (33%). In 20% of the communities reporting a population increase sustained for two weeks or more, the number of visitors was at about, or more than, the size of the usual population of the community (ABS 2002d).

3.9 FIXING HOUSES FOR BETTER HEALTH (FHBH) PROJECTS

FaCS is funding Fixing Houses for Better Health 2 (FHBH2) projects to assess and fix 1500 houses in remote Indigenous communities over three years. FHBH2 projects improve the function of health hardware such as electrical fittings, taps, showers and drainage. Local Indigenous community members are trained in basic maintenance and cyclical maintenance systems are established. As part of the projects detailed data will be collected about the condition of Indigenous housing.

In July 2002, FHBH projects commenced in eleven remote Indigenous communities across Western Australia (5), the Northern Territory (3) and the Torres Strait region in Queensland (3). By May 2003, all projects had completed an initial survey of maintenance requirements and maintenance was undertaken (survey/fix 1), capital works were in progress in ten projects and survey/fix 2 had been completed in one project.

In the first survey/fix, a total of 1,826 plumbing and 968 electrical trade items were fixed out of 4,186 items checked and reported. Ninety six Indigenous people were employed on the projects and received training in the survey/fix process and basic maintenance.

Funds are used to employ Indigenous community members (around 80 per cent of survey/fix team are Indigenous people), electricians, plumbers and architects, to perform fix work and purchase health hardware and toolkits, and cover administration costs.

Results from survey/fix 1 show that:

- 66% of houses had power, water and waste systems connected
- 62% of houses had safe gas installation
- 11% had safe electrical systems
- 9% were structurally safe
- 51% had a working flush toilet
- 13% had all drains working
- 3% of houses enabled residents to store, prepare and cook food.

Ongoing cyclical maintenance will be put in place in communities through a project called Maintaining Houses for Better Health, which employs and trains local people to continually assess and repair critical health hardware. Community capacity building occurs through the transfer of skills in cyclical maintenance, contracting and overseeing trades work, ordering supplies and recording maintenance work on survey sheets.

Source: Indigenous Policy Unit, North Australia Office, Commonwealth Department of Family and Community Services.

Water supply

Access to a reliable supply of clean water is a necessity for healthy living practices at an individual and community level. An adequate supply should meet domestic needs for drinking, food preparation, bathing and personal hygiene. Inadequate access to clean water can lead to serious illness and long-term health consequences. The most common and widespread health risks associated with drinking water result from the presence of micro-organisms, which can cause disease such as gastroenteritis, diarrhoea, hepatitis, and typhoid fever (ABS & AIHW 2001). For an Indigenous community, an adequate water supply may allow for dust suppression and the cultivation of local produce, which in turn will indirectly affect health outcomes (Bailie et al. 2002).

In the 2001 CHINS, bore water was reported as the main source of drinking water for 784 discrete Indigenous communities, representing 62% of the total population of discrete Indigenous communities. Communities with a usual population of 50 or more were more likely to be connected to a town supply (34%) than were smaller communities (8%). Town water was the main source of drinking water for 186 (15%) Indigenous communities, or 17% of the total population of discrete Indigenous communities (table 3.10).

More than one in three communities (35%) with a usual population of 50 or more experienced water restrictions in the 12 months prior to the 2001 CHINS. Equipment breakdown was a contributing factor for the majority (61%) of communities with water restrictions. This was more commonly reported than climatic reasons, such as normal dry season shortages (18%) or drought (5%). While the overall proportion of communities reporting water restrictions in 2001 was the same as in the 1999 survey, the proportion of people affected by these restrictions has increased from 35% to 42% since 1999 (ABS 2002d).

3.10 MAIN SOURCE OF DRINKING WATER, ALL COMMUNITIES — 2001

	Communities with a population of						
	Less than 20	*20 to 49*	*50 to 99*	*100 to 199*	*200 or more*	*Total*	*Reported usual population*
Main source of drinking water							
Connected to town supply	35	40	41	36	34	186	18 134
Bore water	426	188	53	33	84	754	66 531
Rain water tank(s)	27	10	5	4	7	53	4 017
River or reservoir	54	19	2	6	18	99	17 580
Well or spring	33	14	1	1	2	51	1 535
Other organised water supply	21	1	—	—	—	22	198
All communities with an organised drinking water supply	596	272	102	80	145	1 195	107 995
No organised water supply	20	1	—	—	—	21	90
All communities	**616**	**273**	**102**	**80**	**145**	**1 216**	**108 085**

Source: ABS 2002d.

Water supply *continued*

Water testing and water treatment are essential to ensure that water is free from micro-organisms hazardous to human health. Information on water treatment and testing was collected from 213 of the 216 Indigenous communities with a usual population of 50 or more which were not connected to a town water supply for their main source of drinking water. A fifth (20%) of these communities, representing 8% of the population of such communities, had drinking water that was not tested in the 12 months prior to the 2001 CHINS, and over a quarter (26%) of communities (22% of the population) had drinking water supplies that failed testing at least once in the 12 months prior to CHINS (table 3.11).

3.11 DRINKING WATER TESTING(a), COMMUNITIES NOT CONNECTED TO A TOWN WATER SUPPLY(b)

	2001						
	Communities with a population of					*1999*	
	50 to 99	100 to 199	200 or more	Total	Reported usual population	Total	Reported usual population
Drinking water sent away for testing							
Drinking water failed testing	14	14	28	56	17 028	58	25 322
Drinking water did not fail testing	20	19	71	110	52 144	100	36 918
All communities with drinking water sent away for testing(c)	34	34	101	169	70 542	169	65 829
Drinking water not sent away for testing	25	9	9	43	6 245	64	11 435
All communities(d)	**59**	**43**	**111**	**213**	**78 087**	**233**	**77 264**

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

(b) Communities with a population of 50 or more.

(c) Includes 'Whether drinking water failed testing' not stated.

(d) Includes 'Whether drinking water sent away for testing' not stated.

Source: ABS 2002d.

Sewerage systems and drainage

Functioning sewerage systems provide a vital basis for the health of a community, decreasing the risk of various infectious and parasitic diseases, such as gastro-enteritis, hepatitis A, and strongyloidiasis (Bailie et al. 2002). In the 2001 CHINS, 7% of discrete Indigenous communities, representing 1% of the total reported population of all such communities, reported having no organised sewerage system. Septic tanks with a leach drain were the most common type of sewerage system in discrete Indigenous communities, being the main system used by almost half (49%) of all communities (representing 20% of the population in all communities). Community water-borne systems were used in communities representing 47% of the population of all communities, and were more common in larger communities (in 47% of communities with a usual population of 200 or more) (ABS 2002d).

Sewerage systems and drainage *continued*

Sewerage system overflows or leakages in the 12 months prior to the 2001 CHINS occurred in just under half (48%) of the 327 Indigenous communities with a usual population of 50 or more, a decrease from 59% of communities in 1999. The main causes of reported overflows or leakages were blocked drains (51%), equipment failure (33%) and design or installation problems (28%) (ABS 2002d).

Communities with a population of 50 or more were asked whether areas within the community had been affected by ponding in the previous 12 month period. Ponding refers to areas where large pools of stagnant water collect and remain for more than a week. A major health risk associated with ponding is the increased risk of vector-borne diseases (i.e. diseases spread by insects, such as mosquitoes). Restriction of access and contamination by sewage are other important issues associated with ponding.

In the year prior to the conduct of the 2001 CHINS, ponding occurred in 137 (42%) communities with a usual population of 50 or more. For 46% of those communities, ponding occurred more than five times over that year, and 39% of communities experiencing ponding reported the longest duration to be 12 weeks or more (ABS 2002d).

Flooding also creates health-related problems through the disruption of essential health services, destruction of infrastructure and personal property, and possible drowning (Bailie et al. 2002). Flooding is defined as instances where water courses overflow and inundate either part or all sections of the community. Flooding occurred in 31% of discrete Indigenous communities with a usual population of 50 or more, affecting 3% of the permanent dwellings in communities of this size. Slightly over a third (35%) of communities affected by flooding reported that the longest period of flooding had lasted less than a week. However, 24% of communities affected by flooding reported that the longest period of flooding had lasted for four weeks or more (ABS 2002d).

Electricity

Adequate electricity supply is required for functioning of health-related infrastructure at both a household and community level. Temporary alternative sources of power can prove costly (e.g. generator fuel costs) and potentially injurious to health (e.g. open fires) (Bailie et al. 2002). No organised electricity supply was reported for 7% of communities in the 2001 CHINS, representing 0.6% of the total reported population of those communities (ABS 2002d).

Community or domestic generators were the main source of electricity reported for just over half (53%) of Indigenous communities, or 61% of the reported usual population of all Indigenous communities. Communities with a usual population of 50 or more were more likely to be connected to the state grid or a transmitted supply (46%) than were smaller communities (12%). The state grid or a transmitted supply was the main source of electricity for 260 Indigenous communities (21%), representing 34% of the total reported population of all discrete Indigenous communities in the 2001 CHINS (ABS 2002d).

Electricity *continued*

Interruptions to the electricity supply in the 12 months prior to the 2001 CHINS occurred in 82% of the 327 discrete Indigenous communities with a usual population of 50 or more. While 37% of affected communities experienced less than five electricity interruptions, 20% reported experiencing 20 or more interruptions to the electricity supply in the year prior to the survey, a similar level to that reported in 1999. The main reasons reported for these interruptions were storms, equipment breakdown and planned outages for maintenance (ABS 2002d).

Rubbish collection and disposal

Adequate rubbish collection and disposal are important factors in preventing chemical and food poisoning, and infectious diseases spread by vermin and insects (Bailie et al. 2002). Organised rubbish collection was carried out in 94% of the 327 discrete Indigenous communities with a usual population of 50 or more. Rubbish was collected at least weekly in 97% of those communities with organised rubbish collection (309 communities). Some form of organised rubbish disposal was reported for all communities with a population of 50 or more, and 96% of discrete Indigenous communities overall. For the majority of all communities, however, rubbish disposal was in an unfenced community tip (53%) (ABS 2002d).

Environmental health workers

Environmental health workers play an important role in creating and maintaining health hardware in Indigenous communities. An environmental health worker is usually an Indigenous person from within the community whose roles include inspection of community infrastructure, reporting any environmental concerns to relevant government authorities, and taking an active role in the maintenance of the community infrastructure (e.g. rubbish collection, dog control).

In the 2001 CHINS, one-third (33%) of discrete Indigenous communities with a usual population of 50 or more had environmental health workers working or training in the community. Two-thirds (67%) of discrete Indigenous communities with a usual population of 50 or more in Western Australia had existing, or training environmental health workers, compared to 8% in South Australia (table 3.12). The most common activities undertaken by environmental health workers were rubbish disposal and dog and/or pest control (ABS 2002d).

3.12 ENVIRONMENTAL HEALTH WORKERS(a) — 2001

	Communities with environmental health workers				
	Working	*Training*	*Total*	*No environmental health worker(s)*	*All communities(b)*
New South Wales	5	—	5	44	49
Queensland	14	6	20	21	44
South Australia	2	—	2	24	26
Western Australia	48	6	54	27	81
Northern Territory	22	4	26	98	124
Australia(c)	**91**	**17**	**108**	**216**	**327**

(a) Communities with a population of 50 or more.

(b) Includes 'Whether environmental health worker(s) working or training in the community' not stated.

(c) Victoria and Tasmania included in Australia for confidentiality reasons.

Source: ABS 2002d.

Information from the 2001 CHINS regarding access to other health professionals is presented in Chapter 4.

SUMMARY

3.13 SELECTED HOUSING INDICATORS(a) — 2001

	Units	*Households with Indigenous person(s)*	*Other households*
Improvised dwellings(b)	%	1.0	0.1
Average household size (persons)	no.	3.6	2.6
Households requiring an extra bedroom(c)	%	15	3.7
Households renting(c)	%	63.5	26.6
Median weekly rent	$	100	150
Households purchasing(c)	%	19.4	27.0
Median monthly housing loan repayment	$	767	867
Households owning their dwelling(c)	%	12.6	40.4

(a) See Glossary for definition of households with Indigenous person(s) and Other households.

(b) Percentage of total dwellings.

(c) Percentage of total households.

Source: ABS data available on request, 2001 Census of Population and Housing.

A significant number of Aboriginal and Torres Strait Islander persons, particularly those in remote areas, are faced with a range of disadvantages in relation to housing. They are more likely to live in improvised dwellings, in dwellings with a greater number of persons, or in dwellings requiring an extra bedroom(s), and less likely to own their own homes (table 3.13). In discrete Indigenous communities, issues such as access to safe and reliable drinking water, adequate sewerage systems and drainage, electricity and rubbish collection impact on the ability of Indigenous persons to become, and stay healthy.

CHAPTER 4 HEALTH SERVICES: PROVISION, ACCESS AND USE

INTRODUCTION

This Chapter focuses on the provision of health services, their level of accessibility, and the extent to which they are used. Health services include primary care services such as those provided by general practitioners, nurses and allied health professionals, as well as acute care provided in hospitals, and specialist services, such as those provided by obstetricians and eye specialists. These services may be provided in a range of settings including community health centres and clinics, doctors' rooms and hospitals.

Health expenditure patterns are used to examine health service provision by governments and utilisation of services by clients, while aspects of access to health services are examined in relation to the distances clients must travel to access services and facilities. A range of other factors that affect access are also addressed, including affordability and the composition of the health and community service workforce. A section on the use of health services provides information on the activity of Commonwealth funded Aboriginal primary health care services, and services provided by general practitioners and information about the use of hospital services. Detailed information about community services is presented in Chapter 5.

There are a number of difficulties in quantifying the provision of, access to and use of health services by Aboriginal and Torres Strait Islander peoples. The quality of administrative data sources is affected by the accuracy with which Indigenous people are identified in health service records (Chapter 11). Administrative data are collected by all providers of health services including Commonwealth, state, territory and local governments, community organisations and some private sector providers. The reasons for data collections are as diverse as the providers themselves. Generally there is a lack of comparability and consistency across collection methods and data items, which makes a comprehensive examination of service use difficult.

The accuracy of the Indigenous population estimates and projections, used in the calculation of rates, will also affect the accuracy of the rates presented here. Refer to Chapter 11 for information on the difficulties associated with estimating and projecting the Indigenous population.

PROVISION OF HEALTH SERVICES

Expenditure on health services

Examining expenditure on health services is one way of understanding the way health services are delivered and used. Expenditure reflects not only differing client needs and preferences, but differing levels of access and modes of delivery that have developed in response to various policies and strategies. The 2001 edition of this publication included information on expenditure on health services for Indigenous and non-Indigenous peoples for 1998–99. New estimates of health expenditure on Indigenous peoples are produced every three years and will not be available until 2004. The information presented here describes slightly different aspects of health expenditure to that reported in the 2001 edition.

In 1998–99, an estimated $1,245m was spent on health services for Aboriginal and Torres Strait Islander peoples, and translates into $3,065 for each Indigenous person, compared with $2,518 for each non-Indigenous person. This spending was financed by Commonwealth, state, territory and local government sources as well as by private funding sources such as patients or private health insurance (AIHW 2001b). The difference in health expenditure between Indigenous and non-Indigenous peoples is less than would have been expected, given the much poorer health status of Aboriginal and Torres Strait Islander peoples.

The pattern of health expenditure varied between Indigenous and non-Indigenous peoples. More money per person was spent on Indigenous peoples, compared with non-Indigenous peoples, in community and public health, patient transport, public hospital services (both admitted and non-admitted patient services), mental health institutions and government administration and research. The situation was reversed in the case of private hospitals, Medicare, the Pharmaceutical Benefits Scheme (PBS) and high level residential aged care where, on average, less was spent on Indigenous peoples.

Expenditures through government programs constitute the bulk of health expenditure for Aboriginal and Torres Strait Islander peoples (95%), whereas for non-Indigenous peoples these programs comprise 74% of health expenditure (table 4.1). Almost half of the total expenditures on Indigenous Australians are through public hospitals.

4.1 ESTIMATED HEALTH EXPENDITURES PER PERSON, BY PROGRAM — 1998–99

	Per person Indigenous *$*	*Per person non-Indigenous* *$*	*Ratio Indigenous/ non-Indigenous*
Expenditures through government programs			
Acute-care institutions			
Admitted patient services	1 125	558	2.0
Non-admitted patient services	307	139	2.2
Mental health institutions	64	25	2.5
Public hospitals	1 496	722	2.1
High-care residential aged care	99	209	0.5
Community and public health	874	170	5.1
Patient transport	106	31	3.4
Medicare(a) and other medical	179	468	0.4
PBS medicines	61	195	0.3
Administration and research	101	72	1.4
Total	*2 917*	*1 868*	*1.6*
Expenditures on private sector services			
Private hospitals	25	222	0.1
Dental and other professional	42	213	0.2
Non-PBS medicines and appliances	66	144	0.5
Medical (compensable, etc.)	11	37	0.3
Administration	5	34	0.1
Total	*148*	*650*	*0.2*
Total	**3 065**	**2 518**	**1.22**

(a) Includes Medicare optometrical and dental as well as medical services.

Source: AIHW 2001b.

The Northern Territory was estimated to have the highest per capita government expenditure on health services for Indigenous peoples ($3,208), followed by Western Australia ($2,772), the Australian Capital Territory ($2,431) and South Australia ($2,350) (table 4.2). The jurisdictions with the highest per capita expenditure tended to be those with a higher proportion of Indigenous people living in remote areas, and this may explain some of the difference.

4.2 ESTIMATED STATE AND TERRITORY GOVERNMENT EXPENDITURES ON HEALTH SERVICES(a) — 1998–99

	Indigenous *$*	*Non-Indigenous* *$*	*Ratio(b)*
New South Wales	1 829	1 011	1.8
Victoria	1 444	828	1.7
Queensland	2 014	861	2.3
South Australia	2 350	935	2.5
Western Australia	2 772	929	3.0
Tasmania	1 638	861	1.9
Northern Territory	3 208	1 139	2.8
Australian Capital Territory	2 431	950	2.6
Australia(c)	**2 205**	**920**	**2.4**

(a) Estimated recurrent expenditure per person through state and territory authorities.

(b) Ratio is equal to Indigenous expenditure per person divided by non-Indigenous expenditure per person.

(c) Total of state and territory government expenditures across Australia.

Source: AIHW 2001b.

ACCESS TO HEALTH SERVICES

The accessibility of health services for Aboriginal and Torres Strait Islander peoples is affected by a number of factors. These include affordability; distance to and availability of health professionals, services and facilities; the availability of transport to access services; the degree of proficiency in English of patients and the cultural appropriateness of service delivery.

Although much of the focus of the following information relates to the limited access to health services of Aboriginal and Torres Strait Islander peoples who live in rural and remote areas, Indigenous peoples who live in metropolitan areas also suffer from poor access to culturally appropriate services.

Availability of health professionals, services and facilities

The supply of medical professionals per head of population (both Indigenous and non-Indigenous) tends to decrease with increasing geographic remoteness. In 1999, there were about 2–3 times as many medical practitioners, nurses and pharmacists per person in capital cities as in the most remote areas, and about seven times as many medical specialists per person in capital cities than in remote areas (table 4.3). This limits access to health services for people in rural and remote areas. A higher proportion of Indigenous peoples than of the total Australian population, live in rural and remote areas.

4.3 HEALTH PROFESSIONALS PER 100,000 PERSONS — 1999(a)

	Capital cities	*Other metropolitan areas*	*Large rural centres*	*Small rural centres*	*Other rural areas*	*Remote centres*	*Other remote areas*	*Australia*
Medical practitioners								
Primary care practitioners	121	105	105	95	79	(b)75	—	110
Medical specialists	113	83	115	48	8	(b)15	—	90
Total medical practitioners	*317*	*248*	*275*	*163*	*93*	*(b)115*	—	*264*
Nurses	1 160	1 233	1 789	1 328	910	(b)452	—	1 179
Pharmacists								
Community pharmacists	67	61	68	60	50	32	26	62
Total pharmacists	*87*	*71*	*81*	*68*	*53*	*38*	*31*	*79*

(a) Classifications are based on the Rural, Remote and Metropolitan Areas Classification (Department of Primary Industries and Energy and Department of Human Services and Health 1994).

(b) Data refer to both remote centres and other remote areas combined.

Source: AIHW 2003f, AIHW 2003g, AIHW 2003h.

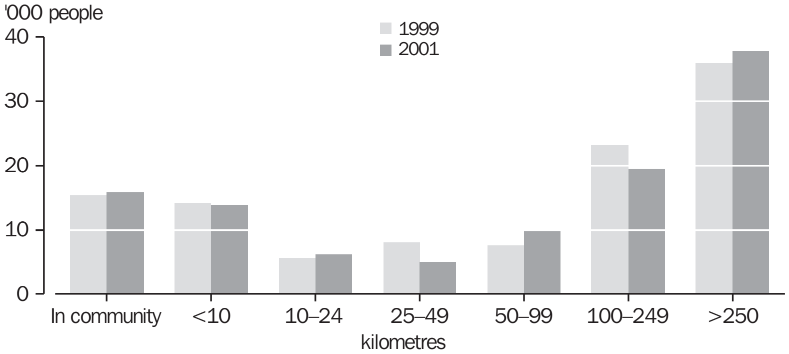
Distance to health services in discrete Aboriginal and Torres Strait Islander communities

Detailed information about the distance to, and the availability of, health services for people living in discrete Indigenous communities is collected in the Community Housing and Infrastructure Needs Survey (CHINS). The 2001 CHINS collected data concerning a total of 1,216 discrete communities with a combined population of approximately 109,000 (ABS 2002d). Approximately 85% of these people lived in Very Remote regions of Australia (see Glossary). Drawing from the CHINS data collection, the following section illustrates the number of people in discrete communities and the distances these communities are located from specified health facilities and services.

Distance to health services in discrete Aboriginal and Torres Strait Islander communities *continued*

In 2001, over two-thirds (841 communities or 69%) of all discrete Indigenous communities were located 100 kilometres or more from the nearest hospital, representing 53% (57,222) of the reported population living in discrete Indigenous communities. Approximately half (51%) of these communities that were located 100 kilometres or more from the nearest hospital reported having access to a medical emergency air service. These communities accounted for 50,278 people, which is 88% of surveyed people living in communities located 100 kilometres or more from the nearest hospital (graph 4.5).

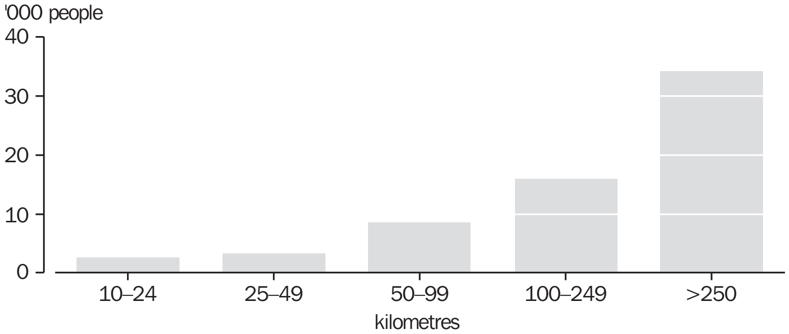
4.4 DISTANCE TO NEAREST HOSPITAL(a) — 1999 AND 2001



(a) Persons living in discrete Indigenous communities. Excludes communities that did not state distance.

Source: ABS 2002d.

4.5 ACCESS TO MEDICAL EMERGENCY AIR SERVICE(a)(b) — 2001



(a) Persons living in discrete Indigenous communities. Excludes communities that did not state distance.
(b) Excludes commmunities located less than 10 kilometres from the nearest hospital.

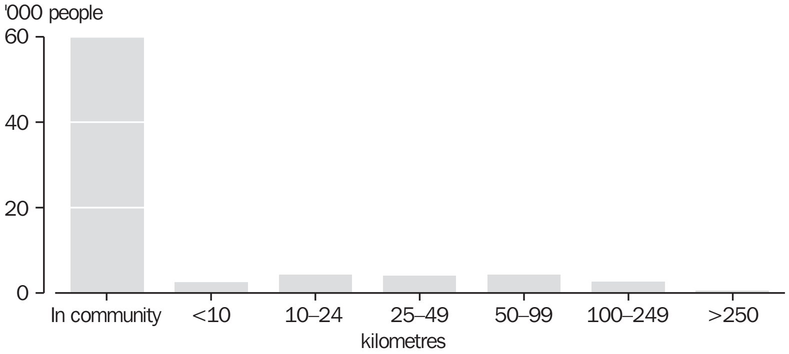
Source: ABS 2002d.

The following graphs show the distance to community health centres (graph 4.6), first aid clinics (graph 4.7) and chemists or dispensaries (graph 4.8) for communities that were located 10 kilometres or more from the nearest hospital. This represented 1,087 of the communities surveyed, with a total population of 78,382.

Distance to health services in discrete Aboriginal and Torres Strait Islander communities *continued*

Community health centres were more likely to be located near or within Indigenous communities than were hospitals. There were 62,518 people (281 communities) who either had a health centre within their community, or were located within 10 kilometres of a community health centre. Of the 15,864 people (806 communities) that were located 10 kilometres or more from either a hospital or a community health centre, 3,255 people (174 communities) were located 100 kilometres or more away from either a hospital or a community health centre (graph 4.6).

4.6 DISTANCE TO NEAREST COMMUNITY HEALTH CENTRE(a) — 2001

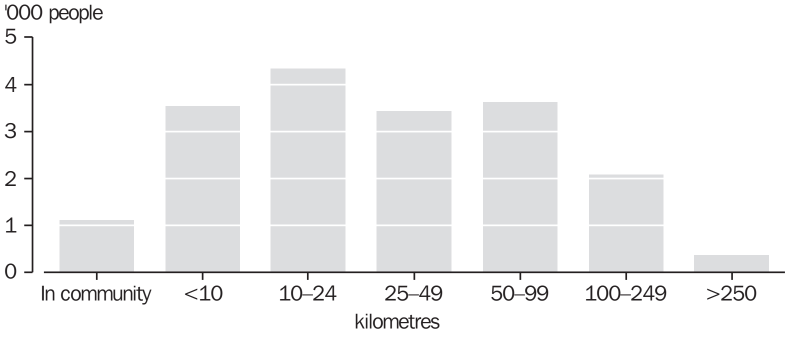


(a) Persons living in discrete Indigenous communities. Excludes 'not stated' and communities that have a hospital located in or within 10 kilometres of the community.

Source: ABS 2002d.

For the 132 communities (4,662 people) that were 10 kilometres or more from a hospital and did not have a community health centre, first aid clinics were located in, or less than 10 kilometres away from, the community. Of the 772 communities (13,818 people) that were more than 10 kilometres away from a first aid clinic, 151 communities (2,453 people) were located 100 kilometres or more from the nearest first aid clinic (graph 4.7).

4.7 DISTANCE TO NEAREST FIRST AID CLINIC(a) — 2001



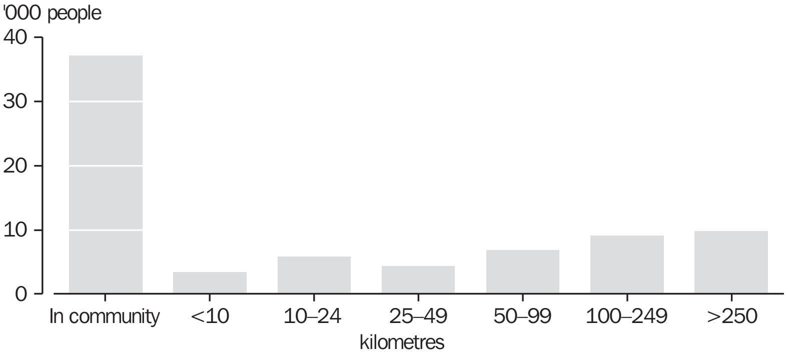
(a) Persons living in discrete Indigenous communities. Excludes 'not stated' and communities with a community health centre located within them, or that have a hospital located in or within 10 kilometres.

Source: ABS 2002d.

Distance to health services in discrete Aboriginal and Torres Strait Islander communities *continued*

Furthermore, a total of 19,190 people in 390 communities were located 100 kilometres or more from the nearest chemist or dispensary (graph 4.8), although it should be noted that some health centres also act as dispensaries.

4.8 DISTANCE TO NEAREST CHEMIST OR DISPENSARY(a) — 2001



(a) Persons living in discrete Indigenous communities. Excludes 'not stated' and communities that have a hospital located in or within 10 kilometres of the community.
Source: ABS 2002d.

Health professionals and health promotion programs in remote communities

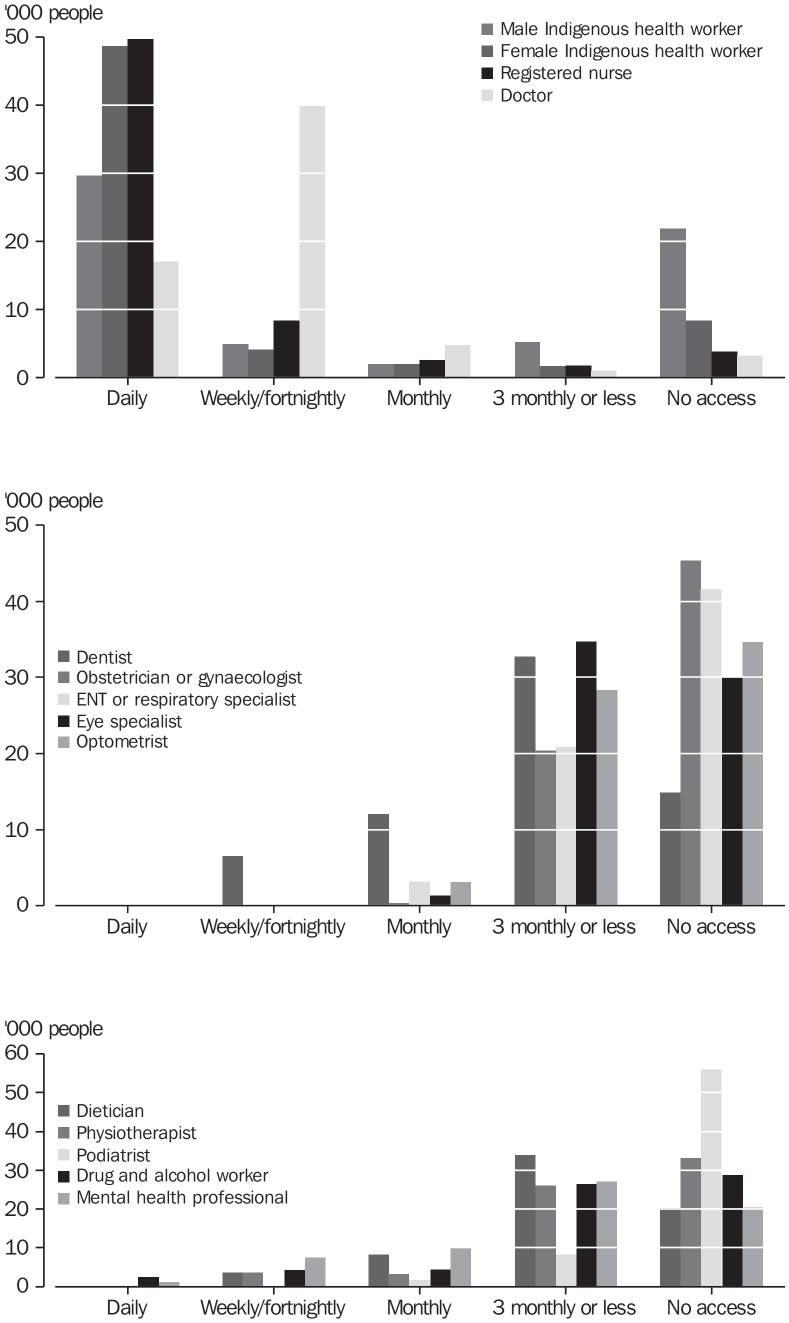
While distance to various health services provides one measure of access, lack of transport can often mean that comparatively short distances are an impediment to service usage. For this reason, the frequency with which various health workers worked in the community was examined for 242 communities with a reported population of 50 or more which were located 10 kilometres or more from the nearest hospital (ABS 2002d). These communities had a total population of 66,197. The following graphs refer to these communities. If a health professional regularly visits or works in a community this is referred to as 'access to'. 'No access' means the communities in question did not receive any visits from relevant health professionals, and that there were none working in the community.

Graph 4.9 shows how frequently people living in the 242 communities surveyed by CHINS, that had 50 or more people and were 10 kilometres or more from the nearest hospital, had the services of a variety of health professionals.

Very few communities (26 with a total population of 16,997) had daily access to a doctor, although in 140 communities (total population 40,046) a doctor was available either weekly or fortnightly. Compared to the 1999 CHINS, doctors were practising on a more frequent basis in remote communities.

In 125 communities (total population 48,679) there was daily access to a female Indigenous health worker, however, there was no access to a male Indigenous health worker in 117 communities (total population 21,887). Access to a health professional of the same sex has been found to be an important factor in ensuring that health services provided are culturally appropriate (Ivers et al. 1997).

4.9 ACCESS TO HEALTH PROFESSIONALS(a) — 2001



(a) Persons living in discrete Indigenous communities. Communities with a population of 50 or more. Excludes 'not stated'.

Note: Some data values = 0.

Source: ABS data available on request, 2001 CHINS.

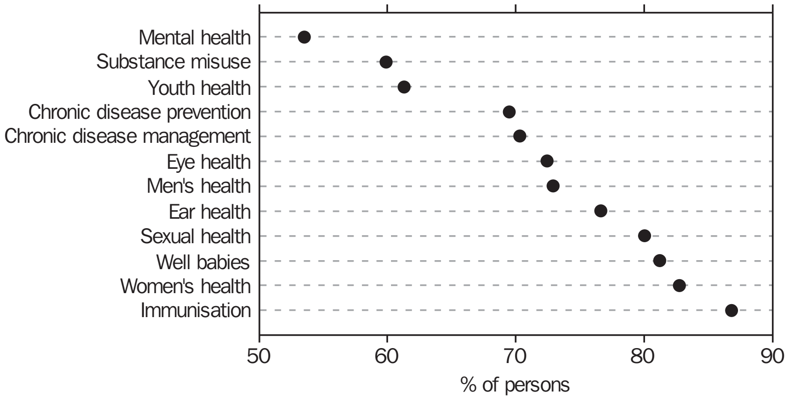
Health professionals and health promotion programs in remote communities *continued*

There were 193 (80%) communities (total population 45,331) with no access to an obstetrician–gynaecologist, 180 (74%) communities (total population 41,610) with no access to an ENT specialist, 145 (60%) communities (total population 34,641) with no access to an optometrist and 139 (57%) communities (total population 29,999) with no access to an eye specialist. The number of communities with no access to a dentist (99, total population 14,846) decreased from 1999 (105, total population 13,619) to 2001, while the number of communities with dentists working in the community weekly or fortnightly increased from 1999 to 2001.

A number of communities had no access to podiatrists (205 communities, 85%), physiotherapists (146 communities, 60%), drug and alcohol workers (129 communities, 53%), dieticians (118 communities, 49%) and mental health professionals (113 communities, 47%).

Graph 4.10 shows the percentage of people from communities with a population of 50 or more, that were located 10 kilometres or more from the nearest hospital, who had access to health promotion programs in operation. The most commonly conducted programs were immunisation, women's health and 'well babies' programs.

4.10 ACCESS TO HEALTH PROMOTION PROGRAMS(a) — 2001



(a) Persons living in discrete Indigenous communities. Communities with a population of 50 or more located 10 kilometres or more from the nearest hospital. Excludes 'not stated'.

Source: ABS data available on request, 2001 CHINS.

Other factors affecting access

As discussed above, a range of physical, economic, cultural and personal factors can affect one's access to services. In this section, information is presented about some of these factors, including availability of transport, affordability, possession of private health insurance, proficiency in English, the involvement of Indigenous people in the provision of services, and community control of services.

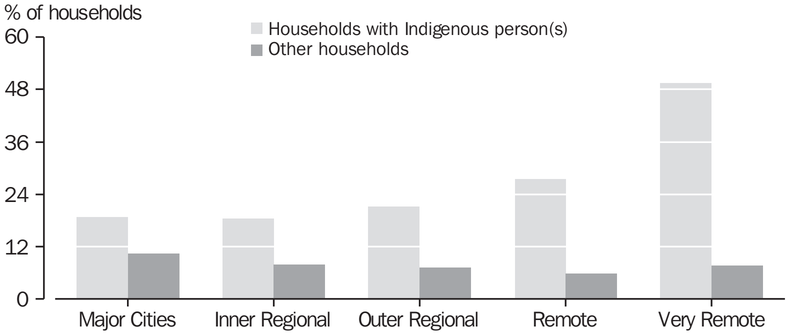
Transportation

The availability of roadworthy vehicles and the condition and proximity of roads and airstrips are some of the physical factors that can affect a person's access to health and other services. Data are available from the 2001 Census on the number of vehicles per household. As was discussed in Chapter 2, households with Indigenous person(s) are larger on average than Other households, and this may result in greater stress on the vehicles in households with Indigenous person(s).

Transportation *continued*

As shown in graph 4.11, households with Indigenous person(s) were more likely than Other households to be without a vehicle in 2001. The proportion of households with Indigenous person(s) without a vehicle was 22.7%, compared with 9.6% of Other households. Households with Indigenous person(s) in the Remote and Very Remote regions were most likely to report having no vehicle. The opposite trend in vehicle access was shown for Other households, with highest access to a vehicle greatest among dwellings in the Very Remote areas.

4.11 HOUSEHOLDS WITHOUT VEHICLES, BY REMOTENESS(a)(b) — 2001



(a) Vehicles includes motor vehicles, motor bikes and scooters owned or used by household members, garaged or parked at or near private dwellings on Census night.
(b) See Glossary for definition of households with Indigenous person(s) and Other households.

Source: ABS data available on request, 2001 Census of Population and Housing.

Households with Indigenous person(s) in the Northern Territory and Western Australia were the most likely to report no vehicle. The largest difference between households with Indigenous person(s) and Other households in terms of vehicle access was also evident in these states (table 4.12).

4.12 DWELLINGS WITHOUT VEHICLES(a)(b) — 2001

	Households with Indigenous person(s)	*Other households*	*Total households*
	%	%	%
New South Wales	22.7	11.6	11.8
Victoria	16.0	8.8	8.9
Queensland	22.4	8.5	8.9
South Australia	20.8	9.7	9.9
Western Australia	23.9	7.1	7.5
Tasmania	11.7	9.8	9.8
Northern Territory	40.3	7.1	13.1
Australian Capital Territory	13.1	7.1	7.1
Australia	**22.7**	**9.6**	**9.8**

(a) Vehicles includes motor vehicles, motor bikes and scooters owned or used by household members, garaged or parked at or near private dwellings on Census night. Excludes 'not stated'.

(b) See Glossary for definition of households with Indigenous person(s) and Other households.

Source: ABS data available on request, 2001 Census of Population and Housing.

Transportation *continued*

The data on vehicles per household suggest that non-Indigenous peoples have better access to personal transport than Indigenous peoples and would therefore be more readily able to reach a health facility or service. Public transportation may compensate for the lack of personal transport and clinics may provide a transport service for their patients, but these services are not available everywhere.

Affordability

Many privately provided health services involve direct out-of-pocket payments by patients. These impact more on people with limited economic means and, given the generally poorer economic position of Aboriginal and Torres Strait Islander peoples (Chapter 2), the effect is likely to be greater on Aboriginal and Torres Strait Islander peoples than other Australians. Examples of this are services provided by dentists, physiotherapists and other health professionals not covered by Medicare, and pharmaceuticals not covered by the PBS. These do not attract subsidies from governments and, therefore, patients meet out-of-pocket fees when they are accessed. Other services — for example, medical services covered by Medicare and pharmaceuticals covered by the PBS — although subsidised, can also involve out-of-pocket expenditures, which restrict the access of people in lower socioeconomic groups.

In the case of medical services, although they are subsidised under Medicare, if the services are not bulk-billed patients can face co-payments. In the quarter to March 2003, 67.9% of medical services were bulk-billed (DHA 2003). Bulk-billing rates are generally lower in rural and remote areas than in capital cities or other metropolitan centres (SCRCSSP 2003). Patients who are not bulk-billed are usually required to pay the full fee at the time of service and can then seek a refund from Medicare. This, however, means that they must first be able to pay for the service. This is further exacerbated by the fact that some practitioners charge fees above the Medicare Benefits Schedule fee, requiring larger gap payments, which are generally borne by the patients.

People who are prescribed drugs under the PBS are also required to make out-of-pocket co-payments. The amount that a patient needs to find is adjusted to some extent in accordance with the patient's ability to pay — different co-payments apply to concession card holders, pensioners and general patients. The PBS also has safety net provisions that protect individuals and families from large overall expenses for PBS medicines.

Private health insurance

Lack of health insurance is a barrier to accessing private hospitals as well as those health professionals who work solely or primarily within the private health system. In the 2001 National Health Survey (NHS), non-Indigenous adults aged 18 years or more living in non-remote areas were three times more likely to report having private health insurance (including hospital and/or ancillary cover) than Indigenous adults (51% compared with 17%). People aged 45–54 years reported the highest level of private health insurance (table 4.13). The large gap between the Indigenous and non-Indigenous populations is due, at least in part, to the relative economic disadvantage of Indigenous Australians, as discussed in Chapter 2.

4.13 PERSONS WITH PRIVATE HEALTH INSURANCE(a) — 2001

	Age group (years)							
	18–24		*25–44*		*45–54*		*55 and over*	
	'000	%	'000	%	'000	%	'000	%
				INDIGENOUS				
With private health insurance	*4	*10	14	16	8	31	*5	*20
Without private health insurance	34	89	76	84	18	69	19	80
Total(b)	**38**	**100**	**90**	**100**	**27**	**100**	**23**	**100**
				NON-INDIGENOUS				
With private health insurance	626	36	2 789	50	1 652	65	1 984	50
Without private health insurance	1 072	62	2 737	50	888	35	1 964	50
Total(b)	**1 725**	**100**	**5 529**	**100**	**2 541**	**100**	**3 950**	**100**

(a) Excludes persons living in remote areas.

(b) Includes private health insurance 'not known'.

Source: ABS data available on request, 2001 National Health Survey.

Language

Limited proficiency in English is another potential barrier to accessing services. In the 2001 Census, about 15% of Indigenous peoples reported that they spoke a language other than English at home. This figure includes 12.1% who said they spoke an Indigenous language at home (Chapter 2) and 2.5% who said they spoke another language or for whom the language was not adequately described.

People who do not speak English at home may not have the same proficiency in English as those who do speak it at home. In 2001, 26% of Indigenous peoples who spoke an Indigenous language at home were reported to speak English 'not well' or 'not at all'. This group represented 3% of all Indigenous peoples.

Not being able to speak, read and write English proficiently can mean that some Indigenous peoples find it difficult to approach services such as health and welfare. They may therefore miss out on important information and entitlements and may have difficulty reading and completing forms (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1993). More information about language, including where Indigenous languages are spoken, is presented in Chapter 2.

Other cultural barriers

Measurement of the accessibility of health services involves other factors besides the distance people must travel and the financial costs incurred (Ivers et al. 1997). The perception of cultural barriers may cause Indigenous peoples to travel substantial distances in order to access health services delivered in a more appropriate manner than those available locally (Ivers et al. 1997). The willingness of Indigenous peoples to access health services may be affected by such factors as community control of the service, the gender of health service staff, and the availability of Aboriginal and Torres Strait Islander staff, particularly where the degree of proficiency in spoken and written English is limited (Ivers et al. 1997). Aboriginal and Torres Strait Islander peoples who speak English as a second language and those who speak Aboriginal English — a separate dialect from standard Australian English — often experience difficulty in approaching services such as hospitals to obtain information and treatment (House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs 1993).

CURRENT AND FUTURE INDIGENOUS HEALTH AND COMMUNITY SERVICES WORKFORCE

This section presents information about the participation of Indigenous peoples in the health, welfare and community service workforce, and in higher education courses in health and welfare related fields. The availability of Aboriginal and Torres Strait Islander staff is an important factor in whether or not Indigenous peoples are able to effectively access services (Ivers et al. 1997).

In 2000–01, 67% of the full-time equivalent positions in Commonwealth-funded Aboriginal primary health care services were held by Aboriginal and Torres Strait Islander peoples. Most Aboriginal health workers (97%), field officers and drivers (94%), substance misuse workers (93%) and environmental health workers (96%) were Aboriginal and/or Torres Strait Islander peoples. Most doctors (98%), nurses (87%), allied health professionals (89%) and dentists (88%) were non-Indigenous (DHA & NACCHO unpublished).

The health workforce

In the 2001 Census, Indigenous adults (15 years and over) were less likely (1.5%) than non-Indigenous adults (3.1%) to be employed in health-related occupations (table 4.14). The coding of occupation was based on answers to Census questions on occupation title and the main tasks usually performed. This information was then used to classify occupation according to the second edition of the Australian Standard Classification of Occupations (ABS 1996, ABS 1997a).

At the time of the 2001 Census, 1,114 Indigenous persons were working as nursing professionals or enrolled nurses, and 800 were working as personal carers and nursing assistants. After nursing, the most common health-related profession for Indigenous people was Aboriginal and Torres Strait Islander health worker, with 853 Indigenous peoples indicating this profession. Aboriginal and Torres Strait Islander health workers may be employed as specialists in such areas as alcohol, mental health, diabetes, eye and ear health, and sexual health, or they may work as generalist members of primary care teams, or as hospital liaison officers.

4.14 EMPLOYMENT IN HEALTH-RELATED OCCUPATIONS(a) — 2001

	Indigenous persons			*Non-Indigenous persons(b)*		
		Proportion of population	*Proportion of persons in health-related occupations*		*Proportion of population*	*Proportion of persons in health-related occupations*
	no.	*%*	*%*	*no.*	*%*	*%*
Medical practitioners	90	—	2.4	48 119	0.3	10.7
Nursing professionals	912	0.4	24.1	170 694	1.2	38.1
Enrolled nurses	202	0.1	5.3	19 296	0.1	4.3
Personal care and nursing assistants	800	0.3	21.1	50 216	0.3	11.2
Aboriginal and Torres Strait Islander health workers	853	0.3	22.5	62	—	—
Miscellaneous health professionals(c)	159	0.1	4.2	66 074	0.5	14.7
Dental associate professionals	17	—	0.5	4 571	—	1.0
Dental assistants	125	0.1	3.3	12 971	0.1	2.9
Occupational and environmental health workers	141	0.1	3.7	6 682	0.1	1.5
Ambulance officers and paramedics	83	—	2.2	6 636	0.1	1.5
Health services managers	73	—	1.9	6 475	—	1.4
Other(d)	310	0.1	8.2	56 516	0.4	12.6
Total(e)	**3 787**	**1.5**	**100.0**	**448 479**	**3.1**	**100.0**

(a) Persons aged 15 years and over.

(b) Includes persons for whom Indigenous status was not stated.

(c) Includes dental practitioners, pharmacists, occupational therapists, optometrists, physiotherapists, speech pathologists, chiropractors and osteopaths, podiatrists, medical imaging professionals, dietitians, natural therapy professionals and other health professionals.

(d) Includes anatomist or physiologist, medical scientist, biomedical engineer, health information manager, clinical psychologist, medical technical officers, massage therapists, primary products inspectors, safety inspectors, admissions clerks, therapy aides, natural remedy consultants, and weight loss consultants.

(e) Includes persons whose occupation was coded as associate professional but was 'not further defined'.

Source: ABS data available on request, 2001 Census of Population and Housing.

Indigenous adults were less likely than other adults in every state and territory to be employed in health-related occupations in 2001 (table 4.15).

4.15 EMPLOYMENT IN HEALTH-RELATED OCCUPATIONS, BY JURISDICTION(a) — 2001

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.(b)*
INDIGENOUS									
Persons in health-related occupations (no.)	1 233	296	1 045	216	470	155	341	31	3 787
Proportion of the population (%)	1.7	1.9	1.6	1.5	1.3	1.6	1.1	1.4	1.5
NON-INDIGENOUS(c)									
Persons in health-related occupations (no.)	145 353	115 629	82 471	38 847	44 350	11 087	3 695	7 008	448 479
Proportion of the population (%)	2.9	3.1	3.1	3.3	3.2	3.1	3.5	2.9	3.1

(a) Persons aged 15 years and over. Health occupations include those listed in table 4.14. Excludes those whose occupation was not stated.

(b) Includes Other Territories.

(c) Includes persons for whom Indigenous status was not stated.

Source: ABS data available on request, 2001 Census of Population and Housing.

The welfare and community services workforce

Indigenous persons in the 2001 Census were more likely to report being employed in selected welfare and community service-related occupations (table 4.16) than in health-related occupations (table 4.14). About 2.7% of those employed in community and welfare service-related occupations were Indigenous, and employed Indigenous adults were more likely than non-Indigenous adults to be employed in community and welfare-related occupations (2.7% compared with 1.6%).

4.16 EMPLOYMENT IN WELFARE AND COMMUNITY SERVICE-RELATED OCCUPATIONS(a) — 2001

	Indigenous persons			*Non-Indigenous persons(b)*		
		Proportion of population	*Proportion of persons in welfare and community service-related occupations*		*Proportion of population*	*Proportion of persons in welfare and community service-related occupations*
	no.	*%*	*%*	*no.*	*%*	*%*
Child care coordinators	70	—	1.1	6 370	—	2.7
Pre-primary school teachers	131	0.1	2.0	14 036	0.1	5.9
Special education teachers	158	0.1	2.4	11 595	0.1	4.9
Children's care workers	1 428	0.6	21.7	66 880	0.5	28.1
Education aides(c)	204	0.1	3.1	14 871	0.1	6.3
Other carers and aides(d)	1 417	0.6	21.5	58 228	0.4	24.5
Social workers	166	0.1	2.5	8 959	0.1	3.8
Welfare and community workers	1 473	0.6	22.4	24 950	0.2	10.5
Counsellors	131	0.1	2.0	3 809	—	1.6
Welfare associate professionals(e)	851	0.3	12.9	17 386	0.1	7.3
Other(f)	526	0.2	8.0	9 608	0.1	4.0
Total(g)	**6 592**	**2.7**	**100.0**	**237 674**	**1.6**	**100.0**

(a) Persons aged 15 years and over.

(b) Includes persons for whom Indigenous status was not stated.

(c) Includes pre-school aides and integration aides.

(d) Includes hostel parents, child or youth residential care assistants, refuge workers, aged or disabled person carers and carers and aides not further defined.

(e) Includes parole or probation officers, youth workers, residential care officers, disabilities services officers and family support workers.

(f) Includes welfare centre managers and social security inspectors.

(g) Includes persons whose occupation was coded as 'social welfare professional, not further defined'.

Source: ABS data available on request, 2001 Census of Population and Housing.

The proportion of adults employed in welfare and community services-related occupations was higher for Indigenous adults than for non-Indigenous adults in every state and territory (table 4.17).

4.17 EMPLOYMENT IN WELFARE AND COMMUNITY SERVICE-RELATED OCCUPATIONS, BY JURISDICTION(a) — 2001

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.(b)*
INDIGENOUS									
Persons in welfare-related occupations (no.)	1 830	503	1 773	490	942	205	774	69	6 592
Proportion of the population (%)	2.5	3.3	2.6	3.4	2.7	2.1	2.4	3.2	2.7
NON-INDIGENOUS(c)									
Persons in welfare-related occupations (no.)	70 429	64 374	45 532	20 867	22 282	6 697	2 381	5 097	237 674
Proportion of the population (%)	1.4	1.7	1.7	1.8	1.6	1.9	2.2	2.1	1.6

(a) Persons aged 15 years and over. Welfare and community service occupations include those listed in table 4.16. Excludes those whose occupation was not stated.

(b) Includes Other Territories.

(c) Includes persons for whom Indigenous status was not stated.

Source: ABS data available on request, 2001 Census of Population and Housing.

Undergraduate studies in health, welfare and community service-related courses

Table 4.18 presents information about tertiary students who completed or commenced a course in a health or welfare field in the years 2000 and 2001 respectively. Indigenous students made up a larger proportion of all undergraduate students enrolled in welfare-related courses (2.6%) than those enrolled in health-related courses (1.4%). In the health-related field, most Indigenous enrolments were in health support activities and public health (e.g. public health and Indigenous health) (36%) and nursing (29%). Most enrolments of Indigenous students in welfare-related courses were in the field of early childhood education (33%), welfare studies (30%) and social work (16%). Overall in 2000, 165 Indigenous students completed health-related undergraduate courses, and 72 completed welfare-related courses, representing 1.3% and 1.2% respectively of all students completing undergraduate courses in these fields. In 2000, eight Indigenous students completed a degree in medicine, and 99 were enrolled in a medical undergraduate course in 2001.

The numbers of Indigenous students commencing and completing health and welfare-related courses in 2000 increased over 1999 completions (Appendix 3). The number of students commencing health and welfare related courses was also higher in 2001 than 2000. It is difficult to determine if these are real increases or if they are due to a change in classification from ‘field of study’ to ‘field of education’.

4.18 INDIGENOUS UNDERGRADUATE STUDENTS IN HEALTH AND WELFARE-RELATED COURSES(a) — 2000–01

	2000 completions		*2001 commencements*	
		Indigenous as a proportion of total		*Indigenous as a proportion of total*
	no.	*%*	*no.*	*%*
	HEALTH			
Medical studies(b)				
Medical science	1	0.2	5	0.3
Medicine	7	0.6	27	1.3
Total medical science, medicine	*8*	*0.5*	*32*	*0.9*
Dental studies(c)	2	0.8	1	0.4
Health support activities and public health(d)	94	12.3	211	16.5
Health sciences and technologies(e)				
Nursing	41	0.7	101	1.3
Other	8	0.4	2	0.1
Total	*49*	*2.6*	*103*	*1.0*
Allied health(f)	11	0.6	8	0.3
Other(g)	1	0.2	64	1.8
Total health	**165**	**1.3**	**419**	**2.0**
	WELFARE			
Counselling(h)	1	0.9	5	2.9
Social work	18	1.5	40	2.0
Psychology	11	0.6	23	0.6
Welfare studies(i)	7	2.3	76	6.4
Early childhood education(j)	25	1.8	121	4.6
Special education(k)	2	0.7	3	1.4
Other(l)	8	1.1	33	1.9
Total welfare	**72**	**1.2**	**301**	**2.6**

(a) For Indigenous students, 2000 completions based on 'field of study'; 2001 commencements based on 'field of education'.

(b) Includes medical science and medicine in 2000. Includes medical science, medical studies, general medicine, surgery, psychiatry, obstetrics and gynaecology, paediatrics, anaesthesiology, pathology, radiology, internal medicine, general practice, medical studies not elsewhere classified, complementary therapies, naturopathy, acupuncture, traditional Chinese medicine and complementary therapies not elsewhere classified, in 2001.

(c) Includes dentistry and dental therapy in 2000. Includes dentistry, dental assisting, dental technology and dental studies not elsewhere classified, in 2001.

(d) Includes health support activities (general), health administration, health surveying and environmental health, and health support activities (other), in 2000. Includes public health, occupational health and safety, environmental health, Indigenous health, health promotion, community health, epidemiology and public health not elsewhere classified, in 2001.

(e) Includes health sciences and technologies (general), nursing (basic), nursing (post-basic), medical radiography, medical technology, nutrition and dietetics, optometry, pharmacy, and health sciences and technologies (other), in 2000. Includes nursing, pharmacy, optical science, radiography and nutrition and dietetics, in 2001.

(f) Includes rehabilitation therapies, physiotherapy, occupational therapy, chiropractic and osteopathy, speech pathology, audiology, massage therapy, podiatry rehabilitation therapies not elsewhere classified.

(g) Includes nurse and health educators education, health-general and veterinary science, in 2000. Includes health, veterinary studies, veterinary science, veterinary assisting, other health, human movement, paramedical studies, first aid and health not elsewhere classified, in 2001.

(h) Includes educational counselling, health counselling and other counselling.

(i) Includes welfare studies and human welfare studies not elsewhere classified.

(j) Includes early childhood education and post-initial early childhood education.

(k) Includes initial special teacher education and post-initial special teacher education.

(l) Includes children's services, youth work, care for the aged, care for the disabled, residential client care and behavioural science.

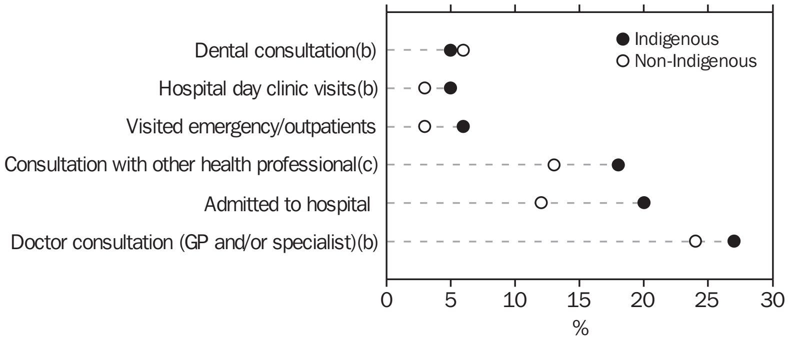
Source: Department of Education, Science and Training, unpublished data, Higher Education Student Statistics Collection.

USE OF HEALTH SERVICES

Self-reported information on the use of health services is available from the 2001 NHS, including information for Indigenous Australians from the NHS Indigenous component (NHS(I)) (ABS 2002f, ABS 2002e). Respondents were asked about health-related actions they had taken in the previous two weeks (apart from hospital admissions which related to the previous 12 months). Although there are some limitations with self-reported data (e.g. people may have reported actions that occurred outside the two-week time frame), the reporting of actions is generally straightforward, as no specialised knowledge (such as a diagnosis) is required. It should be noted that both the NHS and NHS(I) are sample surveys and are therefore subject to sampling error. In addition, as the NHS was conducted over a 10 month period while the NHS(I) was conducted over a 6 month period, seasonal effects may be exaggerated for the NHS(I) sample. Therefore, reported differences between the two populations should be interpreted with caution.

After adjusting for age differences, in 2001 Indigenous Australians were more likely to have taken at least one health-related action (53%) than non-Indigenous Australians (47%). For both Indigenous and non-Indigenous peoples, the most commonly reported recent health action was consultation with a doctor. Indigenous peoples were more likely to consult with a health professional other than a doctor or dentist, to attend hospital, either as admitted patients or outpatients, or to seek emergency or day clinic services, than non-Indigenous peoples (graph 4.19). However, because the sample error associated with the estimate for consultations with doctors and dentists, it can not be stated with confidence that there is any difference between the Indigenous and non-Indigenous population in their likelihood to have consulted these professionals.

4.19 HEALTH RELATED ACTIONS BY INDIGENOUS STATUS(a) — 2001



(a) Hospital admissions relate to the 12 months prior to interview. All other health-related actions relate to the two weeks prior to interview.
(b) Difference between Indigenous and non-Indigenous data is not statistically significant.
(c) Data collected for non-remote areas only.
(d) Includes Aboriginal health worker, nurse, chemist, social worker/welfare officer, accredited counsellor, actupuncturist, alcohol and drug worker, audiologist, chiropodist/podiatrist, dietician/nutritionist, herbalist, hypnotherapist, naturopath, occupational therapist, osteopath, psychologist and speech therapist/pathologist.

Source: ABS 2002e.

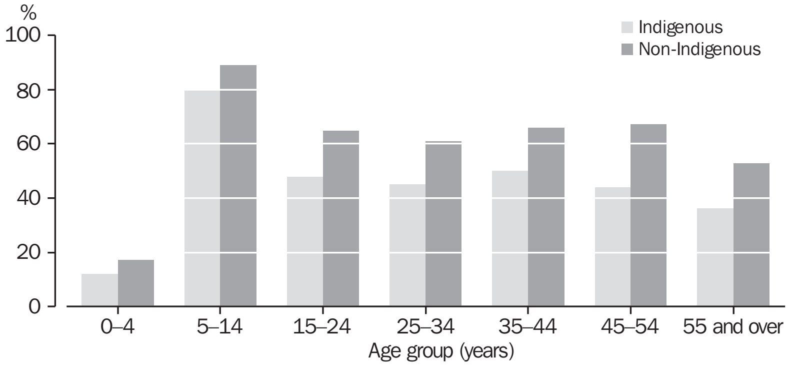
USE OF HEALTH SERVICES
continued

Indigenous peoples in remote areas were more likely to be admitted to hospital (21%) or visit emergency or outpatients departments (9%) than Indigenous peoples in non-remote areas (19% and 5% respectively). Some people may use hospitals rather than general practitioners for their primary health care for a variety of reasons.

About 5% of Indigenous peoples reported that they had visited a dentist in the two weeks prior to the survey. The reporting of recent consultations does not necessarily represent routine and preventative care, but this is also of interest. Indigenous peoples in every age group were less likely to have visited a dentist in the last two years than non-Indigenous peoples (graph 4.20). Reporting a visit within the last two years was most common among children of school age, which is probably due to the impact of school dental health programs in many jurisdictions.

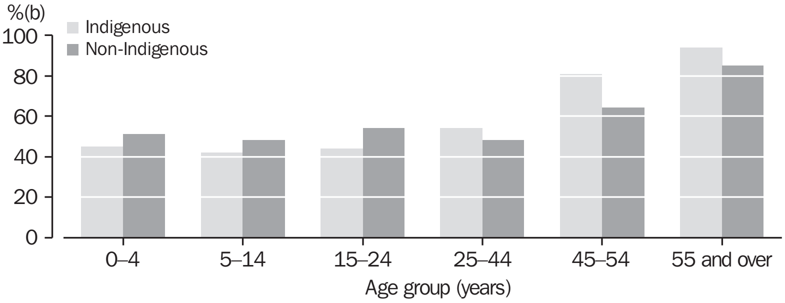
Self-reported information on the use of medications among people with selected health conditions is also available from the NHS. Those health conditions for which medication use was investigated were asthma, cancer, heart and circulatory conditions and diabetes. Indigenous Australians with these selected health conditions were less likely than non-Indigenous Australians to have used medication in the two weeks prior to interview — 60% reported medication use, compared with 68% of non-Indigenous Australians (graph 4.21). In the older age groups, reported use of medication was higher among Indigenous Australians than among non-Indigenous peoples.

4.20 PEOPLE REPORTING DENTIST VISITS WITHIN THE LAST TWO YEARS — 2001



Source: ABS 2002e.

4.21 PERSONS USING MEDICATIONS FOR SELECTED CONDITIONS(a), BY AGE OF RESPONDENT — 2001



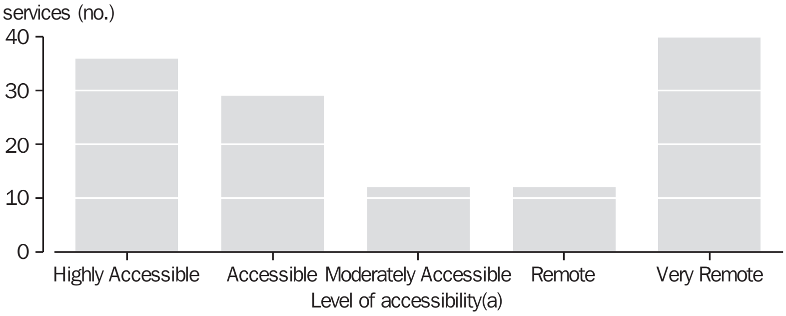
(a) Medication taken in the two weeks prior to interview, as reported by respondent. Limited to medication used for selected long term and current conditions (asthma, cancer, cardiovascular condition(s), and diabetes/high sugar levels). Excludes medication used for mental wellbeing.
(b) Proportion of all respondents reporting that a doctor/nurse had advised them that they currently had a long-term condition of asthma, cancer, cardiovascular conditions and/or diabetes.

Source: ABS data available on request, 2001 NHS.

Community controlled health services

Health services that are initiated, controlled and operated by the Indigenous community have the potential to increase the level of access to health services for Aboriginal and Torres Strait Islander peoples by providing holistic and culturally appropriate care. A study by Keys Young (1997) found that some of the reasons for this might include the provision of services at no cost, a sense of ownership, the staff being likely to speak the local language, the centres playing a social role, and the provision of a wide range of services. In 2000–01, the Office for Aboriginal and Torres Strait Islander Health in the former Commonwealth Department of Health and Aged Care funded 129 Aboriginal primary health care services that had responsibility for providing or facilitating access to primary health care. Graph 4.22 shows the location of these services throughout Australia. (See Chapter 2 for more information on the distribution of the Aboriginal and Torres Strait Islander population.)

4.22 DISTRIBUTION OF COMMONWEALTH FUNDED ABORIGINAL PRIMARY HEALTH CARE SERVICES — 2000–01



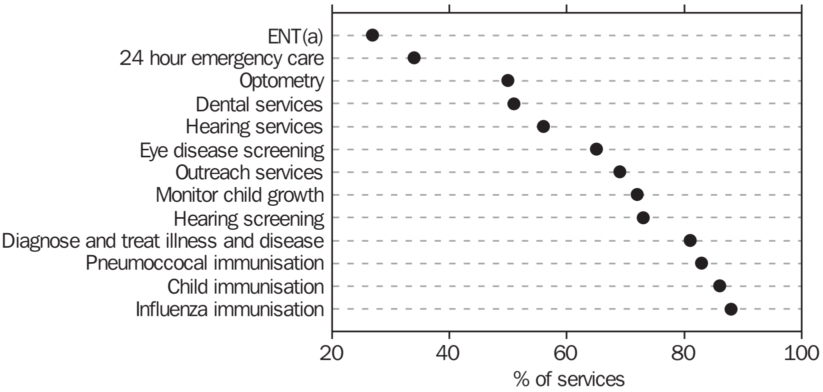
(a) See DHAC 2001b.

Source: OATSIH (2000–01) administrative data.

Community controlled health services *continued*

Graph 4.23 shows the proportion of services offering various types of clinical care screening programs, preventative health care activities, and health related and community support services. In addition to these roles and activities, Aboriginal Community Control Health Services (ACCHS) provide health promotion activities, social and emotional wellbeing services, substance misuse services, counselling and health-related community support roles such as men's and women's support groups, transport to medical appointments and school-based activities.

4.23 COMMONWEALTH FUNDED ABORIGINAL PRIMARY HEALTH CARE SERVICES ROLES AND ACTIVITIES — 2000–01



(a) Ear, nose and throat specialist services.

Source: OATSIH (2000–01) administrative data.

In 2000–01 an estimated 1,340,000 episodes of health care were provided by ACCHS, 90% of which were to Aboriginal and Torres Strait Islander clients. Approximately 40% of all episodes of care were provided to males and around 60% to females.

General practice

Some information about the extent to which general practitioners (GPs) are used by both Indigenous and non-Indigenous peoples is available from a survey being undertaken by the University of Sydney and the Australian Institute of Health and Welfare. Known as Bettering the Evaluation And Care of Health (BEACH), the survey is a study of general practice activity in Australia.

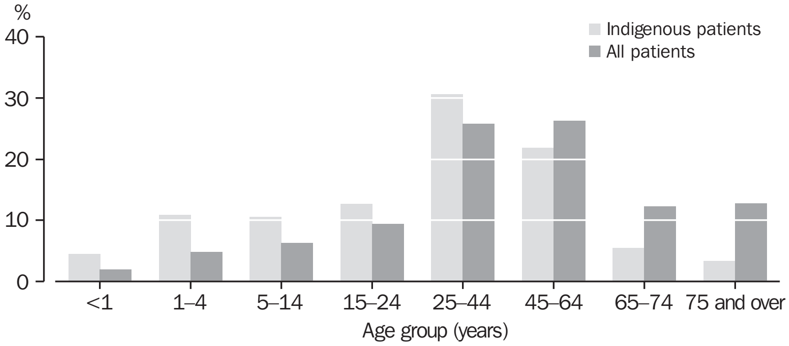
BEACH is conducted through a random sample of about 1,000 general practitioners per year, each of whom records the details of 100 consecutive GP–patient encounters. Details include patient reasons for each consultation, problems managed, medications and other treatments, referrals made, and tests ordered. Patient demographic information is also recorded, including each patient's self-reported Indigenous status. The GPs also record information about themselves and their practice.

General practice *continued*

The results presented here are for April 2001 to March 2002. There were 96,973 encounters, of which 982 (1%) were for Indigenous patients. This is low, relative to the proportion of Indigenous peoples in the total population (2.4% at 30 June 2001). These lower figures may be the result of lower use of private GP services by Indigenous peoples, where other services such as Aboriginal primary health care services exist, failure by GPs to record the Indigenous status of patients, or reluctance of patients to identify as Indigenous. Other reasons may also include the geographic distribution of GPs not reflecting that of the Indigenous population, or Indigenous peoples using other services such as hospital emergency departments or pharmacists' advice. For the 2002–03 collection, a substudy is being undertaken to try to assess the extent to which these figures are likely to be an under-representation of the true attendance rates of Indigenous peoples.

Indigenous patients were significantly younger than the total sample of patients encountered, the proportion of patients aged less than 15 years being 26% compared with 13% in the total data set. Only 9% of encounters were for Indigenous patients aged 65 years or over, compared with 25% in the total sample (graph 4.24). This reflects the younger age structure of the Indigenous population (Chapter 2). Almost 70% of Indigenous patients held a Health Care Card, compared with 42% in the total sample (Britt et al. 2002).

4.24 AGE DISTRIBUTION OF PATIENTS AT GP ENCOUNTERS BY INDIGENOUS STATUS — 2000–01



Source: Britt et al. 2002.

Hypertension, diabetes, asthma, upper respiratory tract infection, immunisation and acute bronchitis/bronchiolitis were the six most frequent problems managed by GPs for Indigenous people. The six most common problems managed for the total sample were hypertension, upper respiratory tract infection, immunisation, depression, diabetes and lipid disorder. The management rate of diabetes was about double the average rate (6.0 per 100 Indigenous encounters compared with 3.1 for the total data set). The rate of management of acute otitis media was also notable at 3.0 per 100 encounters (compared with 1.3 on average), as was the rate of impetigo (2.1 per 100 compared with 0.2) and pregnancy (2.0 per 100 compared with 0.9) (Britt et al. 2002).

4.25 GENERAL PRACTITIONER ABORIGINAL HEALTH CLINICS PROJECT

South Coast Medical Service, New South Wales

The Shoalhaven area is situated on the south coast of New South Wales. It covers approximately 4,566 square kilometres and includes communities south of Gerringong and north of Ulladulla. Nowra is a rural town within the Shoalhaven region. Approximately 3.3% of Shoalhaven residents are Indigenous, which is above the average for the state.

Aboriginal community controlled health services in the Shoalhaven area include: South Coast Medical Service, Waminda Aboriginal Women's Health Centre, Oolong Aboriginal Corporation Drug and Alcohol Rehabilitation Service, and Rose Mumbler Retirement Village. Mainstream services include GP services and hospitals. Aboriginal access to mainstream services, particularly the primary health care services, is very low.

In 1999, the Shoalhaven Division of General Practice, in partnership with the South Coast Medical Service, undertook a health needs assessment to identify and respond to the major health concerns of the Aboriginal community. As a result, a General Practitioner Aboriginal Health Clinic was established. The aim of the intervention was to increase the accessibility of general practice health services and to improve local health outcomes for the Aboriginal community.

Accepted as fundamental to the collaborative partnership were the need for:

- Aboriginal self-determination and community control
- facilitation of strong collaboration between the Aboriginal Medical Service and the GP Division
- parties to consult and reach agreed positions in relation to Aboriginal health policy, and planning and resource allocation in operating the clinics
- health services to be provided in a culturally appropriate way.

One objective was to provide additional GP services outside the practitioner's surgery in a culturally appropriate setting, to enable the Aboriginal community to take charge of its own health. Another aim was to increase opportunities for appropriate, more efficient referral systems between GPs and other health services.

One of the first initiatives was training for GPs. This included not only training in management of common Indigenous health problems but also in cultural awareness ('A sorry state', The Australian Doctor, 26 January 2001, 27–31).

Before the intervention, many local Aboriginal women had felt apprehensive using health services as they had clear memories of being made to feel unwelcome at the local hospital only a generation ago. Women were therefore reluctant, for example, to use the mainstream health services for screening procedures or other preventative activities.

Aboriginal Health Workers (AHWs) were found to be crucial in community education, population health, contacting and transporting women to clinical services, acting as chaperone during Pap smear testing and, in some areas, collecting the smear specimens themselves. As a result of the project, AHWs are now successfully involved with these activities.

...continued

4.25 GENERAL PRACTITIONER ABORIGINAL HEALTH CLINICS PROJECT *continued*

A total of 59 clinic sessions were held during the period between July 1999 and March 2000, with 423 visitations and 191 new patients recorded, attesting to the success of the intervention. The South Coast Medical Service found that half the people now accessing GPs did not have a regular practitioner before the pilot program began.

Source: Case Study from South Coast Medical Service, 2000, cited in Department of Health and Aged Care ed. (2001), 'Better Health Care: Studies in the Successful Delivery of Primary Health Care Services for Aboriginal and Torres Strait Islander Australians', Commonwealth of Australia, Canberra.

Alcohol and other drug treatment services

Information on the use of alcohol and other treatment services by Aboriginal and Torres Strait Islander persons is available from the Alcohol and Other Drug Treatment Services National Minimum Data Set (AODTS-NMDS). The information collected by the AODTS-NMDS is a nationally agreed set of common data items collected by service providers for clients registered for treatment (AIHW 2002a). Data for 2000–01, the first year of collection, are presented here.

There were 6,571 clients (7.9%) who identified themselves as being of Aboriginal and/or Torres Strait Islander origin in the 2000–01 collection (table 4.26). This is a higher proportion than the overall proportion of Indigenous peoples in the total Australian population. However, because a significant proportion of clients (8.5%) were recorded with a 'not stated' Indigenous status the Indigenous proportion should be reported with caution as it may be an under-count of the actual number of Indigenous clients in treatment. These figures also do not include the majority of Commonwealth-funded Indigenous substance use services (41 agencies) or a number of Aboriginal Health Services that also provide treatment for alcohol and other drug problems. These services are generally not under the jurisdiction of the state or territory health authority and the Commonwealth currently only reports NMDS data from one specific program. In addition, both of these services have a different collection basis to the NMDS. As a result, most of these data are not currently included in the AODTS-NMDS collection.

4.26 CLIENT REGISTRATIONS IN ALCOHOL AND DRUG TREATMENT SERVICES BY AGE GROUP(a) — 2000–01

	Indigenous		*Non-Indigenous(b)*		*Total*	
Age group (years)	*no.*	*%*	*no.*	*%*	*no.*	*%*
10–19	1 185	1.4	10 656	12.8	11 841	14.2
20–29	2 341	2.8	27 806	33.3	30 147	36.1
30–39	1 943	2.3	19 532	23.4	21 475	25.7
40–49	716	0.9	11 477	13.7	12 193	14.6
50–59	223	0.3	4 825	5.8	5 048	6.0
60 and over	40	—	1 522	1.8	1 562	1.9
Not stated	123	0.1	1 140	1.4	1 263	1.5
Total	**6 571**	**7.9**	**76 958**	**92.1**	**83 529**	**100.0**

(a) Excludes Queensland.

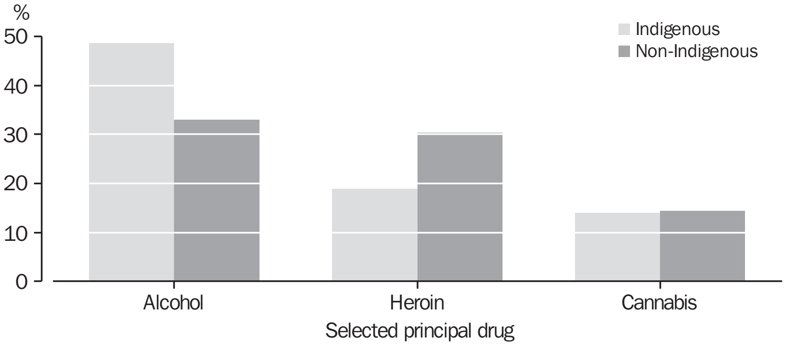
(b) Includes those clients who identified as non-Indigenous and those for whom Indigenous status was not stated, (8.5%).

Source: AIHW 2002a.

Alcohol and other drug treatment services *continued*

Despite the limitations, there were interesting differences between Indigenous and non-Indigenous substance-using clients for the most common principal drug of concern. Indigenous clients were more likely to nominate alcohol as their principal drug of concern (49%) compared with non-Indigenous clients (33%) (graph 4.27). By contrast, 19% of Indigenous clients reported heroin as their principal drug of concern compared with 30% of non-Indigenous clients.

4.27 SUBSTANCE USERS, SELECTED PRINCIPAL DRUG OF CONCERN —2000–01



Source: AIHW 2002a.

Hospital services

Hospital services are a major component of expenditure on health services for Aboriginal and Torres Strait Islander persons. In 1998–99, $467m was spent on admitted patient services, representing 38% of all health expenditure for Indigenous Australians. In that same period, 31% of all health expenditure for non-Indigenous persons was spent on admitted patient services (AIHW 2001b).

While information on hospitalisation can provide insights into the health of the population they represent, the reasons for which persons are hospitalised and the procedures they may undergo in hospital, they are not necessarily indicators of the health of the total community. Hospitalisation statistics are limited to information about the conditions for which persons are admitted to hospital, thereby excluding information regarding those who have made use of other health services, such as GPs and community health clinics, and those who have not accessed health care at all. The number and pattern of hospital admissions can also be affected by the variation between hospitals in decisions about whether to admit patients or treat them as non-admitted patients, and information concerning non-admitted patients is not routinely reported. Other factors, such as the availability of and access to other medical services, may influence hospital utilisation. A rising rate of hospitalisation, for example, could mean that health status is deteriorating, or that access to hospitals has improved, or both.

4.28 IDENTIFICATION OF INDIGENOUS AUSTRALIANS IN HOSPITAL RECORDS

Analysis of hospital morbidity collections for Indigenous Australians is complicated by difficulties in estimating both the numbers of Indigenous patients admitted to hospital and the numbers in the overall population. Information concerning the numbers of Indigenous patients in hospital is limited by the accuracy with which they are identified in hospital records. Problems associated with identification will result in an understatement of morbidity patterns among Aboriginal and Torres Strait Islander persons.

Assessments of the level of completeness of Indigenous identification in hospital morbidity collections are provided annually by each state and territory to the Australian Institute of Health and Welfare. In 2000–01, only South Australia and the Northern Territory reported the quality of Indigenous status to be acceptable (AIHW 2002b).

While there are no national estimates of the level of completeness of coverage of Indigenous identification in hospital morbidity collections, a number of studies indicate that Indigenous persons are under-identified in hospital records. Other studies have demonstrated that the rate at which hospitals correctly record Indigenous status varied from as low as 44% complete in some hospitals, to 100% complete in others (Shannon et al. 1997; Lynch & Lewis 1997; ATSIHWIU 1999). Western Australia and the Northern Territory have calculated estimates from data quality audits. The Health Department of Western Australia undertook an assessment of hospital data involving 10,000 patients in 26 hospitals. Results from this project indicated that 86% of hospital records had an accurate indication of Indigenous status (Young 2001). In the Northern Territory, a 1997 data quality audit of all public hospitals showed a 94% agreement in Indigenous status responses recorded between hospital separation records and patient interviews (Condon et al. 1998).

Uncertainties regarding the accuracy of methods used to gather information about Indigenous persons also make it difficult to draw conclusions about changes occurring over time. Improvements in the identification of Indigenous patients can lead to higher apparent rates of hospitalisation. At present, it is not possible to ascertain whether a change in identified hospitalisation rates reflects changed Indigenous identification or a genuine change in hospital use.

In this publication, hospital separations by principal diagnosis and procedures for the 2000–01 reporting period are presented for all states and territories. With the exception of the Northern Territory, where only public hospital data were available, information from both public and private hospitals has been included in the National Hospital Morbidity Database. Complete information was not obtained from a few smaller public and private hospitals (AIHW 2002b). Principal diagnoses and procedures are classified according to the second edition of the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) (NCCH 2000).

For hospitalisation data presented in this publication, where Indigenous status was not reported, the separation was regarded as being for a non-Indigenous patient. There were approximately 192,000 separations for which Indigenous status was not reported, compared to approximately 177,000 separations recorded as Indigenous. The proportion of records where Indigenous status was not reported declined from approximately 12% of separations in the National Hospital Morbidity Database in 1997–98 (AIHW 1999) to approximately 3% of separations in 2000–01.

Hospital separations

In Australia during 2000–01 there were 6.1 million hospital separations recorded. Separations where patients were recorded as Indigenous accounted for 177,407 or 2.9% of total separations. Indigenous males accounted for 2.7% of all male separations. Indigenous females accounted for 3.1% of all female separations. After adjusting for age, Indigenous males and females were about twice as likely to be hospitalised as non-Indigenous males and females. Indigenous males and females had higher separation rates when compared with non-Indigenous males and females in most states and territories. The rate of hospitalisation was two to four times as high for Indigenous persons living in the Northern Territory, Western Australia, South Australia and Queensland compared to non-Indigenous persons for these jurisdictions (table 4.29).

About 98% of Indigenous separations were recorded in public hospitals, compared with 62% of non-Indigenous separations. While Indigenous patients may be correctly identified less frequently in private hospitals than in public hospitals, the much lower proportions of separations for Indigenous patients in private hospitals largely reflects lower attendance at private hospitals by Indigenous patients.

These rates are influenced by the quality of the data on Indigenous status, which is likely to vary among the states and territories. Also some public and private hospitals are omitted from the data for some jurisdictions. For example, the restriction of Northern Territory data to only public hospitals is likely to understate the non-Indigenous hospitalisation rates and overstate the Indigenous to non-Indigenous separation rate ratios for that jurisdiction. The rates can also be influenced by variation among the jurisdictions in the health status of Indigenous persons and in their access to hospital services (AIHW 2002b).

4.29 HOSPITAL SEPARATIONS BY STATE OR TERRITORY OF USUAL RESIDENCE(a) — 2000–01

	Indigenous separations		Non-Indigenous separations(b)				
					Rate ratio(e)	Proportion of separations identified as Indigenous	Proportion of the population identified as Indigenous(f)
	no.	rate(c)(d)	no.	rate(c)(d)		%	%
			MALES				
New South Wales	15 591	375.2	870 255	262.4	1.4	1.8	1.8
Victoria	2 706	315.4	733 749	303.8	1.0	0.4	0.5
Queensland	21 044	579.3	537 355	304.9	1.9	3.8	3.2
South Australia	5 948	764.0	239 229	303.4	2.5	2.4	1.6
Western Australia(g)	15 144	712.6	268 989	297.7	2.4	5.3	3.2
Tasmania	431	80.9	62 429	261.4	0.3	0.7	3.5
Northern Territory(h)	14 601	852.6	12 860	204.2	4.2	53.2	27.1
Australian Capital Territory	447	1 130.0	32 648	232.6	4.9	1.4	1.1
Australia(i)	**76 194**	**550.5**	**2 769 027**	**287.4**	**1.9**	**2.7**	**2.2**
			FEMALES				
New South Wales	19 200	425.4	1 009 019	287.8	1.5	1.9	1.8
Victoria	4 083	473.0	857 432	328.0	1.4	0.5	0.5
Queensland	28 515	701.0	603 727	328.6	2.1	4.5	3.3
South Australia	6 503	738.8	283 129	342.6	2.2	2.2	1.6
Western Australia(g)	22 021	964.7	305 753	322.5	3.0	6.7	3.3
Tasmania	884	157.7	75 207	302.5	0.5	1.2	3.5
Northern Territory(h)	19 456	952.4	13 534	226.2	4.2	59.0	29.4
Australian Capital Territory	357	236.6	36 563	232.1	1.0	1.0	1.1
Australia(i)	**101 213**	**657.7**	**3 191 907**	**312.8**	**2.1**	**3.1**	**2.2**

(a) Based on place of usual residence. Data are for public and most private hospitals. No data were available for a number of small private hospitals and private free-standing day hospital facilities. Excludes separations for which sex was not stated.

(b) Includes non-Indigenous separations and those for whom Indigenous status was not reported.

(c) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

(d) The true rate of hospitalisation of Indigenous people in states and territories will be underestimated to the extent that Indigenous people are under-identified in the hospital records of those jurisdictions.

(e) Rate ratio is equal to the rate of separations identified as Indigenous divided by the rate of non-Indigenous separations.

(f) As estimated for 31 December 2000.

(g) The Health Department of Western Australia suggests a correction factor of 1.09 for state level Indigenous counts, although this has not been applied to data presented in this table.

(h) Public hospitals only.

(i) Includes those usually resident in other Australian territories or overseas, and those for whom place of usual residence was not stated.

Source: AIHW National Hospital Morbidity Database.

The most common principal diagnosis (see Glossary) based on ICD-10-AM chapters for both Indigenous males and females in 2000–01 was ‘Factors influencing health status and contact with health services’. The majority of these (88%) were for ‘Care involving dialysis’ which is used in the treatment of kidney failure. Indigenous males were also commonly hospitalised for injury and poisoning (12%), respiratory diseases (11%), digestive diseases (7%) and mental and behavioural disorders (6%). For Indigenous females, pregnancy and childbirth were important reasons for hospitalisation (16%), followed by respiratory diseases (8%), injury and poisoning (7%) and digestive diseases (5%). More detailed analysis of hospitalisations for specific diseases is discussed in Chapter 7.

Hospital separations *continued*

As indicated by the rate ratios in table 4.30, for many principal diagnoses, the age-standardised separation rates for Indigenous persons were higher than the separation rates for non-Indigenous persons. Indigenous males were over six times more likely and Indigenous females over 12 times more likely to be hospitalised for a principal diagnosis of ‘Care involving dialysis’ than non-Indigenous males and females respectively. Similarly, Indigenous males and females were over three times more likely than non-Indigenous males and females to be hospitalised for a principal diagnosis of ‘Endocrine, nutritional and metabolic diseases’, which includes diabetes. Despite the under-identification of Indigenous persons in hospitalisation data, the data available indicate that the Indigenous population experiences a higher burden of illness and disease resulting in hospitalisation than does the rest of the population.

4.30 INDIGENOUS HOSPITAL SEPARATIONS, BY PRINCIPAL DIAGNOSIS(a) — 2000–01

	Indigenous separations		*Proportion of Indigenous separations*		*Directly age-standardised rate(b)*		*Rate ratio(c)*	
	Males	*Females*	*Males*	*Females*				
	no.	*no.*	*%*	*%*	*Males*	*Females*	*Males*	*Females*
Certain infectious and parasitic diseases	2 618	2 672	3.4	2.6	10.6	11.4	2.3	2.6
Neoplasms	937	1 692	1.2	1.7	10.7	13.1	0.5	0.6
Diseases of the blood and blood-forming organs & certain disorders involving the immune mechanism	283	523	0.4	0.5	2.1	3.7	0.7	1.2
Endocrine, nutritional and metabolic diseases	1 578	1 971	2.1	1.9	14.1	15.7	3.5	3.8
Mental and behavioural disorders	4 583	3 730	6.0	3.7	26.7	20.4	2.2	1.5
Diseases of the nervous system	1 636	1 186	2.1	1.2	11.5	7.3	1.6	1.2
Diseases of the eye and adnexa	533	674	0.7	0.7	6.4	7.2	0.9	0.9
Diseases of the ear and mastoid process	968	862	1.3	0.9	3.1	3.1	1.0	1.2
Diseases of the circulatory system	3 298	3 057	4.3	3.0	34.1	28.9	1.4	1.8
Diseases of the respiratory system	7 976	7 747	10.5	7.7	46.0	45.2	2.6	3.1
Diseases of the digestive system	5 042	5 304	6.6	5.2	34.6	32.7	1.0	0.9
Diseases of the skin and subcutaneous tissue	2 611	2 493	3.4	2.5	14.4	12.9	2.4	2.7
Diseases of the musculoskeletal system and connective tissue	1 871	1 673	2.5	1.7	12.9	11.6	0.7	0.8
Diseases of the genitourinary system	1 379	4 335	1.8	4.3	11.3	26.7	1.0	1.1
Pregnancy, childbirth and the puerperium	. .	15 786	. .	15.6	. .	68.1	. .	1.4
Certain conditions originating in the perinatal period	1 203	1 074	1.6	1.1	3.0	2.8	1.0	1.1
Congenital malformations, deformations and chromosomal abnormalities	494	298	0.6	0.3	1.3	0.9	0.7	0.5
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified(d)	3 772	4 516	5.0	4.5	27.1	27.7	1.7	1.5
Injury, poisoning and certain other consequences of external causes	9 095	7 184	11.9	7.1	48.6	38.3	1.9	2.3
Factors influencing health status and contact with health services(e)								
Care involving dialysis	23 221	30 136	30.5	29.8	207.6	251.8	6.6	12.6
Other	2 867	4 164	3.8	4.1	22.8	26.9	0.7	0.8
Total	*26 088*	*34 300*	*34.2*	*33.9*	*230.4*	*278.7*	*3.6*	*5.3*
Not specified	229	136	0.3	0.1	1.6	1.2	3.2	2.8
Total (excluding 'Care involving dialysis')	**52 973**	**71 077**	**69.5**	**70.2**	**342.9**	**405.9**	**1.3**	**1.4**
Total (including 'Care involving dialysis')	**76 194**	**101 213**	**100.0**	**100.0**	**550.5**	**657.7**	**1.9**	**2.1**

(a) Data are for public and most private hospitals. No data were available for a number of small private and private hospitals free-standing day hospital facilities. Excludes separations for which sex was not stated. Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) (National Centre for Classification in Health 2000).

(b) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

(c) Rate ratio is equal to the rate of Indigenous separations divided by the rate of non-Indigenous separations.

(d) Includes signs, symptoms and abnormal results of clinical or other investigative procedures that do not point conclusively to a specific diagnosis.

(e) Includes hospitalisation for 'Care involving dialysis', chemotherapy, radiotherapy and other reasons for contact that are not a disease or injury classified elsewhere.

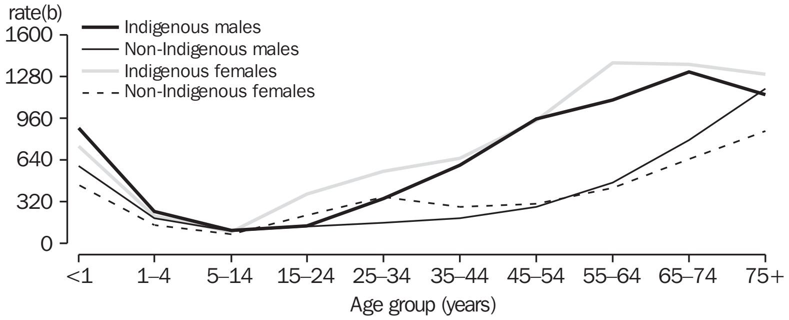
Source: AIHW National Hospital Morbidity Database.

Age-specific hospital separation rates in graph 4.31 show that at all ages, except for the 75 and over age group for males, higher separation rates were recorded for Indigenous patients than for non-Indigenous patients. The highest rate differences for both males and females were in the age groups between 35 and 64 years.

Hospital separations *continued*

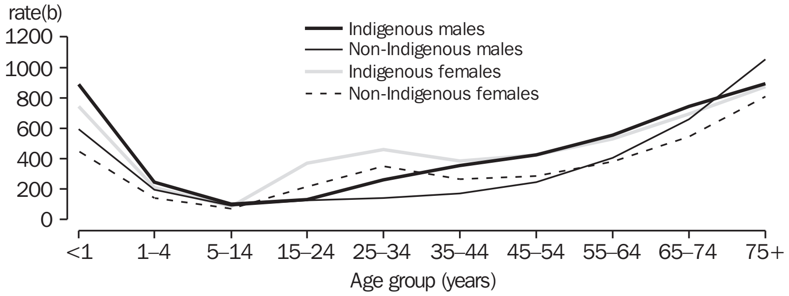
The principal diagnosis, 'Care involving dialysis', was recorded for 30% of separations for Indigenous patients and 9% of separations among non-Indigenous patients. It is therefore useful to look at Indigenous–non-Indigenous comparisons of hospital separations both including and excluding 'Care involving dialysis'. After excluding separations where the principal diagnosis was 'Care involving dialysis' the differences were greatly reduced for the age groups 35–44 and above (graph 4.32). The overall rate ratio for both males and females was 1.4 (table 4.30).

4.31 AGE-SPECIFIC HOSPITAL SEPARATION RATES(a)—2000–01



(a) Data are for public and most private hospitals.
(b) Per 1,000 population.
Source: AIHW National Hospital Morbidity Database.

4.32 AGE-SPECIFIC HOSPITAL SEPARATION RATES, EXCLUDING 'CARE INVOLVING DIALYSIS'(a) — 2000–01



(a) Data are for public and most private hospitals.
(b) Per 1,000 population.
Source: AIHW National Hospital Morbidity Database.

Procedures

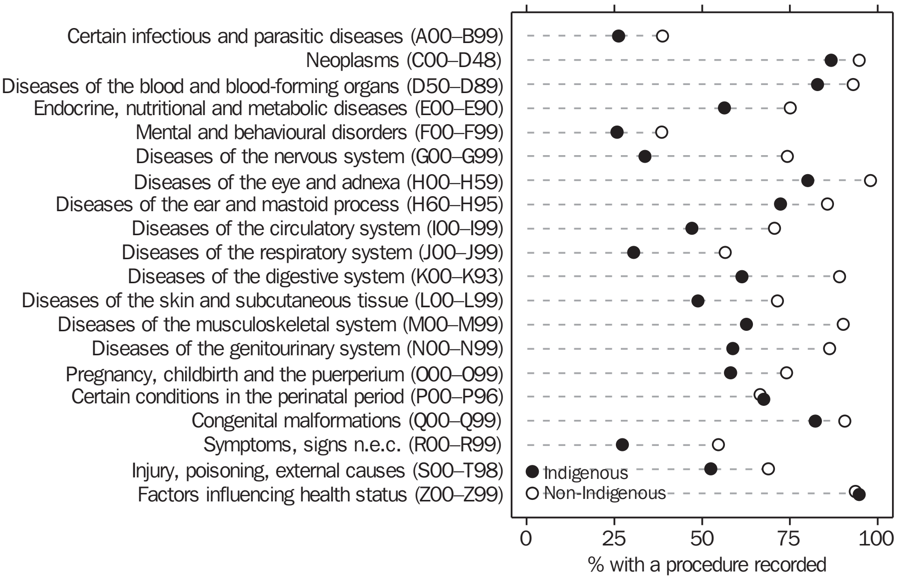
It is important to note that information on procedures in this publication is not comparable with that in previous editions of this publication, which only considered the formerly recognised concept of 'principal procedure', rather than all procedures. As one or more procedure can be reported for each separation, and all have equal 'status', the data presented in tables and graphs in this section and those presented in Chapter 7 refer to the total number of procedures reported. However, procedures are not undertaken during all hospital admissions, so only a proportion of the separation records includes procedure data. In 2000–01, 64% of Indigenous separations had a procedure recorded, compared with 79% of non-Indigenous separations.

Procedures *continued*

There were 4.8 million separations with a procedure reported in 2000–01, of which 2.3% (113,330) were recorded for Indigenous patients. Over half of all separations had more than one procedure performed, totalling about 10.9 million procedures in 2000–01. Just under 2% of all procedures were performed on Indigenous patients (200,060).

For almost all principal diagnoses chapters, Indigenous patients were less likely than non-Indigenous patients to have one or more procedures recorded (graph 4.33). Principal diagnoses of 'Certain conditions originating in the perinatal period' and 'Factors influencing health status and contact with health services' were the only exceptions to this. Graph 4.33 presents separations with one or more procedure recorded. The reasons why Aboriginal and Torres Strait Islander persons who are admitted to hospital are less likely to have a procedure recorded may include age, sex, area of residence, patient accommodation status, type of hospital and principal diagnosis (Cunningham 2002).

4.33 SEPARATIONS WITH A PROCEDURE RECORDED BY PRINCIPAL DIAGNOSIS(a)(b) — 2000–01



(a) Data are for public and most private hospitals.
(b) ICD-10-AM chapter names have been shortened. ICD-10-AM codes are provided to indicate disease groupings in each chapter. The full name of each ICD-10-AM chapter is included in Appendix 4.

Source: AIHW National Hospital Morbidity Database.

On a population basis, the likelihood of an Indigenous person undergoing a procedure, including dialysis, in hospital was slightly greater nationally, and in the jurisdictions of Queensland, South Australia, Western Australia and the Northern Territory, than it was for other patients (table 4.34).

4.34 PROCEDURES BY STATE OR TERRITORY OF PATIENT'S USUAL RESIDENCE(a) — 2000–01

	Procedures reported for Indigenous patients		*Procedures reported for non-Indigenous patients(b)*			*Proportion of procedures for Indigenous patients*	*Proportion of the population identified as Indigenous(f)*
	no.	*rate(c)(d)*	*no.*	*rate(c)(d)*	*Rate ratio(e)*	*%*	*%*
			MALES				
New South Wales	16 053	411.6	1 588 276	476.1	0.9	1.0	1.8
Victoria	3 463	411.8	1 266 501	523.2	0.8	0.3	0.5
Queensland	22 420	624.5	928 391	525.2	1.2	2.4	3.2
South Australia	6 978	865.5	405 538	512.0	1.7	1.7	1.6
Western Australia	16 426	782.2	478 486	529.9	1.5	3.3	3.2
Tasmania	776	155.8	109 445	455.2	0.3	0.7	3.5
Northern Territory(g)	18 044	1 049.5	22 074	359.5	2.9	45.0	27.1
Australia (excluding haemodialysis)(h)	**61 190**	**411.4**	**4 563 083**	**472.7**	**0.9**	**1.3**	**2.2**
Australia(h)	**85 077**	**624.8**	**4 877 153**	**504.6**	**1.2**	**1.7**	**2.2**
			FEMALES				
New South Wales	20 576	475.4	1 873 024	525.4	0.9	1.1	1.8
Victoria	5 313	611.4	1 520 997	572.9	1.1	0.3	0.5
Queensland	31 147	771.2	1 086 185	588.7	1.3	2.8	3.3
South Australia	8 146	904.6	486 102	584.2	1.5	1.6	1.6
Western Australia	25 552	1 092.2	585 967	617.0	1.8	4.2	3.3
Tasmania	1 314	227.1	132 088	524.2	0.4	1.0	3.5
Northern Territory(g)	22 182	1 094.6	20 492	346.3	3.2	52.0	29.4
Australia (excluding haemodialysis)(h)	**84 080**	**491.9**	**5 571 401**	**540.9**	**0.9**	**1.5**	**2.2**
Australia(h)	**114 977**	**749.7**	**5 788 223**	**561.1**	**1.3**	**1.9**	**2.2**

(a) Based on place of usual residence. Data are for public and most private hospitals. No data were available for a number of small private and private free-standing day hospital facilities. Excludes procedures for patients for which sex was not stated.

(b) Includes those for whom Indigenous status was not reported.

(c) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

(d) The true rate of hospitalisation of Indigenous people in states and territories will be underestimated to the extent that Indigenous people are under-identified in the hospital records of those jurisdictions.

(e) Rate ratio is equal to the rate of procedures for Indigenous patients divided by the rate of procedures for non-Indigenous patients.

(f) As estimated for 31 December 2000.

(g) Public hospitals only.

(h) Includes those usually resident in the Australian Capital Territory or in other Australian territories or overseas, and those for whom place of usual residence was not stated.

Source: AIHW National Hospital Morbidity Database.

The most common types of procedure recorded for Indigenous persons in 2000–01 were 'Non-invasive, cognitive and interventions, not elsewhere classified'. A large proportion of procedures in this group was for allied health interventions such as physiotherapy and social work and for general anaesthesia and sedation. 'Procedures on the urinary system' was the second most common type of procedure for both males and females, the majority of which were for haemodialysis (table 4.35). Some 28% of procedures for Indigenous males and 27% for Indigenous females were for haemodialysis, a procedure which artificially performs the work of the kidneys in end-stage renal disease patients. For more detail on haemodialysis procedures and end-stage renal disease, see the section in Chapter 7 on chronic kidney disease.

Procedures *continued*

Other types of procedures commonly performed on Indigenous male patients were procedures on the musculoskeletal system (6%), dermatological and plastic procedures (6%), and imaging services (5%). For Indigenous females (after haemodialysis), obstetric procedures were the most commonly performed procedures, accounting for 10% of total procedures recorded. Other common types of procedures for Indigenous females were gynaecological procedures (6%) and procedures on the digestive system (5%).

4.35 PROCEDURES FOR INDIGENOUS PATIENTS, BY ICD-10-AM PROCEDURE CHAPTER(a) — 2000–01

	Procedures for Indigenous patients		*Proportion of procedures for Indigenous patients*		*Directly age-standardised rate(b)*		*Rate ratio(c)*	
	Males	*Females*	*Males*	*Females*				
	no.	*no.*	*%*	*%*	*Males*	*Females*	*Males*	*Females*
Procedures on nervous system	1 249	2 251	1.5	2.0	8.9	12.0	0.7	0.8
Procedures on endocrine system	30	89	0.0	0.1	0.2	0.7	0.7	0.9
Procedures on eye and adnexa	701	809	0.8	0.7	8.1	8.8	0.9	1.0
Procedures on ear and mastoid process	960	829	1.1	0.7	3.2	2.7	0.9	1.0
Procedures on nose, mouth and pharynx	876	699	1.0	0.6	4.3	3.1	0.5	0.4
Dental services	2 149	2 255	2.5	2.0	7.3	7.6	0.6	0.5
Procedures on respiratory system	2 465	1 915	2.9	1.7	15.5	11.1	1.6	1.9
Procedures on cardiovascular system	3 143	2 596	3.7	2.3	25.2	19.5	0.9	1.4
Procedures on blood and blood-forming organs	162	227	0.2	0.2	1.2	1.5	0.6	0.7
Procedures on digestive system	3 750	5 244	4.4	4.6	30.9	35.5	0.6	0.6
Procedures on urinary system								
Haemodialysis	23 887	30 897	28.1	26.9	213.4	257.8	6.7	12.8
Other	1 215	1 493	1.4	1.3	11.3	11.3	0.8	1.1
Total	*25 102*	*32 390*	*29.5*	*28.2*	*224.7*	*269.1*	*4.8*	*8.9*
Procedures on male genital organs	735	. .	0.9	. .	4.2	. .	0.5	. .
Gynaecological procedures	. .	6 531	. .	5.7	. .	34.2	. .	0.7
Obstetric procedures	. .	11 200	. .	9.7	. .	48.0	. .	1.0
Procedures on musculoskeletal system	4 856	2 978	5.7	2.6	26.6	17.4	0.8	0.8
Dermatological and plastic procedures	4 672	3 579	5.5	3.1	26.2	19.0	1.0	1.0
Procedures on breast	17	350	0.0	0.3	0.1	2.6	0.4	0.5
Chemotherapeutic and radiation oncology procedures	631	628	0.7	0.5	6.6	4.0	0.5	0.3
Non-invasive, cognitive and interventions not elsewhere classified	29 439	36 441	34.6	31.7	200.3	225.7	0.9	1.0
Imaging services	4 139	3 966	4.9	3.4	31.4	27.4	1.2	1.3
Total (excluding haemodialysis)	**61 190**	**84 080**	**71.9**	**73.1**	**411.4**	**491.9**	**0.9**	**0.9**
Total (including haemodialysis)	**85 077**	**114 977**	**100.0**	**100.0**	**624.8**	**749.7**	**1.2**	**1.3**

(a) Data are for public and most private hospitals. No data were available for a number of small private and private free-standing day hospital facilities. Excludes procedures for patients for which sex was not stated. Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) (National Centre for Classification in Health 2000).

(b) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

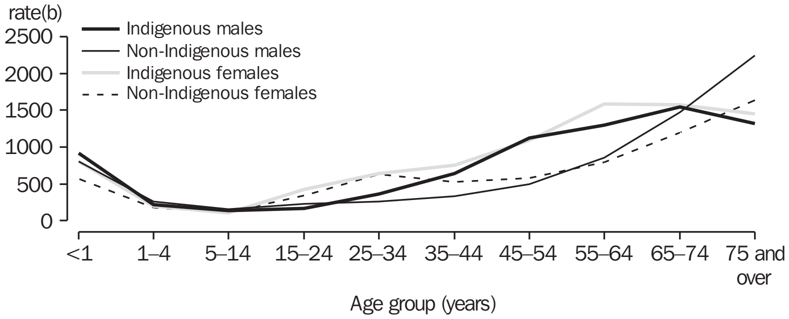
(c) Rate ratio is equal to the rate of procedures for Indigenous patients divided by the rate of procedures for non-Indigenous patients.

Source: AIHW National Hospital Morbidity Database.

Procedures *continued*

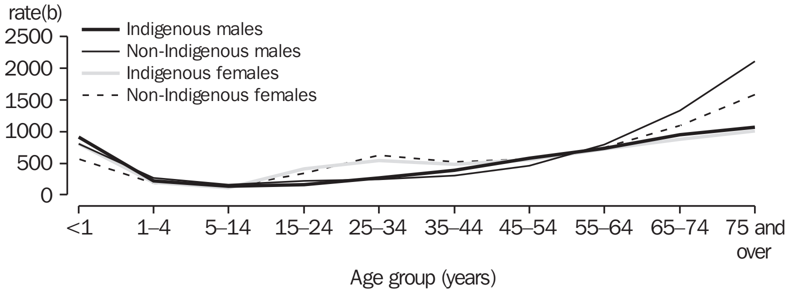
Indigenous males and females aged 25–74 years had higher age-specific procedure rates than were recorded for the non-Indigenous population, with Indigenous rates for some age groups two times the non-Indigenous rates (graph 4.36). The procedure rates for the non-Indigenous population for both males and females were greater than the corresponding rates for the Indigenous population in the 75 and over age group. Excluding haemodialysis procedures, rates for the Indigenous males and females overall were the same as for non-Indigenous males and females respectively, and across most age groups they were also similar (graph 4.37).

4.36 AGE-SPECIFIC PROCEDURE RATES(a) — 2000–01



(a) Data are for public and most private hospitals.
(b) Per 1,000 population.
Source: AIHW National Hospital Morbidity Database.

4.37 AGE-SPECIFIC PROCEDURE RATES, EXCLUDING HAEMODIALYSIS(a) — 2000–01



(a) Data are for public and most private hospitals.
(b) Per 1,000 population.
Source: AIHW National Hospital Morbidity Database.

SUMMARY

A range of factors that could affect Indigenous persons' access to, and use of, health services have been presented in this Chapter. Indigenous persons are more likely to live outside urban areas than non-Indigenous persons and are therefore more likely to live further from health services than other Australians. Aboriginal community controlled health services, operating in many parts of the country, including remote areas, go some way to addressing the gaps in health service provision for a more geographically dispersed population.

SUMMARY *continued*

Expenditure on health services is another area which may reflect levels of access to, and use of, particular services. In 1998–99, more was spent on Indigenous persons compared with non-Indigenous persons in some areas, such as community and public health, patient transport, and public hospital services, but less was spent on private hospitals, Medicare, the PBS and high level residential aged care. However, the amount spent on Indigenous peoples on health services is less than what might be expected given their poorer health status.

The provision of culturally appropriate health services, and the employment of Indigenous staff in services, may also affect access. The 2001 CHINS showed that male Indigenous health workers were not available in many remote communities, which could affect the willingness of Indigenous men to seek help for their health problems.

The future involvement of Indigenous persons in health and welfare services will be influenced by their current participation in health and welfare-related education. The numbers of Indigenous students commencing and completing undergraduate health courses increased substantially in 2000 (up 46% on 1999). Commencements in undergraduate health courses were also up significantly in 2001 (up 40% on 2000), although part of that increase may reflect a classification change from ‘field of study’ to ‘field of education’.

Indigenous persons are disadvantaged on a range of factors that could affect access to and use of services, such as distance, availability of transport (particularly in remote areas), access to Medicare and the PBS, the proximity of culturally appropriate services, the proportion of Indigenous persons involved in health-related professions and in higher education courses leading into these professions, and coverage by private health insurance. Expenditure on health services for Indigenous persons is estimated to be more than that for non-Indigenous persons, but the difference is less than might be expected, given the much poorer health status of Indigenous persons, as described in the following Chapters.

CHAPTER 5 COMMUNITY SERVICES

INTRODUCTION

Community services form part of a set of public sector services designed to address individual and societal needs, in conjunction with other service sectors such as employment, income support, education and health. They are provided by Commonwealth, state, territory and local government agencies, as well as by non-government organisations and the for-profit sector.

This Chapter presents information about delivery of community services to Aboriginal and Torres Strait Islander clients in the areas of housing assistance, child care, child protection, adoptions, juvenile justice, disability services and aged care. Where possible, comparisons with the non-Indigenous population are included.

Most of the data in this Chapter come from the administrative databases of housing and community service providers compiled by the Australian Institute of Health and Welfare (AIHW). While these data provide useful information, there are some limitations on quality due to missing data. The Indigenous status of clients is not always reported by the clients or recorded by the service provider. In addition, in some cases where Indigenous status is recorded, inconsistencies in recording methods result in data that are not comparable between jurisdictions.

HOUSING ASSISTANCE

Housing assistance to Aboriginal and Torres Strait Islander peoples is provided through a range of means, including targeted state–territory owned and managed housing, and community-managed housing which supplements assistance available through mainstream housing programs. These programs are summarised in box 5.1 and a data overview is provided in table 5.2. There were a total of 144,732 households with Indigenous persons living in occupied private dwellings enumerated in the 2001 Census, which accounted for 2% of the total number of occupied private dwellings in Australia (Chapter 3). This section examines the number and distribution of these households receiving housing assistance.

5.1 PROGRAMS DESIGNED TO ADDRESS HOUSING NEED

Several programs are specifically targeted to Aboriginal and Torres Strait Islander peoples:

- State–territory owned and managed Indigenous housing refers to the Commonwealth State Housing Agreement (CSHA) Aboriginal Rental Housing Program, which administers stock not managed by Indigenous community organisations. Stock is managed by the states and territories, and allocated specifically to Indigenous Australians.

- Community Managed Indigenous Housing is administered by Indigenous community organisations and may be funded through a variety of sources, including the Aboriginal and Torres Strait Islander Commission (ATSIC), the CSHA, and state and territory governments.

An objective of housing assistance programs is to improve Indigenous access to mainstream public and community housing programs:

- CSHA Public Housing is administered by the states and territories, which provide publicly owned dwellings that are funded through the CSHA and used to provide appropriate, affordable and accessible shelter for low to moderate income earners who are unable to enter the private market.

- Commonwealth Rent Assistance (CRA) is supplementary financial assistance that may be payable to recipients of social security, family tax benefit and Department of Veterans Affairs payments, who pay rents above specified threshold levels in the private rental market.

- CSHA Community Housing is managed by non-profit community-based organisations such as local governments, churches and charity groups. It takes several forms; from emergency or crisis accommodation, to medium-term or transitional accommodation, to long-term housing.

- Private Rent 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.

- 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 public housing stock.

- CSHA Crisis Accommodation Program (CAP) provides emergency accommodation, and funds are used for the purchase, lease, and maintenance of dwellings that provide accommodation assistance to people who are homeless or in crisis.

There is much variability in data quality and the compatibility of information about mainstream housing assistance for Indigenous Australians. In mainstream program data collections, Indigenous identification is not complete, and it is likely that the number of Indigenous people or their households receiving assistance is under-represented.

Furthermore, housing assistance to Indigenous households is measured in several ways. The time period reference can describe activity or 'throughput' for the year ending 30 June 2002 (number of households assisted for year ending 30 June 2002), or it can be a point in time that describes status at 30 June 2002 (number of households at 30 June 2002). There are also two populations that can be described, either total population assisted, or all new population assisted.

HOUSING ASSISTANCE
continued

The 1999 Australian Bureau of Statistics (ABS) Australian Housing Survey and the 1999 ATSIC Community Housing and Infrastructure Needs Survey identified considerable housing need among Aboriginal and Torres Strait Islander peoples (ABS 2001a, 2002d). Indigenous Australians are more likely to live in subsidised housing, are much less likely to be owners or purchasers, and are more likely to live in overcrowded housing and housing in need of repairs (AIHW 2002c).

In May 2001, housing ministers endorsed a 10-year statement on directions for Indigenous housing reform to provide better housing for Indigenous Australians (HMAC 2001). This statement set out the 1997 ministers' reform agenda that focused on identifying and addressing outstanding need; improving the viability of Indigenous community housing organisations; establishing safe, healthy and sustainable housing for Indigenous Australians, especially in rural and remote communities; and establishing a national framework for the development and delivery of improved housing outcomes for Indigenous Australians by state, territory and community housing providers.

Table 5.2 provides a summary of total numbers of Indigenous households receiving government housing assistance by tenure and program type. Adding the total number of Indigenous households in mainstream public housing to the targeted public housing state–territory owned and managed Indigenous housing gives an overall figure of 28,548 Indigenous households in public housing at 30 June 2002. For Indigenous people in the private rental market, the Commonwealth Rent Assistance Program assisted nearly 20,000 Indigenous income units across Australia for the week ending 30 June 2002. Over 2,000 Indigenous households were identified as living in CSHA-funded community housing as at 30 June 2002.

5.2 SUMMARY OF HOUSEHOLDS RECEIVING GOVERNMENT ASSISTANCE BY TENURE TYPE — 2001–02

	Indigenous households	*All households*	*Proportion of all households that are Indigenous*
	no.	*no.*	*%*
Public rental households at 30 June 2002			
State–territory owned and managed Indigenous housing	11 874	. .	. .
Mainstream public housing	16 674	342 467	4.9
New public rental households for year ending 30 June 2002			
State–territory owned and managed Indigenous housing	1 759	. .	. .
Mainstream public housing	3 492	36 894	9.5
CSHA Community housing			
Households at 30 June 2002	2 198	28 917	7.6
New households for year ending 30 June 2002	3 066	20 666	14.8
Private rental			
Commonwealth Rent Assistance			
Iincome units) for week ending 30 June 2001	19 788	944 931	2.1
Private Rent Assistance			
(Instances of assistance) for year ending 30 June 2002	1 903	146 331	1.3
Home buyers			
Home Purchase Assistance			
(Instances of assistance) for year ending 30 June 2002	148	31 878	0.5

Source: AIHW 2003k, 2003l, 2003m, 2002j, 2002k.

Public housing

Mainstream public housing

There were 16,674 Indigenous households living in mainstream public housing at 30 June 2002, which represents 5% of the total number of households receiving public housing assistance (342,467) (tables 5.2 and 5.3). The proportion of Indigenous households in public housing is large relative to their size across all tenures (2% of all households).

Of those households that began receiving mainstream public housing assistance in 2001–02, 3,492 or 9% identified as Indigenous (tables 5.2 and 5.3). The relatively high proportion of Indigenous households being newly assisted reflects the priority they are given in several jurisdiction waiting lists, and recent improvements in Indigenous identification in new tenancies for public housing.

5.3 EXISTING AND NEW HOUSEHOLDS IN MAINSTREAM PUBLIC RENTAL HOUSING(a)

	Households at 30 June 2002	*New households for year ending 30 June 2002(b)*
Indigenous households		
New South Wales	8 700	888
Victoria	771	218
Queensland	2 311	830
South Australia	812	233
Western Australia	2 098	750
Tasmania	463	163
Northern Territory	1 377	382
Australian Capital Territory	142	28
Australia	16 674	3 492
All households Australia	342 467	36 894

(a) The identification of new Indigenous households is likely to be more accurate than for existing households, as recent targeting criteria means that households must identify as Indigenous in order to receive priority allocation.

(b) New households assisted with rebated public rental housing.

Source: AIHW 2003m.

State–territory owned and managed Indigenous housing

There were 11,766 households assisted by state–territory owned and managed Indigenous public housing for the year ending 30 June 2002 (table 5.4). Of these, 15% (1,759) were households that were newly allocated housing during that financial year. The total number of households that transferred from one Indigenous public housing dwelling to another during the 2001–02 financial year was 660.

5.4 STATE–TERRITORY OWNED AND MANAGED INDIGENOUS HOUSING — YEAR ENDING 30 JUNE 2002

Indigenous households within	*All rebated households*	*New households*	*Households who relocated(a)*
New South Wales(b)	3 402	471	174
Victoria	1 200	183	76
Queensland	2 620	332	139
South Australia(c)	1 621	212	88
Western Australia	2 530	464	160
Tasmania	393	97	23
Northern Territory(d)	. .	. .	. .
Australian Capital Territory(e)	. .	. .	. .
Australia	**11 766**	**1 759**	**660**

(a) Total number of households who relocated from one dwelling to another.

(b) The same household may be counted twice if they were newly housed and transferred within the year.

(c) Where a household was newly allocated and also transferred within the same financial year they were counted in the total number of new households assisted and excluded from the number that were relocated.

(d) The Northern Territory government is not in a position to differentiate between the various Indigenous funding sources due to the commitment reached under the Bilateral Agreement to specifically 'pool' all funds earmarked for Indigenous housing and associated infrastructure in the Northern Territory.

(e) The Australian Capital Territory does not have a separately identified or funded Aboriginal Housing Program.

Source: AIHW 2003k.

CSHA community housing

At 30 June 2002 there were 2,198 Indigenous households living in mainstream CSHA community housing. During 2001–02, there were 3,066 Indigenous households that commenced receiving CSHA community housing. This represents 15% of the total number of households that commenced receiving community housing assistance during this period (table 5.5). Of all new Indigenous households, 83% were living in Western Australia. The lack of available data for some states and territories prevents any accurate distributional analysis. The historical context, nature and role of mainstream CSHA community housing differs between states and territories and this is reflected in the different distributions of assistance shown in table 5.5 (AIHW 2001a).

5.5 CSHA COMMUNITY HOUSING DATA, SELECTED CHARACTERISTICS — 2001–02(a)

	Households at 30 June 2002	New households(b)	Households assisted by Targeted providers(c)(d)	Households assisted by Non-targeted providers(c)(d)
Indigenous households				
New South Wales	537	175	320	217
Victoria(e)	. .	. .	. .	. .
Queensland	445	327	274	—
South Australia	33	13	13	14
Western Australia	1 165	2 536	190	—
Tasmania	n.a.	n.a.	—	n.a.
Northern Territory(f)	n.a.	n.a.	n.a.	n.a.
Australian Capital Territory	18	15	4	12
Indigenous total	*2 198*	*3 066*	*801*	*243*
Australia	**28 917**	**20 666**	**. .**	**. .**

(a) CSHA community housing data is produced from both administrative and survey data. Administrative data is based on all community housing providers and dwellings, whereas survey data is based on a sample of providers and dwellings. Survey response rates affect the reliability of the survey data reported, therefore care should be taken in interpreting these data.

(b) Year ending 30 June 2002.

(c) At 30 June 2002.

(d) These two figures do not add up to the total number of Indigenous households assisted by community housing providers at 30 June 2002 (which is 2,198). In most cases where a provider has more than one target group (including Indigenous people), the provider reports 'People in multiple target group', which means that not all providers targeted to Indigenous people are identified.

(e) Victoria did not supply data on the number of Indigenous households as these data are not applicable to the Community Housing Program and Indigenous households access accommodation through the General Rental Program and housing managed by the Aboriginal Housing Program.

(f) Northern Territory provided administrative data only (number of dwellings and number of providers). Only limited data are available for the Northern Territory, as the survey was not carried out due to the small number of community housing providers and community housing tenants.

Source: AIHW 2003l.

Commonwealth Rent Assistance

There were 19,788 Indigenous income units who received CRA during the week ending 30 June 2001, which was around 2% of the total number of income units (944,931) receiving CRA for this period (table 5.6).

In relation to location, the highest proportion of Indigenous income units (39%) were living in Inner Regional areas, followed by Outer Regional areas (27%) and Major Cities (26%). The other 8% lived in Remote and Very Remote areas. Only the Northern Territory had a substantial proportion of recipients living in Remote and Very Remote areas (40%). For all CRA income units across Australia only 1% were in Remote areas.

5.6 INCOME UNITS RECEIVING CRA(a) — WEEK ENDING 30 JUNE 2001(b)

		Remoteness Area					
	Units	*Major City*	*Inner Regional*	*Outer Regional*	*Remote*	*Very Remote*	*Total*
Indigenous income units							
New South Wales	no.	1 324	4 082	1 153	258	43	6 860
Victoria	no.	481	475	179	—	. .	1 135
Queensland	no.	2 185	2 058	2 741	327	219	7 530
South Australia	no.	335	212	167	(c)	(c)	755
Western Australia	no.	705	545	430	211	126	2 017
Tasmania	no.	. .	370	199	(d)	(d)	576
Northern Territory	no.	. .	. .	492	238	91	821
Australian Capital Territory	no.	(e)	(e)	. .	. .	. .	94
Australia	no.	5 124	7 742	5 361	1 057	504	19 788
Indigenous income units							
New South Wales	%	19.3	59.5	16.8	3.8	0.6	100.0
Victoria	%	42.4	41.9	15.8	—	. .	100.0
Queensland	%	29.0	27.3	36.4	4.3	2.9	100.0
South Australia	%	44.4	28.1	22.1	(c)	(c)	100.0
Western Australia	%	35.0	27.0	21.3	10.5	6.2	100.0
Tasmania	%	. .	64.2	34.5	(d)	(d)	100.0
Northern Territory	%	. .	. .	59.9	29.0	11.1	100.0
Australian Capital Territory	%	(e)	(e)	. .	. .	. .	100.0
Australia	%	25.9	39.1	27.1	5.3	2.5	100.0
All income units							
Australia	no.	469 532	376 781	88 000	8 143	2 475	944 931
Australia	%	49.7	39.9	9.3	0.9	0.3	100.0

(a) Income units receiving CRA, Remoteness Area by states and territories, week ending 30 June 2001.

(b) includes income units that received CRA during the week ending 30 June 2002 and had an ongoing entitlement to CRA.

(c) For confidentiality reasons, the number of income units in South Australia receiving CRA in Remote and Very Remote areas have been combined. There were 41 income units and proportions have not been calculated.

(d) For confidentiality reasons, the number of income units in Tasmania receiving CRA in Remote and Very Remote areas have been combined. There were seven income units and proportions have not been calculated.

(e) For confidentiality reasons, the number of income units in the Australian Capital Territory receiving CRA in Major City and Inner Regional areas have been combined and included under Major City. There were 94 income units.

Source: FaCS housing data set with Commonwealth Rent Assistance June 2001.

Other housing assistance

There were 1,903 instances of PRA received by Indigenous households for the year ending 30 June 2002, which represents 1% of the total assistance received by all households for that period. There was a total of 148 instances of HPA received by Indigenous households for the year ending 30 June 2002, which represents less than 1% of assistance received by all households. At least 2,468 Indigenous households received tenancy management assistance under the CAP for the year ending 30 June 2002, which represents 15% of the total number of households receiving this assistance.

More information about households and people assisted by crisis accommodation is provided in the next section on programs for homeless people.

5.7 OTHER HOUSING ASSISTANCE, INSTANCES OF ASSISTANCE FOR YEAR ENDING 30 JUNE 2002(a)

	Indigenous households									*All households*
Program	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Aust.*	*Aust.*
PRIVATE RENT ASSISTANCE										
Bond loans	—	—	n.a.	529	—	299	80	n.a.	908	82 976
Rental grants/subsidies	n.a.	n.a.	n.a.	620	. .	70	. .	. .	690	49 537
Relocation expenses	n.a.	n.a.	. .	. .	. .	16	. .	. .	16	3 301
Other	n.a.	n.a.	. .	. .	. .	289	. .	. .	289	10 517
Total	n.a.	n.a.	n.a.	*1 149*	—	*674*	80	n.a.	*1 903*	*146 331*
HOME PURCHASE ASSISTANCE										
Direct lending	—	n.a.	2	n.a.	46	n.a.	12	. .	60	7 265
Deposit assistance	. .	. .	1	. .	. .	n.a.	n.a.	. .	1	749
Interest rate assistance	. .	. .	2	n.a.	16	. .	10	. .	28	1 324
Mortgage relief	n.a.	n.a.	1	n.a.	. .	. .	. .	n.a.	1	202
Home purchase advisory and counselling services	n.a.	. .	. .	. .	46	. .	. .	. .	46	21 442
Other	. .	n.a.	1	. .	11	. .	. .	. .	12	896
Total	n.a.	n.a.	*7*	n.a.	*119*	n.a.	*22*	n.a.	*148*	*31 878*
CRISIS ACCOMMODATION PROGRAM										
Tenancy management	n.a.	n.a.	n.a.	n.a.	2 468	n.a.	n.a.	n.a.	2 468	16 366

(a) The number of households assisted is not exact, as counts for separate types of assistance have been added and in some cases may result in double-counting. For more information about types of assistance, see AIHW 2002i, 2002j and 2002k.

Source: AIHW 2002i, 2002j, 2002k.

PROGRAMS FOR HOMELESS PEOPLE

The Supported Accommodation Assistance Program (SAAP) is jointly funded and managed by the Commonwealth and state governments to provide assistance to homeless people. The program aims to help them achieve self-reliance and independence. Families, single people, young people, and women and children who are escaping domestic violence are assisted under the program (AIHW 2002f). SAAP provides temporary accommodation and support services, such as domestic violence counselling, employment assistance and living skills development.

In the year 2001–02, Aboriginal and Torres Strait Islander peoples made up 17% of all adults or unaccompanied children assisted by SAAP. The number of Indigenous SAAP clients constitutes a substantial over-representation of this population group, which was about 2% of the total Australian adult population during this period (table 5.8). This over-representation was also substantial for every state and territory. For example, in Victoria, Indigenous clients were over-represented in SAAP (5%) by more than 10 times compared to the proportion of Aboriginal or Torres Strait Islander peoples in the general Victorian population (0.4%). In the Northern Territory, almost one-quarter of the population are Indigenous while more than half of all SAAP clients (53%) identified as Indigenous.

5.8 INDIGENOUS SAAP CLIENTS AGED 15 YEARS OR MORE BY STATE AND TERRITORY(a)(b)(c)

	Clients identified as Indigenous	*Clients identified as Indigenous as a proportion of all SAAP clients*	*Indigenous adults as a proportion of total adult population*
	no.	*%*	*%*
New South Wales	4 200	16.1	1.4
Victoria	1 450	5.1	0.4
Queensland	4 250	23.4	2.5
South Australia	1 200	13.9	1.2
Western Australia	2 900	33.2	2.5
Tasmania	300	9.3	2.8
Northern Territory	1 600	53.1	24.2
Australian Capital Territory	200	11.5	0.9
Australia(d)	**15 500**	**16.6**	**1.7**

(a) SAAP clients aged 15 years or more identifying as Indigenous by state and territory and per head of Australian population, 2001–02.

(b) Client figures for states and territories include multiple uses of the program.

(c) Figures have been weighted to adjust for non-participation and non-consent.

(d) State figures do not add to Australian total because clients can visit more than one state.

Source: AIHW SAAP database; ABS 1998b.

During the 2001–02 reporting period, 54% of all SAAP clients were female, but 69% of Indigenous clients were female (table 5.9). Indigenous female clients were over-represented in all age groups compared to the proportion of female SAAP clients. Indigenous female clients also outnumbered Indigenous male clients in all age categories except the category 55–59 years where there was a slightly higher proportion of Indigenous males. This compares to all SAAP clients where males made up a higher proportion than females in all age groups from 45 years and over. Thus, while Indigenous peoples were more likely to be supported by SAAP than non-Indigenous peoples, this trend was stronger among women than men.

5.9 SAAP CLIENTS, BY AGE AND GENDER(a)(b)(c) — 2001–02

		Indigenous SAAP clients		*All SAAP clients*		*Indigenous Australian population*	
	Units	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*
Age group (years)							
Under 15	%	33.8	66.2	41.7	58.3	51.1	48.9
15–17	%	34.9	65.1	39.9	60.1	50.6	49.4
18–19	%	33.1	66.9	43.8	56.2	50.9	49.1
20–24	%	23.2	76.8	44.4	55.6	50.2	49.8
25–29	%	23.8	76.2	45.5	54.5	49.0	51.0
30–34	%	27.8	72.2	43.6	56.4	47.4	52.6
35–39	%	32.9	67.1	44.4	55.6	47.1	52.9
40–44	%	39.9	60.1	48.3	51.7	47.3	52.7
45–49	%	43.3	56.7	55.1	44.9	47.3	52.7
50–54	%	42.8	57.2	58.0	42.0	47.6	52.4
55–59	%	52.9	47.1	62.9	37.1	48.3	51.7
60–64	%	47.8	52.2	64.6	35.4	46.0	54.0
65 and over	%	47.5	52.5	64.3	35.7	42.3	57.7
Total							
Proportion	%	31.2	68.8	46.4	53.6	49.4	50.6
Number	no.	4 800	10 600	35 850	41 450	211 100	216 000

(a) SAAP clients identified as Indigenous by age and gender and compared to all SAAP clients and Indigenous Australian population.

(b) Number excluded due to errors and omissions (weighted): 565.

(c) Figures have been weighted to adjust for agency non-participation and client non-consent.

Source: AIHW SAAP database; ABS 1998b.

The higher proportion of Indigenous female clients is reflected in data on the main reasons for seeking SAAP assistance. In 2001–02, 33% of Indigenous clients who accessed services under the SAAP program were reported to be escaping domestic violence. The comparable figure for the non-Indigenous client population was 19% (table 5.10). Proportions for the other main reasons given for seeking assistance did not differ greatly for Indigenous and non-Indigenous clients. For example, drug, alcohol or substance abuse was the main reason for seeking assistance in 5% of support periods to Indigenous clients compared to 6% for non-Indigenous clients. The exception was accommodation difficulties, which was a more common reason for seeking assistance among non-Indigenous clients.

5.10 MAIN REASON FOR SEEKING SAAP ASSISTANCE(a)(b)(c)(d)

Main reason for seeking assistance	*Units*	*Indigenous*	*Non-Indigenous*	*Total*
Accommodation difficulties(e)	%	18.3	24.9	23.8
Relationship/family breakdown(f)	%	16.3	18.5	18.1
Sexual/physical/emotional abuse	%	4.5	3.5	3.7
Domestic violence	%	33.3	19.2	21.5
Financial difficulty	%	6.4	9.6	9.1
Gambling	%	0.1	0.3	0.3
Drug/alcohol/substance abuse	%	5.2	5.7	5.6
Recently left institution	%	1.4	1.7	1.7
Psychiatric illness	%	0.6	1.9	1.7
Recent arrival to area with no means of support	%	6.3	5.6	5.7
Itinerant	%	3.2	2.9	2.9
Other	%	4.3	6.2	5.9
Total	%	100.0	100.0	100.0
Total	no.	20 800	104 000	124 800

(a) SAAP support periods: main reason for seeking SAAP assistance among Indigenous and non-Indigenous clients, 2001–02.

(b) Number excluded due to errors and omissions (weighted): 9,016.

(c) Table excludes high-volume records because not all items were included on the high-volume form.

(d Figures have been weighted to adjust for agency non-participation and client non-consent.

(e) Usual accommodation unavailable; Eviction/previous accommodation ended; Emergency accommodation ended.

(f) Time out from family/other situation; Interpersonal conflict.

Source: AIHW SAAP database.

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' living arrangements and income source both before and after their use of SAAP services. The data presented in tables 5.11 and 5.12 relate only to support periods where both before and after information on clients' living arrangements and income source were provided. Instances where only before or only after information were provided have been excluded. As such, caution should be exercised in assessing these data because they do not necessarily represent a complete picture of the population. It is more likely that the excluded data relate to a specific group of clients who received brief crisis assistance and did not provide full information on their circumstances either before or after support.

For Indigenous clients there were only small changes before and after assistance in the proportions in different types of accommodation. The main change occurred in the proportion of clients in public or community housing which increased from 25% before assistance to 27% after assistance (table 5.11). For non-Indigenous clients there was a larger increase in the proportion of clients in public or community housing (from 8% before assistance to 15% after) and some increase in the proportion in private rental accommodation (from 19% to 21%).

5.11 TYPE OF HOUSING IMMEDIATELY BEFORE AND AFTER SAAP SUPPORT PERIODS(a)(b)(c)(d) — 2001–02

Type of accommodation	*Units*	*Before*	*After*
INDIGENOUS			
SAAP or other emergency housing	%	24.2	24.8
Living rent-free in house or flat	%	12.1	12.2
Private rental	%	8.1	8.8
Public or community housing	%	24.7	26.5
Rooming house/hostel/hotel/caravan	%	5.2	5.9
Boarding in a private home	%	13.0	12.0
Other	%	2.2	2.7
Living in a car/tent/park/street/squat	%	6.7	3.4
Institutional	%	3.8	3.8
Total	*%*	*100.0*	*100.0*
Total with valid data	no.	13 700	13 700
NON-INDIGENOUS			
SAAP or other emergency housing	%	17.7	17.6
Living rent-free in house or flat	%	14.0	11.7
Private rental	%	18.9	21.2
Public or community housing	%	8.3	14.8
Rooming house/hostel/hotel/caravan	%	7.8	8.7
Boarding in a private home	%	13.9	12.4
Other	%	6.9	6.3
Living in a car/tent/park/street/squat	%	7.9	3.0
Institutional	%	4.6	4.3
Total	*%*	*100.0*	*100.0*
Total with valid data	no.	58 400	58 400

(a) SAAP support periods: type of housing immediately before and after SAAP support of Indigenous and non-Indigenous clients.

(b) Number excluded due to errors and omissions for both Indigenous and non-Indigenous: 963.

(c) Table excludes high-volume records because not all items were included on the high-volume form.

(d) Figures have been weighted to adjust for agency non-participation and client non-consent.

Source: AIHW SAAP database.

In relation to income source for Indigenous clients there were only small changes in the proportions with different sources of income before and after assistance (AIHW 2002g). For example, the proportion of Indigenous clients on government pension or benefit increased from 90% before assistance to 91% after assistance and the proportion with no income decreased from 6% to 5% (table 5.12). For non-Indigenous clients the changes were greater with the proportion on government pension or benefit increasing from 82% before assistance to 85% after assistance and the proportion with no income decreasing from 9% to 6%.

5.12 PRIMARY INCOME SOURCE IMMEDIATELY BEFORE AND AFTER SAAP SUPPORT PERIODS (a)(b)(c)(d) — 2001–02

Source of income	*Units*	*Before*	*After*
INDIGENOUS			
No income	%	5.9	4.6
No income, awaiting pension/benefit	%	0.7	0.7
Government pension/benefit	%	90.1	91.1
Other	%	3.3	3.6
Total	%	*100.0*	*100.0*
Total with valid data	no.	16 800	16 800
NON-INDIGENOUS			
No income	%	9.2	6.0
No income, awaiting pension/benefit	%	1.5	1.1
Government pension/benefit	%	81.7	84.6
Other	%	7.6	8.2
Total	%	*100.0*	*100.0*
Total with valid data	no.	70 200	70 200

(a) SAAP support periods: primary income source immediately before and after SAAP support of Indigenous and non-Indigenous clients.

(b) Number excluded due to errors and omissions for both Indigenous and non-Indigenous: 1,018.

(c) Table excludes high-volume records because not all items were included on the high-volume form.

(d) Figures have been weighted to adjust for agency non-participation and client non-consent.

Source: AIHW SAAP database.

CHILD CARE

Child care services provide care and development activities for children generally aged 12 years and younger. These services enable parents to participate in employment, education and training, community activities and personal activities — they may also be used for family support reasons. As a condition of government funding and regulation, child care services must promote and enhance children's emotional, intellectual, social and physical development. Preschool services offer educational and developmental programs for children in the year or two before full-time school.

The Commonwealth Department of Family and Community Services (FaCS) supports most child care services through Commonwealth Child Care Support (AIHW 2001a). All state and territory governments fund dedicated preschool services for children in the year or two before they begin school full-time. They also provide some funding for child care services, either solely or in conjunction with the Commonwealth. The Commonwealth Department of Education, Science and Training (DEST) provides supplementary funding for Indigenous children enrolled in state and territory funded preschools under the Indigenous Education Strategic Initiatives Programme (IESIP).

CHILD CARE *continued*

While the Commonwealth supports child care services such as long day care centres, family day care services and outside hours care services (AIHW 2001a), it also funds culturally specific services for Aboriginal and Torres Strait Islander children in the form of:

- Multifunctional Aboriginal Children's Services (MACS), which provide flexible services to meet Aboriginal and Torres Strait Islander children's social and developmental needs. MACS offer care for children under school age and for school age children, including long day care, playgroups, before and after school care and school holiday care, and cultural programs
- Aboriginal playgroups and enrichment programs. Aboriginal playgroups provide opportunities for children under school age and their parents to socialise and interact with one another. Enrichment programs provide supervised care, organised activities, homework centres and nutrition services for school age children.

Although not specifically for Indigenous children, the Commonwealth also funds mobile children's services which visit remote areas and provide occasional care, school holiday care, playgroups, story telling, games and toy library services for children and information and support for parents.

It is important to note that Aboriginal and Torres Strait Islander children attend Commonwealth supported child care services other than Indigenous specific services and that not all children who attend MACS are Indigenous.

States and territories also fund culturally specific child care and preschool services for Aboriginal and Torres Strait Islander children. For instance, the Queensland Department of Families, through the Remote Area Aboriginal and Torres Strait Islander Child Care Program, provides funding for the operation of a range of children's services to meet the cultural and community needs in remote area communities. These include long day care centres, children's activity programs and playgroups.

Nationally, comprehensive and comparable data on children using child care and preschool services across Australia are not available. The first stage of a National Minimum Data Set for children's services, however, has been developed and has been pilot tested (Chapter 11).

Since most child care services are supported by FaCS, the FaCS Census of Child Care Services is currently the most comprehensive source of data on Indigenous children attending child care services in Australia.

In 2002, 1.8% of children using Commonwealth supported child care services were Indigenous, whereas Indigenous children were estimated to constitute 4.6% of the population aged 0–12 years in June 2001 (table 5.13). Not surprisingly, Indigenous Specific Services — Aboriginal Playgroups and Enrichment Services (91%) and MACS (79%) — had the highest proportions of Indigenous children. When looking at the total number of Indigenous children using Commonwealth-supported services, however, just under half (47%) were in long day care centres.

5.13 CHILDREN IN COMMONWEALTH-SUPPORTED CHILD CARE — MAY 2002

	Indigenous	*Non-Indigenous*	*Total children*	*Children who are Indigenous(a)*
Service type	*%*	*%*	*no.*	*%*
Long day care centres	46.5	56.5	309 071	1.5
Family day care	9.4	17.2	93 433	1.0
Occasional care	1.1	1.5	8 109	1.4
Multifunctional Aboriginal Children's Services	12.0	0.1	1 536	79.2
Multifunctional Children's Services	0.5	0.2	1 048	4.6
Before/after school care (Outside of School Hours Care) Services	17.7	24.0	131 376	1.4
Vacation care	(b)	(b)	82 335	1.7
Mobile and Toy Library Services	2.1	0.4	2 336	9.1
Aboriginal Playgroups and Enrichment Services	10.7	0.0	1 189	91.2
In-home Care Services	(c)0.0	0.2	1 156	0.3
Total(d)	*100.0*	*100.0*	*549 254*	*1.8*

(a) Within each service type.

(b) Totals exclude children in vacation care, since many of these children would also have been attending before/after school care.

(c) Less than 0.1% or four children.

(d) Total number of Indigenous children in Commonwealth-supported child care as at May 2002 was 10,139. Total number of non-Indigenous children for the same period was 539,115.

Source: Preliminary 2002 Commonwealth Child Care Census data. Data has not been weighted for non-responding services.

Some data are also available on the number of Indigenous children enrolled in state and territory funded preschool services from the annual census conducted for the Commonwealth Department of Education, Science and Training. Data for the latest year, 2001, however, are not comprehensive since children attending preschool in Queensland were excluded from the data collection. In 2001, 7,434 Aboriginal and Torres Strait Islander children were enrolled in state- and territory-funded preschools in all jurisdictions, excluding Queensland. In 2000, there were 3,447 Indigenous children attending state-funded preschools in Queensland (Data Analysis Australia Pty Ltd 2002).

CHILD PROTECTION

Child protection services are the responsibility of the community services departments in each state or territory. Children who come into contact with the community services departments for protective reasons include those:

- who have been abused, neglected or otherwise harmed
- whose parents cannot provide adequate care or protection.

The community services departments provide assistance to these children through the provision of, or referral to, a wide range of services. Non-government agencies are often contracted by the departments to provide these services which range from family support to the placement of children in out-of-home care.

Children who are seen to be in need of protection can come to the attention of child protection authorities through a report by an individual or organisation or by children themselves. These reports are assessed by the child protection agencies and in cases where there is a risk of harm to the child or evidence of abuse or neglect they are classified as a notification. Most notifications are then investigated and classified as either ‘substantiated’ or ‘not substantiated’ depending on the degree of risk of harm to the child. A range of services may then be provided to the child and the child’s family.

In more serious cases, the department may also apply to the relevant court to place a child under a care and protection order. Care and protection orders vary between jurisdictions but can provide for a supervisory role for the department or transfer of legal guardianship to the department. The issuing of a care and protection order is often a legal requirement if a child is to be placed in out-of-home care. This option can be used to protect the child from further harm, where there is family conflict and ‘time out’ is needed, or where parents are ill or unable to care for the child.

The three areas of child protection services for which national data are collected are:

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

Each state and territory has its own legislation, policies and practices in relation to child protection, so the data provided by jurisdictions are not strictly comparable. This is particularly the case with the data on notifications, investigations and substantiations, where jurisdictions use different definitions and processes (AIHW 2003b). It is also worth noting that the quality of the Indigenous data varies across jurisdictions due to differences in the practices used to identify and record the Indigenous status of children and young people in the child protection system.

The rates of Aboriginal and Torres Strait Islander children entering the child protection system are higher than the rates for non-Indigenous children. In 2001–02 the rate of Indigenous children in substantiations was higher in all states and territories except Tasmania, being up to nearly eight times the rate for non-Indigenous children in Victoria and Western Australia (table 5.14).

5.14 CHILDREN WHO WERE THE SUBJECT OF A CHILD PROTECTION SUBSTANTIATION — 2001–02

	Indigenous		*Non-Indigenous*		
	no.	*rate(a)*	*no.*	*rate(a)*	*Rate ratio(b)*
New South Wales	913	15.3	6 361	4.3	3.6
Victoria	579	48.1	6 569	6.1	7.9
Queensland	795	14.3	6 553	7.9	1.8
South Australia	346	31.6	1 407	4.4	7.2
Western Australia	386	13.5	718	1.7	7.9
Tasmania	2	0.3	151	1.4	0.2
Northern Territory	222	9.7	109	3.2	3.0
Australian Capital Territory	11	6.5	191	2.6	2.5
Australia	**3 254**	**16.3**	**22 059**	**5.1**	**3.2**

(a) Rates per 1,000 children aged 0–16 years. The Indigenous rates were calculated using 2001 Census data and should not be compared with the Indigenous rates published for previous years.

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

Source: AIHW 2003b.

Substantiations are classified into one of the following four categories depending on the main type of abuse or neglect that has occurred: physical abuse, sexual abuse, emotional abuse, or neglect. It is not always clear what type of abuse, neglect or harm has occurred, and how a substantiation is classified varies according to the policies and practices of the different jurisdictions. New South Wales has an additional category of ‘other’ that includes children identified as being at high risk but with no identifiable harm or injury.

The pattern of substantiated abuse and neglect for Aboriginal and Torres Strait Islander children differs from the pattern for other children. Indigenous children were much more likely to be the subject of a substantiation of neglect than other children. For example, in Western Australia 50% of Indigenous children in substantiations were the subject of a substantiation of neglect, compared with 24% of non-Indigenous children. In Queensland the corresponding percentages were 50% and 37% respectively (table 5.15).

It is important to note that these variations in the distribution of types of abuse or neglect across jurisdictions are likely to be the result of differences in what is classified as a substantiation as well as differences in the types of incidents that are substantiated. In Western Australia and Tasmania a relatively high proportion of substantiations were classified as either 'physical abuse' or 'sexual abuse', as the child protection data from these two states include only child maltreatment cases; cases which require a family support response are dealt with and counted separately.

Victoria, on the other hand, had a relatively high proportion of substantiations that were classified as 'emotional abuse', reflecting the broader range of incidents that are included in child protection notifications and substantiations. The relatively low rate of emotional abuse in New South Wales reflects the policy of classifying many of these matters as carer/family issues rather than as a substantiation of harm. The high proportion of substantiations classified as 'neglect' in Queensland reflects the policies in that state which focus on identifying the protective needs of a child and assessing whether parents have protected the child from harm or risk of harm.

5.15 CHILDREN WHO WERE THE SUBJECT OF A SUBSTANTIATION BY TYPE OF ABUSE OR NEGLECT

	New South Wales	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*	*Northern Territory*	*Australian Capital Territory*
	%	%	%	%	%	%	%	%
INDIGENOUS CHILDREN								
Physical abuse	31	22	23	30	25	100	43	18
Sexual abuse	17	4	5	4	15	—	9	9
Emotional abuse	13	49	21	27	9	—	12	45
Neglect	26	24	50	39	50	—	36	27
Other(a)	13	. .	. .	. .	. .	. .	. .	. .
Total	100	100	100	100	100	100	100	100
NON-INDIGENOUS CHILDREN								
Physical abuse	29	26	24	32	29	42	45	29
Sexual abuse	30	8	6	10	37	28	9	5
Emotional abuse	10	44	33	23	11	6	25	40
Neglect	15	23	37	35	24	24	20	26
Other(a)	15	. .	. .	. .	. .	. .	. .	. .
Total	100	100	100	100	100	100	100	100

(a) The category 'other' used for New South Wales comprises children identified as being at high risk but with no identifiable injury.

Source: AIHW 2003b.

The rate of Aboriginal and Torres Strait Islander children being placed under care and protection orders and in out-of-home care was around six times the rate for other Australian children (table 5.16). The rate ratios varied considerably by jurisdiction and were highest in Victoria (10.4 for children on care and protection orders and 13.0 for children in out-of-home care) and lowest in Tasmania (0.7 for children on care and protection orders and 0.8 for children in out-of-home care).

5.16 RATES OF CHILDREN ON CARE AND PROTECTION ORDERS AND IN OUT-OF-HOME CARE — AT 30 JUNE 2002(a)

	Care and protection orders			*Out-of-home care*		
	Indigenous children	*Non-Indigenous children*		*Indigenous children*	*Non-Indigenous children*	
	rate	*rate*	*rate ratio(b)*	*rate*	*rate*	*rate ratio(b)*
New South Wales(c)	31.9	4.0	8.0	33.5	3.8	8.8
Victoria	40.6	3.9	10.4	39.0	3.0	13.0
Queensland	15.1	3.3	4.6	12.2	2.9	4.2
South Australia	20.3	3.1	6.5	20.2	2.8	7.2
Western Australia	15.7	2.0	7.9	17.1	2.2	7.8
Tasmania	2.8	4.0	0.7	3.6	4.6	0.8
Northern Territory	5.2	1.9	2.7	4.4	1.6	2.8
Australian Capital Territory	18.1	2.9	6.2	15.3	2.5	6.1
Total	**20.5**	**3.5**	**5.9**	**20.1**	**3.2**	**6.3**

(a) Rates per 1,000 children aged 0–17 years. Rates were calculated using 2001 Census data and should not be compared with the Indigenous rates published for previous years.

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

(c) These data exclude children on supervisory orders.

Source: AIHW 2003b.

One of the most significant changes in child welfare policy in relation to Indigenous children was the introduction of the Aboriginal Child Placement Principle (box 5.17). The Principle is based on the premise that Aboriginal children are better off cared for in Aboriginal families and communities. All jurisdictions have adopted the Aboriginal Child Placement Principle either in legislation or policy.

5.17 THE ABORIGINAL CHILD PLACEMENT PRINCIPLE

The Aboriginal Child Placement Principle outlines a preference for the placement of Aboriginal and Torres Strait Islander children with other Aboriginal and Torres Strait Islander people when they are placed outside their family (Lock 1997). The Principle has the following order of preference for the placement of Aboriginal and Torres Strait Islander children:

- with the child's extended family
- within the child's Indigenous community
- with other Indigenous people.

The Principle covers the placement of Indigenous children in out-of-home care as well as the adoption of Indigenous children.

The impact of the Principle is reflected in the relatively high proportion of Indigenous children who are placed with Indigenous caregivers or with relatives, though this proportion varies by state and territory. At 30 June 2002 79% of Indigenous children in out-of-home care in Australia were placed in accordance with the Principle (table 5.18). This proportion ranged from 45% in Tasmania to 88% in New South Wales, which also had the highest proportion (58%) of Indigenous child placements within the child's extended family.

5.18 ABORIGINAL AND TORRES STRAIT ISLANDER CHILDREN IN OUT-OF-HOME CARE(a) — 30 JUNE 2002

Type of placement	*Units*	*NSW*	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Total*
Placed in accordance with the Principle										
Indigenous relative/kin	%	58	20	24	18	49	17	21	19	43
Other Indigenous caregiver	%	16	18	27	48	17	7	52	44	21
Non-Indigenous relative/kin	%	13	13	16	6	7	21	(b)n.a.	7	12
Indigenous residential care	%	—	4	1	—	8	—	—	4	2
Total in accordance with the Principle	*%*	*88*	*55*	*69*	*72*	*80*	*45*	*74*	*74*	*79*
Not placed in accordance with the Principle										
Other non-Indigenous caregiver	%	10	36	30	27	15	28	20	26	19
Non-Indigenous residential care	%	1	9	—	1	5	28	6	—	3
Total not placed in accordance with the Principle	*%*	*12*	*45*	*31*	*28*	*20*	*55*	*26*	*26*	*21*
Total	*%*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*	*100*
Total	**no.**	**2 083**	**489**	**708**	**232**	**506**	**29**	**103**	**27**	**4 177**

(a) Whether placed in accordance with the Aboriginal Child Placement Principle. This table does not include Indigenous children who were living independently or whose living arrangements were unknown.

(b) The relationship of the caregiver to children placed with non-Indigenous caregivers was not available and these children were placed in the 'other' category.

Source: AIHW 2003b.

ADOPTION

The formal adoption of Aboriginal and Torres Strait Islander children has not been a common practice in recent years. In many cases where Aboriginal or Torres Strait Islander children cannot live with their birth parents, informal arrangements are made for them to live with a relative or other member of the community (HREOC 1997). Arrangements of this type are generally preferred and adoption orders are only made when informal alternatives are judged not to be in the best interests of the child.

Between 1998–99 and 2001–02 there were only 15 adoptions of Aboriginal and Torres Strait Islander children in Australia. Five of these were 'known' child adoptions where the adoptive parents had a pre-existing relationship with the child (e.g. relatives/kin or carers), and 10 were 'placement' adoptions where there was no pre-existing relationship between the parent and the child (table 5.19). Most of the adoptions of Aboriginal and Torres Strait Islander children in the four-year period occurred in New South Wales (12), with one each in Victoria, Queensland and Western Australia. There were no adoptions of Indigenous children in South Australia, Tasmania, the Australian Capital Territory or the Northern Territory.

The Aboriginal Child Placement Principle (box 5.17) also covers the adoption of Indigenous children. Of the 10 Indigenous placement adoptions between 1998–99 and 2001–02, 4 were adoptions by Indigenous parents and 6 by non-Indigenous parents (AIHW 2003a).

5.19 ADOPTIONS OF INDIGENOUS CHILDREN — 1998–99 TO 2001–02(a)

		Placement adoptions(b)			
	'Known' child adoptions(c)	*Indigenous parents*	*Non-Indigenous parents*	*Total*	*Total*
New South Wales	5	2	5	7	12
Other states and territories	—	2	1	—	3
Australia	5	4	6	10	15

(a) Adoptions of Aboriginal and Torres Strait Islander children by type of adoption and Indigenous status of the adoptive parents, by state and territory. Adoptive parents were counted as Indigenous where at least one of the parents was Indigenous.

(b) Placement adoptions are adoptions by parents who have no pre-existing relationship with the child.

(c) 'Known' child adoptions are adoptions by parents who have pre-existing relationship to the child for example, relatives/kin or foster carers.

Source: AIHW 2003a.

JUVENILE JUSTICE

The 'juvenile justice system' is responsible for dealing with young people who have committed or allegedly committed an offence while considered to be a 'juvenile'. Juvenile justice is a state and territory responsibility and each has its own legislation that dictates the policies and practices of juvenile justice within its jurisdiction. Whilst this varies in detail, the intent of the legislation is very similar across Australia. For example, key elements of juvenile justice in all jurisdictions include diversion of young people from court where appropriate; incarceration as a last resort; victim's rights; the acceptance of responsibility by the offender for his or her behaviour; and community safety.

One of the ways in which the legislation varies across states and territories is in the definition of a 'juvenile'. In Queensland juvenile justice legislation applies to those people who were aged 10–16 years of age at the time of offence. In most other jurisdictions, however, those aged 10–17 years of age are included as a juvenile. Victoria has a dual track system that provides a sentencing option for adult courts, allowing appropriate 17–20 year olds to be sentenced to detention in juvenile justice facilities.

The juvenile justice system in each state and territory is comprised of several organisations, with each having a different primary role and responsibility in dealing with young offenders:

- The police, who are usually the young person's first point of contact with the justice system. Where considered appropriate, the police may administer warnings, cautions and in some jurisdictions use conferencing to divert the juvenile from proceeding to court.
- The courts (usually a special children's or youth court), where matters regarding the charges against the young person are heard. The courts are largely responsible for decisions regarding bail (and remand) and sentencing options if the young person admits guilt or is found guilty by the court.

- The juvenile justice departments, that are responsible for the supervision of juveniles on a range of community based orders and supervised bail, and which are also responsible for the administration of juvenile detention centres.

There are currently only limited national data on young people in the juvenile justice system. The AIHW and all states and territories are working toward establishing a national data collection that will include young offenders who are on supervised community-based orders as well as detention centres. This data development work is outlined in more detail in the juvenile justice section of Chapter 11.

National data are available on the number of young people held in juvenile justice detention centres, either on remand or sentenced. Data for the years 1996–97 to 2000–01 are provided in tables 5.20 and 5.21. These young people represent only a small proportion of juveniles supervised by juvenile justice departments under some form of court order, and a much smaller proportion of the number of young people who are dealt with by the juvenile justice system as a whole. Many are diverted from court as the offences committed are relatively minor and a first offence. Of those young people who do go to court, most receive either non-supervised orders or community-based orders.

It should also be noted that the figures on people in juvenile detention centres provided in tables 5.20 and 5.21 are calculated by averaging the number of detainees reported at the end of each quarter of the financial year.

As a result of variations in legislation, and the relatively small number of both Indigenous people and young people in detention centres in some jurisdictions, care should be taken when comparing the data both across jurisdictions and across time. In particular, the rates per 100,000 population should be interpreted carefully as the population figures used in the calculations are experimental projections based on 1996 Census data. It should also be noted that the figures for Australia do not include Tasmania and therefore are not necessarily representative of the national situation.

Despite the limitations of the available data, tables 5.20 and 5.21 clearly show that the rates of incarceration in juvenile detention centres for Indigenous people aged 10–17 years are far higher than those for non-Indigenous Australians, in all jurisdictions. The data available for Australia (excluding Tasmania) indicate that in 2000–01, 43% of 10–17 year olds in detention centres were Indigenous. In comparison, it is estimated that less than 4% of the Australian population in that age group were Indigenous (at 30 June 2001).

The figures also indicate that the national rate of detention for Indigenous young people generally declined over the five-year period, from a high of 457 per 100,000 in 1997–98 to 322 per 100,000 in 2000–01. The rate of detention for non-Indigenous 10–17 year olds also declined, from 24 per 100,000 in 1996–97 and 21 per 100,000 in 1997–98 to 16 per 100,000 in 2000–01. As a result, the level of over-representation of Indigenous young people in detention centres declined slightly from 1997–98 (when the rate for Indigenous young people in a juvenile detention centre was 21 times that for non-Indigenous young people) to 2000–01 (20 times).

While national data are not available for other components of the juvenile justice system, state and territory information indicates that the rates for Indigenous young people charged by the police, facing court, and on community-based orders are higher than those for non-Indigenous young Australians.

The over-representation of Indigenous peoples in the justice system is not confined to young people, with Indigenous people being far more likely to be in an adult prison than non-Indigenous peoples. At 30 June 2001, almost 20% of prisoners in Australian prisons were Indigenous (ABS 2002h).

5.20 ESTIMATED AVERAGE NUMBER OF 10–17 YEAR OLDS IN JUVENILE DETENTION CENTRES — 1996–97 TO 2000–01(a)(b)

	New South Wales	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania(c)*	*Northern Territory*	*Australian Capital Territory*	*Australia(d)*
					INDIGENOUS				
1996–97	115	12	72	21	59	n.a.	13	3	294
1997–98	110	12	80	16	77	n.a.	18	3	315
1998–99	96	9	77	14	80	n.a.	17	2	295
1999–2000	91	8	60	13	77	n.a.	10	2	261
2000–01	86	7	53	13	71	n.a.	12	4	246
					NON-INDIGENOUS				
1996–97	232	64	54	62	43	n.a.	3	14	472
1997–98	193	63	64	42	45	n.a.	3	9	417
1998–99	189	63	56	27	45	n.a.	6	7	393
1999–2000	160	55	52	35	39	n.a.	5	9	355
2000–01	137	55	34	46	32	n.a.	5	13	322

(a) 'Estimated average number' is the average of the number of 10–17 year olds in juvenile corrective institutions on the last day of each quarter of the financial year (as reported by the institutions to the Australian Institute of Criminology).

(b) Excludes 10–17 year olds detained in adult prisons. The extent of this varies across jurisdictions. Nationally, at 30 June 2001, the ABS reported that there were 38 people aged less than 18 years of age in prison, with 12 of these being Indigenous (ABS 2002h). It also excludes people over the age of 17 who were held in juvenile detention centres.

(c) Tasmania report that the data provided to and published by the AIC for the years 1996–97 to 2000–01 may be inaccurate (due to the limitations of their previous data system's reporting capabilities). As a result that data for Tasmania are not reproduced here. Tasmania has recently developed a data system to allow for more accurate reporting of detention centre figures and will be providing revised figures in the future.

(d) Excludes Tasmania.

Source: AIC 2002; Cahill & Marshall 2002.

5.21 ESTIMATED AVERAGE NUMBER IN JUVENILE DETENTION CENTRES, PER 100,000 POPULATION(a)(b)(c)(d)(e)

	New South Wales	Victoria	Queensland	South Australia	Western Australia	Tasmania(f)	Northern Territory	Australian Capital Territory	Australia(g)
INDIGENOUS									
1996–97	570	314	369	524	568	n.a.	138	475	434
1997–98	527	292	401	379	709	n.a.	191	448	457
1998–99	445	215	375	330	710	n.a.	176	277	409
1999–2000	410	196	281	285	665	n.a.	100	352	352
2000–01	376	162	240	281	595	n.a.	122	615	322
NON-INDIGENOUS									
1996–97	35	13	14	30	29	n.a.	10	62	24
1997–98	29	13	17	20	30	n.a.	9	36	21
1998–99	28	13	14	13	30	n.a.	20	30	20
1999–2000	23	11	13	16	26	n.a.	20	36	18
2000–01	20	11	9	21	21	n.a.	18	53	16

(a) 'Estimated average number' is the average of the number of 10–17 year olds per 100,000 in juvenile corrective institutions on the last day of each quarter of the financial year (as reported by the institutions to the Australian Institute of Criminology) for 1996–97 to 2000–01.

(b) Excludes 10–17 year olds detained in adult prisons. The extent of this varies across jurisdictions. Nationally, at 30 June 2001 the ABS report that there were 38 people aged less than 18 years of age in prison, with 12 of these being Indigenous (ABS 2002h). It also excludes people over the age of 17 who are held in juvenile detention centres.

(c) Rates are calculated using estimates of population at 31 December. The Indigenous population estimate for 31 December was derived from population projections at 30 June of each year. The non-Indigenous population was calculated by subtracting the estimate for the Indigenous population from the total ERP population at 31 December.

(d) The rates for Indigenous people are indicative only and should be interpreted with care, due to the relatively small numbers involved and as population data used to calculate the rates are projections based on 1996 Census data. These rates should be revised when more up to date population estimates for the Indigenous population, based on 2001 Census data, are available from the ABS.

(e) The rates shown here for Indigenous people are higher than those published by the AIC as they use the Low series projections of population, whereas the AIC use the High series (see Cahill & Marshall 2002).

(f) Tasmania report that the data provided to and published by the AIC for the years 1996–97 to 2000–01 may be inaccurate (due to the limitations of their previous data system's reporting capabilities). As a result that data for Tasmania are not reproduced here. Tasmania has recently developed a data system to allow for more accurate reporting of detention centre figures and will be providing revised figures in the future.

(g) Excludes Tasmania.

Source: AIC 2002; Cahill & Marshall 2002.

DISABILITY SERVICES

Services funded under the Commonwealth–State Disability Agreement (CSDA) are designed for people who need ongoing support with everyday life activities. Under this agreement the Commonwealth has responsibility for planning, policy setting and management of employment services, whilst the states and territories are responsible for all other disability services. These include:

- accommodation support — services that provide accommodation to people with a disability or that provide the support needed for a person with a disability to remain in their existing accommodation
- community support — services that provide the support needed for a person to live in a non-institutional setting such as therapy, early childhood intervention, counselling and case management
- community access — services designed to provide opportunities for people with a disability to gain and use their abilities to enjoy their full potential for social independence
- respite — services that provide a short-term break for families and other voluntary caregivers of people with disabilities, while providing a positive experience for the person with a disability.

Advocacy, print disability and information services are considered joint responsibilities of the Commonwealth and the states and territories.

Information about the types and levels of disability services provided to the Aboriginal and Torres Strait Islander population can be obtained from the Minimum Data Set collected by agencies funded under the CSDA. This data set, which contains the standard question about Indigenous status, is collected and reported to the Australian Institute of Health and Welfare annually. It is based on a selected day, known as 'snapshot day', and includes questions about disability group, assistance needed, income and accommodation. The level to which these services are utilised on the snapshot day gives a national picture of an 'average' or 'typical' day for CSDA service providers, although it may not be a true picture for an individual agency, particularly one affected by regular variations (e.g. providers of school holiday programs).

On the snapshot day in 2002, an estimated 65,809 people were provided with 77,382 CSDA-funded services. Of these people, 1,670 (2.5%) reported that they were of Indigenous origin compared with 2.6% of people of Indigenous origin aged less than 65 in the Australian population. However, the number of 'not stated' responses exceeds the number of Indigenous consumers so these results should be interpreted with caution. The Indigenous status of 3,451 consumers (5.2%) was not known (AIHW 2003e).

The proportion of people who received CSDA services who were of Aboriginal and Torres Strait Islander origin varied by service type (table 5.22). Respite (5.1%) and community support (3.8%) services had an above-average proportion of Indigenous consumers. On the other hand, consumers of employment (1.8%) and community access (1.9%) services had a smaller Indigenous representation than in the overall CSDA population.

5.22 CONSUMERS OF CSDA-FUNDED SERVICES(a) ON A SNAPSHOT DAY, BY SERVICE GROUP — 2002

	Indigenous		*Non-Indigenous(b)*		*Total*	
Service group	*no.*	*%*	*no.*	*%*	*no.*	*%*
Accommodation	573	2.6	21 800	97.4	22 373	100.0
Community support	500	3.8	12 711	96.2	13 211	100.0
Community access	362	1.9	18 504	98.1	18 866	100.0
Respite	164	5.1	3 050	94.9	3 214	100.0
Employment	334	1.8	17 908	98.2	18 242	100.0
All service groups(c)	1 670	2.5	64 139	97.5	65 809	100.0

(a) Data for consumers of the following CSDA-funded service types were not collected: advocacy, information/referral, combined information/advocacy, mutual support/self-help groups, print disability/alternative formats of communication, research and evaluation, training and development, peak bodies and other support services.

(b) Includes 'not stated'.

(c) Consumer data for 'all service group' totals are estimates after use of a statistical linkage key to account for individuals who received more than one service on the snapshot day. Column totals may not be the sum of the components since individuals may have accessed more than one service type on the snapshot day.

Source: AIHW 2003e.

Data on the support needs of CSDA consumers are collected relating to nine life areas. These areas have been grouped into three main categories:

- activities of daily living (ADLs) — including self-care; mobility; and communication
- activities of independent living (AILs) — including interpersonal interactions and relationships; learning, applying knowledge and general tasks and demands; and domestic life
- activities of work, education and community living (AWECs) — including education; community (civic) and economic life; and working. This category is analysed for consumers aged five years and over, as consumers under five are allowed to respond 'not applicable due to age' for all three of these life areas.

Indigenous consumers of CSDA services reported a somewhat more frequent need for support than non-Indigenous consumers in all three of the support categories (table 5.23).

5.23 CONSUMERS OF CSDA-FUNDED SERVICES ON A SNAPSHOT DAY, BY FREQUENCY OF SUPPORT NEEDED(a)

	Indigenous		*Non-Indigenous(a)*		*Total*	
Frequency of support needed	*no.*	*%*	*no.*	*%*	*no.*	*%*
ACTIVITIES OF DAILY LIVING						
Always(b)	772	46.5	26 592	42.7	27 364	42.8
Sometimes	642	38.7	23 717	38.1	24 359	38.1
None but uses aids	51	3.1	2 190	3.5	2 241	3.5
None	194	11.7	9 782	15.7	9 976	15.6
Total(c)	*1 659*	*100.0*	*62 281*	*100.0*	*63 940*	*100.0*
ACTIVITIES OF INDEPENDENT LIVING						
Always(b)	906	55.1	30 921	50.2	31 827	50.3
Sometimes	653	39.7	26 103	42.4	26 756	42.3
None but uses aids	28	1.7	1 436	2.3	1 464	2.3
None	58	3.5	3 119	5.1	3 177	5.0
Total(d)	*1 645*	*100.0*	*61 579*	*100.0*	*63 224*	*100.0*
ACTIVITIES OF WORK, EDUCATION AND COMMUNITY LIVING (5 YEARS AND OVER)						
Always(b)	979	63.0	34 914	59.3	35 893	59.4
Sometimes	484	31.2	20 398	34.7	20 882	34.6
None but uses aids	29	1.9	1 215	2.1	1 244	2.1
None	61	3.9	2 334	4.0	2 395	4.0
Total(e)	*1 553*	*100.0*	*58 861*	*100.0*	*60 414*	*100.0*

(a) Includes not stated. Non-Indigenous totals include 3,451 consumers whose Indigenous status was missing.

(b) Unable to do or always needs help/supervision in this life area.

(c) Totals in the ADL group exclude 1,869 consumers whose support needs were not known.

(d) Totals in the AIL group exclude 2,585 consumers whose support needs were 'not applicable' or missing.

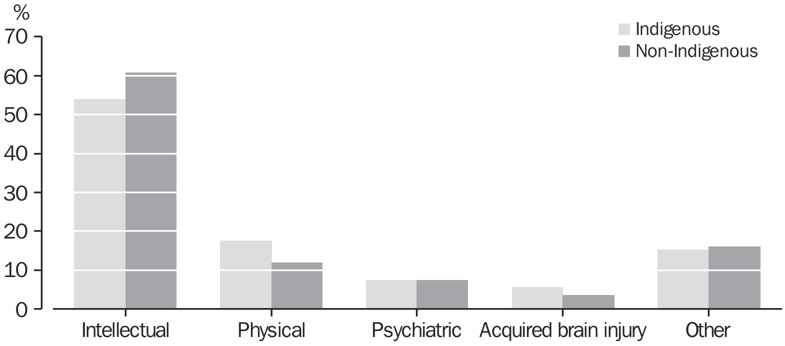
(e) Totals in the AWEC group exclude 1,908 consumers whose support needs were 'not applicable' or missing.

Source: AIHW 2003e.

For activities of daily living, nearly half (47%) of Indigenous consumers reported always needing help and a further 39% reported sometimes needing help. Almost all Indigenous consumers aged five years and over reported always or sometimes needing support, for activities of independent living (95%), and activities of work, education and community living (94%).

Over half (54%) of Indigenous consumers reported their primary disability as intellectual, followed by 18% with a physical primary disability, 7% with a psychiatric primary disability and 6% with an acquired brain injury (graph 5.24). Other primary disabilities included neurological, sensory and speech disabilities, specific learning/attention deficit disorder and autism. A higher proportion of Indigenous consumers had a physical disability or an acquired brain injury, and a lower proportion had an intellectual disability, compared to non-Indigenous consumers.

5.24 CONSUMERS OF CSDA-FUNDED SERVICES ON A SNAPSHOT DAY, BY DISABILITY GROUP — 2002

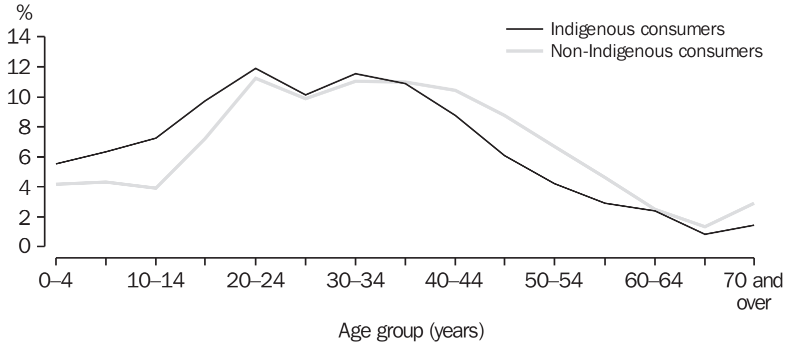


Source: AIHW 2003e.

Overall, Indigenous consumers of CSDA services were younger on average than non-Indigenous consumers (graph 5.25). The median age for Indigenous consumers was 29.4 years compared with 34.3 years for non-Indigenous consumers. About three-fifths (59%) of Indigenous consumers were aged between 20 and 49 years and 29% were aged under 20 years.

The level of use of disability services is not necessarily an adequate reflection of the level of disability in a community, nor the need for assistance, since there may be significant numbers of people with disabilities who do not access the services available. The 2002 Indigenous Social Survey will for the first time provide national information on the prevalence of disability in the Aboriginal and Torres Strait Islander population. Such information has not been available previously, partly due to problems of population sampling and to the differing interpretation of the concept of 'disability' between people in the Indigenous and non-Indigenous populations. Issues of comparability between the data collected for the Indigenous and non-Indigenous populations still remain. One of the roles of the Interim National Indigenous Disability Network is to give advice to the AIHW and ABS on Indigenous disability data collection.

5.25 CONSUMERS OF CSDA-FUNDED SERVICES ON A SNAPSHOT DAY, BY AGE — 2002



Source: AIHW 2003e.

AGED CARE

The range of services available to older Australians is extensive and could be argued to incorporate not only residential and community care but also primary and hospital care as main components of a formal system of care. The focus of this section is on services that are designed to provide care and support to older people living in the community and in formal residential aged care.

The government funds numerous programs designed to meet the care needs of older people. In determining the provision of these services consideration is given to issues of access and equity for defined special needs groups which include Indigenous Australians. Residential aged care is funded by the Commonwealth Government and provides accommodation and other support services such as domestic care, help with performing daily tasks, and medical care. Community Aged Care Packages are also Commonwealth Government funded, and support people who prefer to remain at home but who require care equivalent to low level care provided in residential care. The Home and Community Care Program is jointly funded by Commonwealth and state and territory governments. It provides community-based support services, such as home nursing, personal care, respite, domestic help, meals and transport to people who can be appropriately cared for in the community and can remain at home.

In many instances, younger people make use of services commonly associated with older people. This situation occurs more frequently among Aboriginal and Torres Strait Islander peoples than in the general population. Factors such as higher rates of chronic diseases at younger ages in the Indigenous population compared to the non-Indigenous population mean there is a greater proportion of Aboriginal and Torres Strait Islander peoples becoming ill and needing care at an earlier age.

Furthermore, Indigenous Australians die considerably earlier, with a life expectancy at birth that is about 20 years shorter than that of non-Indigenous Australians. The Commonwealth's *Aged Care Act 1997* recognises the implications of these differences in health status and life expectancy between the two population groups. In planning for services for older Indigenous peoples, the Federal Government uses population estimates for Indigenous peoples aged 50 years and over. The comparable age used for calculating planning ratios for the general population is 70 years and over (DHAC 2001a).

The Aboriginal and Torres Strait Islander Aged Care Strategy was developed in 1994 after a series of consultations with Indigenous communities and organisations involved in aged care services. This Strategy seeks to address issues of access to services, including those related to the rural and remote location of many Indigenous communities. The Strategy established Aboriginal and Torres Strait Islander Flexible Services, which provide aged care services using a flexible model. This initiative provides services with a mix of residential and community care places that can change as community needs vary. Many of these services have been established in remote areas where no aged care services were previously available.

In rural and remote locations that are too small to support the standard systems of aged care provision, Multipurpose Services provide a more workable care and treatment model. Multipurpose Services bring together a range of local health and aged care services, often including residential aged care, under one management structure. Multipurpose Services provide flexible care places.

Usage rates

When age-specific usage rates are considered, Indigenous Australians make at least as high use of aged care services in all the age categories shown in table 5.26. At 30 June 2002, 8 Indigenous people per 1,000 aged 50–74 were residents in residential aged care, compared with 4 per 1,000 non-Indigenous Australians. At ages 75 and over, 103 Indigenous people per 1,000 were in residential care compared to 101 for non-Indigenous. The usage rate for Community Aged Care Packages is substantially higher for Indigenous people compared to non-Indigenous people in all age categories examined. At 30 June 2002, there were 12 per 1,000 Indigenous persons aged 50–74 compared with 1 per 1,000 non-Indigenous people in the same age group (table 5.26). There were 69 Indigenous persons per 1,000 aged 75 and over using Community Aged Care Packages compared to 17 per 1,000 non-Indigenous.

5.26 RATES OF USAGE AND NUMBER OF RESIDENTS/RECIPIENTS OF AGED CARE SERVICES, BY AGE(a) — 30 JUNE 2002

	Residential aged care			*Community Aged Care Packages*		
Age group (years)	*Indigenous*	*Non-Indigenous*	*Total*	*Indigenous*	*Non-Indigenous*	*Total*
			RESIDENTS/RECIPIENTS (NO.)			
Under 50	45	1 032	1 077	40	210	250
50–74	304	17 919	18 223	449	4 272	4 721
75 and over	338	116 869	117 207	228	19 386	19 614
Total	687	135 820	136 507	717	23 868	24 585
			USAGE RATE PER 1,000			
Under 50	0.1	0.1	0.1	0.1	—	—
50–74	7.9	4.0	4.0	11.7	0.9	1.0
75 and over	102.6	100.9	100.9	69.2	16.7	16.9

(a) Places and packages provided by multipurpose services and services receiving flexible funding under the Aboriginal and Torres Strait Islander Aged Care Strategy are not included, as age-specific figures are not available for these programs.

Source: ABS 1998b, 2003a; AIHW analysis of DoHA ACCMIS database.

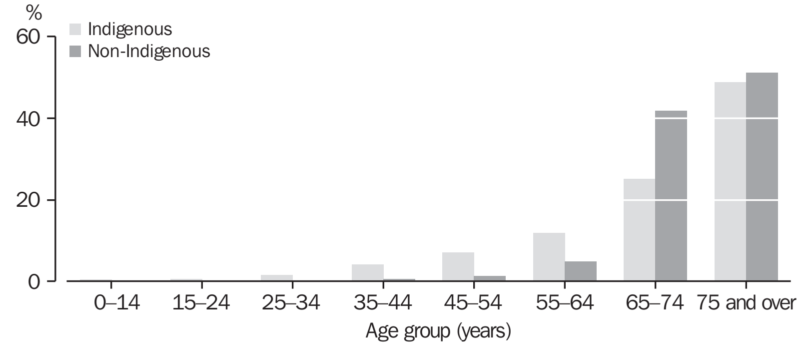
Residential aged care services

At 30 June 2002, there were 41 residential services operating under the Aboriginal and Torres Strait Islander Aged Care Strategy, providing 300 places for Indigenous residents (AIHW 2003i). No demographic data are available for clients of these services.

With respect to mainstream residential aged care services, there were 146,268 places at 30 June 2002. A total of 687 permanent residents (0.5% of all permanent residents) and 19 of those in respite care (0.8% of the total of those in respite care) were identified as being of Aboriginal or Torres Strait Islander origin. Indigenous status was not recorded or not known for 12,426 (9%) of all residents (AIHW 2003i).

Graph 5.27 shows that, of those who were receiving permanent or respite care, greater proportions of Indigenous people were in the lower age groups (ranging from 0.4% to 12% in age groups less than 65 years), while those in the non-Indigenous population were relatively more likely to be aged 65 years and above (93%).

5.27 AGE PROFILE OF RESIDENTIAL AGED CARE PERMANENT AND RESPITE RESIDENTS — 1 JULY 2001 TO 30 JUNE 2002



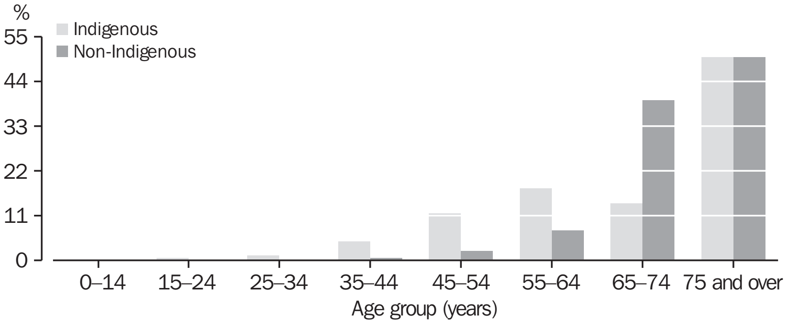
Source: AIHW analysis of DoHA ACCMIS database.

Community Aged Care Packages

At 30 June 2002, there were 22 Community Aged Care Packages services operating under the Aboriginal and Torres Strait Islander Aged Care Strategy, providing 111 packages to Indigenous clients (AIHW 2003c). No demographic data are available for clients of these services.

Out of a total of 24,585 people receiving mainstream Community Aged Care Packages at 30 June 2002, 717 (2.9%) identified as being of Aboriginal or Torres Strait Islander origin. Around 7% of Indigenous peoples receiving assistance were under age 45 compared with less than 1% of non-Indigenous people (AIHW 2003c). As can be seen in graph 5.28, both the Indigenous and non-Indigenous care recipient populations had 50% of their populations in the 75 and over age group. There was a larger proportion of Indigenous recipients in the age groups below age 65.

5.28 AGE PROFILE OF COMMUNITY AGED CARE PACKAGE RECIPIENTS —30 JUNE 2002



Source: AIHW analysis of DoHA ACCMIS database

The Home and Community Care Program

The Home and Community Care Program (HACC) Minimum Data Set (MDS), implemented in 2001, collects data on the Indigenous status of clients. During the three-month period from April to June 2002, 76% of HACC agencies submitted data. Of participating agencies, HACC services were provided to a reported 376,458 clients of all ages. Of these, just over 3% (12,772) were reported to be Indigenous clients.

Analysis of the HACC MDS data suggests that Indigenous HACC clients had a younger age profile than non-Indigenous clients. However, comparison of the numbers of Indigenous people accessing HACC services with numbers of Indigenous people reported in particular age groups based on the 2001 Census indicate that there are some data quality problems (ABS 2002a) and that these same problems occur in prior and subsequent quarters.

Two factors in particular may be responsible for the reported number of Indigenous people accessing HACC being greater than the number of Indigenous people in the population in some age groups. First, people may be more inclined to identify themselves as being Indigenous in the HACC collection than in the 2001 Census. Second, in the HACC MDS, repeat clients are identified through the use of a statistical linkage key which is based on selected letters from the client's name, date of birth and sex. Consequently, a person using different names at different HACC agencies, or reporting different birth dates, will be counted as several people. Both these factors can lead to an overestimate of the number of HACC clients who are Indigenous. In addition to these problems, in some cases problems with automatic coding in agency-level systems may result in the mistaken identification of clients as Indigenous. The AIHW, supported by funding from the Community Services Ministers' Advisory Council, is currently undertaking work to enhance Indigenous identification in community services statistics. The project forms part of the Community and Disability Services Ministers Conference Action Plan. Because of these concerns with the Indigenous data in the HACC minimum data set, further information by Indigenous status is not presented for Home and Community Care.

SUMMARY

Indigenous Australians were more likely than non-Indigenous Australians to live in subsidised housing, including mainstream public housing and community housing. They were also more likely to use SAAP services, a trend that was stronger among women than men. They were less likely than non-Indigenous Australians to be receiving CRA or PRA.

There were relatively high rates of Indigenous children in the child protection services, including in child protection substantiations, on care and protection orders, and in out-of-home care. Compared to the non-Indigenous population, there were also very high rates of Aboriginal and Torres Strait Islander peoples in the juvenile justice system.

Indigenous children were under-represented in Commonwealth supported child care services, though there were a number of services designed specifically for Indigenous children. There were also very few adoptions of Indigenous children in recent years, as informal arrangements for the placement of Indigenous children have been encouraged.

In relation to disability services, Aboriginal and Torres Strait Islander peoples were more frequent users of community support and respite services, but less frequent users of employment and community access services. Indigenous users of disability services were on average younger than non-Indigenous users.

In aged care services the age profile of Indigenous people was lower than non-Indigenous people. When age-specific rates are used, Indigenous Australians make higher use of both Community Aged Care Packages and residential care than the non-Indigenous population.

CHAPTER 6 MOTHERS AND BABIES

INTRODUCTION

This Chapter provides information about Indigenous mothers and their babies. The two main sources of this information are state and territory perinatal collections (also known as the Midwives Collections) and the records of births from the Registrars of Births, Deaths and Marriages in each jurisdiction.

Perinatal statistics include details of antenatal care, complications of pregnancy and labour, and neonatal health. They do not, however, record any information about the father. As these figures do not include births to Indigenous fathers and non-Indigenous mothers, they are not a count of Indigenous births, and should not be used as such. Birth registrations, on the other hand, provide information about both parents' Indigenous status, but not details about the health of the mother and the baby. It is required by law that all births be registered, but this does not always occur, or may be limited by incomplete, late or missing registrations. Similarly, some births are registered without a perinatal report being lodged. As a result, discrepancies exist between the information held in perinatal collections and births registration records. Indeed, both underestimate the number of Indigenous births, because Indigenous status is not always recorded, as demonstrated by ongoing studies in Victoria, linking the perinatal collection, birth registrations, and hospital admissions. Most recent reports indicate similar numbers of Indigenous births being reported by Koori hospital liaison officers and the Victorian perinatal collection, but approximately 25% of these are not able to be identified as certain or probable matches (Day et al. 1999; Department of Human Services 2002).

It should also be noted that because a considerable number of Indigenous babies are born to non-Indigenous women, measures of the fertility of Indigenous women inevitably underestimate the impact of births on the growth of the Indigenous population. Based on birth registrations and population projections, Indigenous fertility for 2000 was estimated to be at least 2.14 babies per woman, compared with 1.73 babies for all Australian women (ABS 2001b). However, the fertility rate in Indigenous women is likely to have been underestimated because of the incomplete identification of Indigenous status in birth registrations.

This Chapter presents data from the perinatal collections of all states and territories, for the period 1998–2000 combined. These data are held at the Australian Institute of Health and Welfare National Perinatal Statistics Unit (AIHW NPSU). Data for 1991–93 and 1994–96 were previously published by the AIHW NPSU (Plunkett et al. 1996; Day et al. 1999) and for 1996–98 in the previous report (ABS & AIHW 2001). For this publication, three years of data were combined to smooth out yearly fluctuations in the number of births to Indigenous mothers, which may subsequently cause volatility in rates such as the perinatal mortality rate.

INTRODUCTION *continued*

Information on the hospitalisation of Indigenous women for pregnancy and childbirth is presented in Chapter 4. Data on Queensland's Torres Strait Islander mothers and their babies are included in this Chapter, as Queensland is the only state to report this information separately.

MOTHERS

Indigenous women have babies, on average, at younger ages than non-Indigenous women. The mean age of Indigenous mothers for 1998–2000 was 24.7 years (AIHW NPSU, perinatal collection), only a slight increase from 24.4 years in 1996–98 (ABS & AIHW 2001). The mean age of non-Indigenous mothers has increased by a similar margin, from 28.9 years in 1996–98, to 29.2 for the 1998–2000 period. Indigenous mothers comprised 3.4% of all mothers who gave birth in Australia during 1998–2000 (table 6.1). The proportion by jurisdiction varied greatly, ranging from less than 1% in Victoria to 37% in the Northern Territory. The reported number of Indigenous mothers was highest in Queensland (8,378), followed by New South Wales (6,207), Western Australia (4,547) and the Northern Territory (3,891).

Maternal age differences by Indigenous status for the whole of Australia are shown in graph 6.2. Of Indigenous mothers who gave birth during the period 1998–2000, 79% were under 30 years of age, compared with 52% of non-Indigenous mothers. A breakdown of maternal age by state and territory is presented in table 6.3. In the Northern Territory, 29% of all Indigenous women who gave birth in 1998–2000 were under 20 years of age.

The age distribution of Torres Strait Islander mothers in Queensland for 1998–2000 was similar to that of all Indigenous mothers in Australia. Nearly 18% of Torres Strait Islander mothers were under 20 years of age, and approximately 6% were aged 35 years or more (Perinatal Data Collection, Queensland Health).

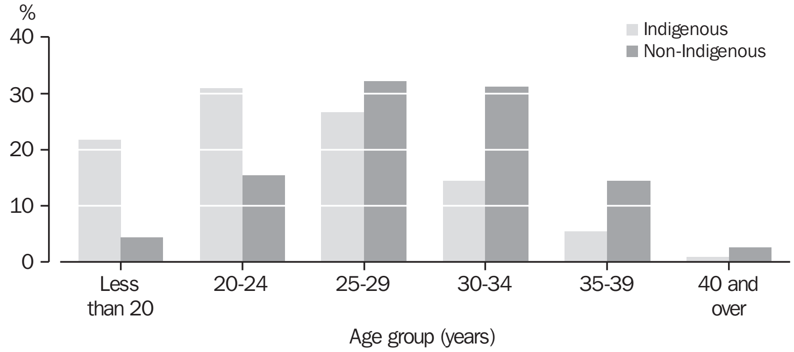
6.1 INDIGENOUS MOTHERS — 1998–2000

	no.	*%(a)*
New South Wales	6 207	2.4
Victoria	1 266	0.7
Queensland	8 378	5.8
South Australia	1 309	2.4
Western Australia	4 547	6.0
Tasmania	249	1.4
Northern Territory	3 891	36.5
Australian Capital Territory	175	1.3
Australia	**26 013**	**3.4**

(a) Proportion of Indigenous mothers in each jurisdiction.

Source: AIHW National Perinatal Statistics Unit, perinatal collection.

6.2 MATERNAL AGE, BY INDIGENOUS STATUS — 1998–2000



Source: AIHW National Perinatal Statistics Unit, perinatal collection.

6.3 MATERNAL AGE, BY INDIGENOUS STATUS — 1998–2000

	Under 20 years		*20–34 years*		*Over 34 years*		*Total(a)*	
	no.	*%*	*no.*	*%*	*no.*	*%*	*no.*	*%*
New South Wales								
Indigenous mothers	1 291	20.8	4 519	72.8	392	6.3	6 207	100.0
Non-Indigenous mothers	10 779	4.3	196 935	78.4	43 449	17.3	251 292	100.0
Victoria								
Indigenous mothers	194	15.3	969	76.5	103	8.1	1 266	100.0
Non-Indigenous mothers	5 923	3.2	143 393	78.4	33 639	18.4	182 964	100.0
Queensland								
Indigenous mothers	1 576	18.8	6 243	74.5	559	6.7	8 378	100.0
Non-Indigenous mothers	7 851	5.8	107 861	79.5	19 916	14.7	135 629	100.0
South Australia								
Indigenous mothers	286	21.8	924	70.6	99	7.6	1 309	100.0
Non-Indigenous mothers	2 583	4.9	42 051	79.5	8 288	15.7	52 922	100.0
Western Australia								
Indigenous mothers	1 120	24.6	3 161	69.5	266	5.9	4 547	100.0
Non-Indigenous mothers	3 387	4.8	56 110	79.1	11 443	16.1	70 940	100.0
Tasmania								
Indigenous mothers	37	14.9	195	78.3	17	6.8	249	100.0
Non-Indigenous mothers	1 468	8.3	13 791	78.3	2 273	12.9	17 615	100.0
Northern Territory								
Indigenous mothers	1 116	28.7	2 565	65.9	206	5.3	3 891	100.0
Non-Indigenous mothers	307	4.5	5 322	78.6	1 143	16.9	6 773	100.0
Australian Capital Territory								
Indigenous mothers	34	19.4	127	72.6	14	8.0	175	100.0
Non-Indigenous mothers	474	3.5	10 652	77.6	2 602	19.0	13 729	100.0
Australia								
Indigenous mothers	**5 654**	**21.7**	**18 703**	**71.9**	**1 656**	**6.4**	**26 022**	**100.0**
Non-Indigenous mothers	**32 772**	**4.5**	**576 115**	**78.7**	**122 753**	**16.8**	**731 864**	**100.0**

(a) Total includes births where maternal age was not stated.

Source: AIHW National Perinatal Statistics Unit, perinatal collection.

6.4 NGANAMPA HEALTH COUNCIL, SOUTH AUSTRALIA, ANTENATAL CARE PROGRAM

The Nganampa Health Council is an Anangu (Aboriginal) controlled community health organisation providing a range of health programs to all persons on Anangu Pitjanjatjara Lands in the far north-west of South Australia.

When Nganampa Health Council took over the provision of health services in 1985, it identified poor antenatal care as a major health problem in the region.[1] Most women presented late in the second trimester of pregnancy and few had regular antenatal visits or appropriate investigations or check-ups. It was estimated that less than a third of all women were receiving reasonable antenatal care at that time.

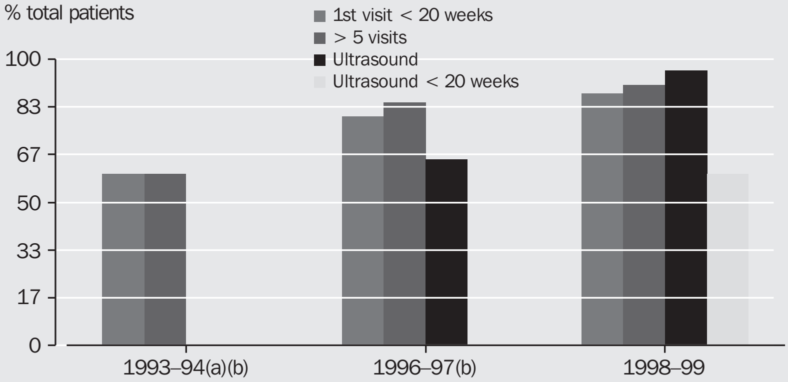
In response, Nganampa Health Council developed a care record system for antenatal patients, to be used in all clinics. The system is both a tool for health management and a source of antenatal care data for the population. It allows the health service to collate information and report annually on its success in moving towards agreed targets.

The initial antenatal care targets for pregnant women were:

- first presentation prior to 20 weeks
- more than five antenatal care visits for each pregnancy
- an ultrasound performed in all pregnancies
- an ultrasound performed at an appropriate time for estimating gestational age
- appropriate investigations performed and checked in all pregnancies.

Data show a steady but marked improvement in antenatal care for women in the Anangu Pitjantjatjara Lands over this time, particularly when contrasted with the very poor antenatal status of women at the time the service commenced. Indications of improved access to antenatal health for women in the region are clearly illustrated in the following graph.

NGANAMPA HEALTH COUNCIL ANTENATAL PROGRAM: IMPROVED ATTENDANCE



(a) Data not available for ultrasound.
(b) Data not available for ultrasound less than 20 weeks.
Source: Department of Health and Aged Care 2001, pp. 53.

...continued

6.4 NGANAMPA HEALTH COUNCIL, SOUTH AUSTRALIA, ANTENATAL CARE PROGRAM *continued*

An independent study[2] undertaken at Nganampa between 1984 and 1996 showed encouraging results. The authors noted that substantial, statistically significant improvements had been demonstrated, for example:

- perinatal mortality rates decreased from 45.2/1000 to 8.6/1000[2], compared with a national average rate for non-Indigenous babies of 6.7/1000[3]
- low birthweight decreased from 14.2% to 8.1%[2], compared with a national average rate for non-Indigenous babies of 6.2%[3]
- mean birthweight increased from 3,080 grams to 3,183 grams[2], compared with a national mean of 3,365 grams for non-Indigenous babies[3].

Endnotes:

1 Nganampa Health Council: pymedia.in-sa.com.au/ap/nganampahealth/index.html

2 Sloman D, Shelly J, Watson L & Lumley J 1999, *Obstetric and Child Health Outcomes on the Anangu Pitjantjatjara Lands, 1984–1996: A Preliminary Analysis*, Proceedings of the 5th National Rural Health Conference, Adelaide, March 1999, pp. 189–95.

3 Day P, Sullivan EA & Lancaster P 1999, *Indigenous mothers and their babies. Australia 1994–1996*, Australian Institute of Health and Welfare, National Perinatal Statistics Unit, Perinatal Statistics Series, No. 8.

Source: Department of Health and Aged Care ed. 2001, 'Better Health Care: Studies in the Successful Delivery of Primary Health Care Services for Aboriginal and Torres Strait Islander Australians', Commonwealth of Australia, Canberra, pp. 52–3.

BABIES

Babies born with a birthweight of less than 2,500 grams are classified as being of 'low birthweight'. Low birthweight may be a result of pre-term birth, fetal growth retardation, or a combination of the two (Alberman 1994). Factors influencing a baby's birthweight may include socioeconomic disadvantage, the size and age of the mother, the number of babies previously borne, the mother's nutritional status, smoking and other risk behaviours, illness during pregnancy, presence of a multiple birth and the duration of pregnancy. Low birthweight babies are more prone to ill health during childhood, and may be more vulnerable to illness in adulthood (Alberman 1994; Barker & Clark 1997).

Table 6.5 shows that in the period 1998–2000, babies of Indigenous mothers were about twice as likely to be of low birthweight as babies born to non-Indigenous mothers. Since 1991, there appears to have been little change in both the proportion of low birthweight babies born to Indigenous mothers and these babies' mean birthweight (Plunkett et al. 1996; Day et al. 1999; ABS & AIHW 1997, ABS & AIHW 1999, ABS & AIHW 2001).

In 1998–2000, in Queensland, the proportion of low birthweight babies born to Torres Strait Islander mothers (9.5%) was somewhat lower than that recorded for babies born to Aboriginal mothers (12.8%), but higher than that recorded for babies born to non-Indigenous mothers (6.6%) (Perinatal Data Collection, Queensland Health). Coory (2000) has queried the use of birthweight as an appropriate measure of the health of babies born to Torres Strait Islander mothers. By using 10 years of combined Queensland perinatal data on live births, he found that even though the recorded birthweights of babies of both Torres Strait Islander and non-Indigenous mothers were similar, babies born to Torres Strait Islander mothers experienced higher rates of neonatal mortality than babies born to non-Indigenous mothers. The study suggests that this result may be related to the high prevalence of diabetes among Torres Strait Islander mothers. More research is needed to explore these findings.

6.5 BIRTHS, BY BIRTHWEIGHT AND MOTHER'S INDIGENOUS STATUS — 1998–2000

	Low birthweight (under 2 500g)		*Normal or high birthweight (2 500g or more)*		*Total(a)*	
	no.	*%*	*no.*	*%*	*no.*	*%*
New South Wales						
Indigenous mothers	731	11.7	5 533	88.2	6 270	100.0
Non-Indigenous mothers	15 704	6.2	239 411	93.8	255 246	100.0
Victoria						
Indigenous mothers	182	14.2	1 103	85.8	1 285	100.0
Non-Indigenous mothers	12 527	6.7	173 503	93.3	186 059	100.0
Queensland						
Indigenous mothers	995	11.7	7 484	88.2	8 481	100.0
Non-Indigenous mothers	9 063	6.6	128 660	93.4	137 738	100.0
South Australia						
Indigenous mothers	220	16.7	1 100	83.3	1 320	100.0
Non-Indigenous mothers	3 601	6.7	50 202	93.3	53 803	100.0
Western Australia						
Indigenous mothers	652	14.2	3 948	85.8	4 601	100.0
Non-Indigenous mothers	4 548	6.3	67 523	93.7	72 076	100.0
Tasmania						
Indigenous mothers	17	6.7	231	91.3	253	100.0
Non-Indigenous mothers	1 225	6.8	16 504	92.1	17 922	100.0
Northern Territory						
Indigenous mothers	536	13.6	3 326	84.7	3 929	100.0
Non-Indigenous mothers	520	7.6	6 305	91.8	6 867	100.0
Australian Capital Territory						
Indigenous mothers	31	17.6	145	82.4	176	100.0
Non-Indigenous mothers	1 038	7.4	12 955	92.5	13 999	100.0
Australia						
Indigenous mothers	**3 364**	**12.8**	**22 870**	**86.9**	**26 315**	**100.0**
Non-Indigenous mothers	**48 226**	**6.5**	**695 063**	**93.5**	**743 710**	**100.0**

(a) Total includes births where birthweight was not stated.

Source: AIHW National Perinatal Statistics Unit, perinatal collection.

PERINATAL MORTALITY

Over the period 1998–2000, the national perinatal mortality rate (see Glossary) for babies born to Indigenous women was twice as high as that for babies born to non-Indigenous women (table 6.6). While it is difficult to assess trends, due to uncertainties about the extent to which women are identified as Indigenous in the perinatal collections, the overall perinatal mortality rate for this period is similar to that for 1996–98. In the Northern Territory, the perinatal mortality rate fell from 27.0 deaths per 1,000 births in 1994–96 to 24.9 per 1,000 in 1998–2000, suggesting that improvements seen in that jurisdiction over the decade from 1986 to 1995 may be continuing (Markey et al. 1998; ABS & AIHW 1999). Despite the decrease, however, the Northern Territory perinatal death rate is still among the highest in Australia.

In 1998–2000, there were 29 perinatal deaths of babies born to Torres Strait Islander mothers in Queensland. The perinatal death rate for babies born to Torres Strait Islander mothers (18.6 per 1,000 births) was lower compared to that for babies born to Aboriginal mothers (21.3 per 1,000 births). These perinatal mortality rates of babies born to Torres Strait Islander and Aboriginal mothers remain considerably higher than the rate for babies born to non-Indigenous mothers (10.4 per 1,000 births) (Perinatal Data Collection, Queensland Health).

Perinatal deaths may be underestimated because the number of neonatal deaths may not be accurately ascertained, particularly for deaths occurring among babies transferred, or readmitted to hospital, or those dying at home. This is a result of some states and territories having no linkage between registered perinatal deaths and the birth records of these babies in the perinatal data collections (Nassar et al. 2000). In recent years, a number of states and territories have linked their perinatal data collections to the registered perinatal deaths of their respective Registries of Births, Deaths and Marriages, in an effort to improve the extent to which neonatal deaths are ascertained. This has led to improved information about perinatal deaths in those states and territories, and apparent reporting of higher numbers of neonatal deaths. Valid comparisons between the neonatal data of states and territories are therefore not always possible in these circumstances. Improved standardisation and linkage of perinatal deaths by all states and territories will allow valid comparisons and interpretation of perinatal mortality in the future.

In addition, regional differences in perinatal death rates may, in part, reflect regional differences in the identification of babies of Indigenous mothers. Data have been combined for three years to smooth out fluctuations. Readers are advised to focus on general patterns rather than precise numbers and rates.

6.6 PERINATAL MORTALITY(a), BY MOTHER'S INDIGENOUS STATUS — 1998–2000

	Fetal deaths		*Neonatal deaths(b)*		*Perinatal deaths(c)*	
	no.	*rate(d)*	*no.*	*rate(e)*	*no.*	*rate(d)*
New South Wales						
Indigenous mothers	66	10.5	31	5.0	97	15.5
Non-Indigenous mothers	1 657	6.5	645	2.5	2 302	9.0
Victoria						
Indigenous mothers	14	10.9	11	8.6	25	19.5
Non-Indigenous mothers	1 278	6.9	618	3.3	1 896	10.2
Queensland						
Indigenous mothers	107	12.6	63	7.5	170	20.0
Non-Indigenous mothers	935	6.8	500	3.7	1 435	10.4
South Australia						
Indigenous mothers	22	16.7	9	7.0	31	23.6
Non-Indigenous mothers	320	5.9	132	2.5	452	8.4
Western Australia						
Indigenous mothers	59	12.8	39	8.6	98	21.3
Non-Indigenous mothers	490	6.8	138	1.9	628	8.7
Northern Territory						
Indigenous mothers	61	15.5	37	9.7	98	24.9
Non-Indigenous mothers	48	7.0	35	5.1	83	12.1
Australia(f)						
Indigenous mothers	**337**	**12.8**	**193**	**7.4**	**530**	**20.1**
Non-Indigenous mothers	**5 004**	**6.7**	**2 171**	**2.9**	**7 175**	**9.6**

(a) Data for Tasmania and Australian Capital Territory are not presented due to small numbers.

(b) Based on live births only. May exclude neonatal deaths within 28 days of birth for babies transferred or readmitted to hospital and those dying at home, for selected states and territories. See text for more information.

(c) Perinatal deaths include fetal deaths and neonatal deaths. See Glossary for definitions.

(d) Rate per 1,000 total births.

(e) Rate per 1,000 live births.

(f) Includes Australian Capital Territory and Tasmania.

Source: AIHW National Perinatal Statistics Unit, perinatal collection.

SUMMARY

Indigenous mothers are more likely to have their babies at younger ages than non-Indigenous mothers, and to have a low birthweight baby. The national perinatal mortality rate for babies of Indigenous mothers remains at about twice the rate for babies of non-Indigenous mothers, but varies considerably across states and territories.

CHAPTER 7

ILL HEALTH

INTRODUCTION

Aboriginal and Torres Strait Islander peoples suffer greater ill health, are more likely to experience disability and reduced quality of life and to die at younger ages than non-Indigenous Australians (AIHW 2002c). Indigenous life expectancy at birth is 20 years less than for the total population, 56 years for Indigenous males compared to 77 years for all Australian males and 63 years for Indigenous females compared to 82 years for all Australian females for the period 1999–2001 (ABS 2002c).

As noted in Chapters 2 and 3, the Indigenous population is disadvantaged across a range of socioeconomic factors that can impact on health outcomes, including having lower incomes, higher rates of unemployment, poorer education outcomes and lower rates of home ownership. In addition, health risks (e.g. smoking, obesity, alcohol misuse) and other health factors (e.g. poor housing, exposure to violence) are important determinants of health among Aboriginal and Torres Strait Islander peoples (Chapter 8).

This Chapter draws on information from a range of health-related data collections, and aims to provide an overview of the health status of Aboriginal and Torres Strait Islander peoples. Information is included for a range of conditions that affect Indigenous Australians and cause significant morbidity and mortality.

The diseases and conditions which are covered in this Chapter are circulatory system diseases, diabetes, chronic kidney disease, cancer, respiratory diseases, communicable diseases, injury, arthritis and other musculoskeletal conditions, eye and vision problems, ear and hearing problems, oral health and mental health. While some information is available on each of these, the quality and completeness of the data are often unknown and may vary. Many of the rates in this Chapter are likely to under-represent true rates of illness and death in the Aboriginal and Torres Strait Islander population due to under-identification of Indigenous persons in these data sets.

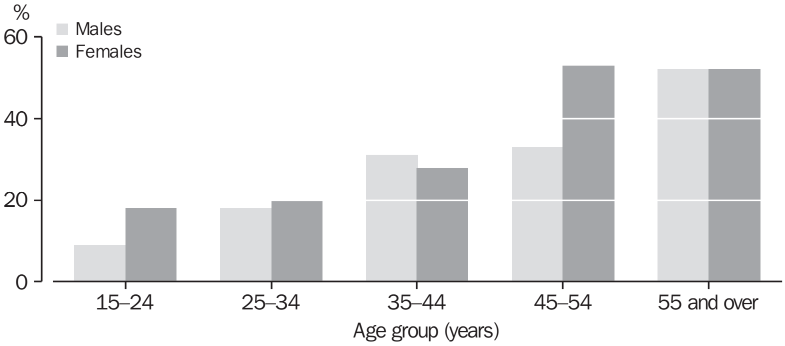
SELF-ASSESSED HEALTH

Self-assessed health status provides an indicator of overall health, based on an individual's perception of their health (ABS 2002e). As this measure is dependent on an individual's awareness and expectation of their own health, it may be influenced by factors such as access to health services and health information. Cunningham et al. (1997) examined the robustness of this measure and found that factors such as language spoken or employment status can have an effect on how individuals described their health.

SELF-ASSESSED HEALTH
continued

In 2001, after adjusting for differences in age structure, two-thirds of Indigenous Australians reported their health as good, very good, or excellent. However, one-third reported their health as 'fair' or 'poor', almost twice the rate for non-Indigenous Australians (18%) (ABS 2002e). The proportion reporting 'fair' or 'poor' health increased with age, from 13% of those aged 15–24 years to 52% of those aged 55 years and over (graph 7.1). Indigenous females were more likely overall to report 'fair' or 'poor' health than Indigenous males (29% compared to 23%).

7.1 INDIGENOUS PERSONS REPORTING FAIR OR POOR SELF-ASSESSED HEALTH — 2001



Source: ABS 2002e.

TYPES OF CONDITIONS

This section includes information about the Indigenous population's experience with various ill-health conditions, and includes measures of prevalence, admissions to hospital and mortality associated with these conditions.

In general, information about the self-reported prevalence of various conditions, available from the 2001 National Health Survey (NHS), provides a broader view of ill-health experience than information about hospitalisation or death. In 2001, Indigenous and non-Indigenous Australians were equally likely (78%) to report having at least one long-term health condition, an illness, injury or disability which had lasted at least six months, or which was expected to last for six months or more (ABS 2002e). Reports of a long-term health condition increased with age from 34% of Indigenous children aged under 5 years to 99% of Indigenous Australians aged 55 years and over. Eye/vision problems were the most commonly reported conditions among Indigenous persons (29%), followed by asthma (16%), back problems (15%) and ear/hearing problems (15%) (ABS 2002e).

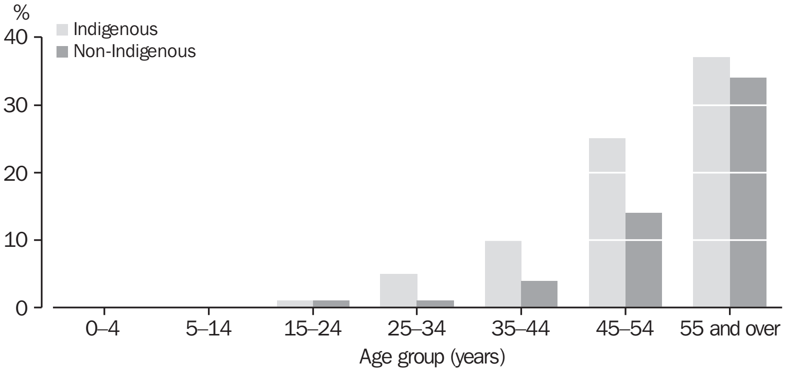
Circulatory system diseases

Circulatory system diseases include coronary heart disease, stroke, peripheral vascular disease and heart failure. The main underlying problem in circulatory system disease is atherosclerosis, a process that clogs blood vessels with deposits of fat, cholesterol and other substances that have built up in the inner lining of the vessels. It is most serious when it affects the blood supply to the heart (causing angina, heart attack or sudden death) or to the brain (which can lead to a stroke).

Prevalence of circulatory system diseases

In 2001, nearly one-fifth (19%) of Indigenous Australians reported a long-term health condition associated with the circulatory system (ABS 2002e). Indigenous Australians from remote areas were more likely than those from non-remote areas to report having circulatory problems (24% compared with 18%). The most commonly reported condition of the circulatory system among Indigenous Australians was hypertension. As in the non-Indigenous population, prevalence of hypertension rises with age. However, in age groups above 25 years, prevalence levels among Aboriginal and Torres Strait Islander peoples are similar to those experienced by non-Indigenous Australians who are 10 years older (graph 7.2).

7.2 SELF-REPORTED HYPERTENSION — 2001



Source: ABS 2002e.

Hospital visits for circulatory system diseases

In 2000–01, diseases of the circulatory system were the main reason for hospitalisation in 4% of separations for Indigenous males and 3% of separations for Indigenous females (table 7.3). Indigenous males up to 74 years of age had higher separation rates than non-Indigenous males. The difference is most marked for males in the age groups 25–54 years, where Indigenous separations were more than double non-Indigenous rates. For females, differentials of this magnitude were maintained across a wider age range (graph 7.4).

7.3 HOSPITAL SEPARATIONS FOR PRINCIPAL DIAGNOSIS OF DISEASES OF THE CIRCULATORY SYSTEM(a) — 2000–01

	Indigenous males				*Indigenous females*			
	no.	*%(b)*	*rate(c)*	*rate ratio(d)*	*no.*	*%(b)*	*rate(c)*	*rate ratio(d)*
Rheumatic heart disease	110	0.1	0.4	5.8	179	0.2	0.8	8.2
Hypertensive disease	158	0.2	1.4	5.6	249	0.2	2.1	5.4
Ischaemic heart disease	1 388	1.8	13.9	1.4	1 108	1.1	10.7	2.4
Other heart disease	993	1.3	11.4	1.8	902	0.9	9.0	2.0
Cerebrovascular disease	251	0.3	3.2	1.5	283	0.3	3.3	2.2
Other diseases of the circulatory system(e)	398	0.5	3.7	0.7	336	0.3	3.0	0.6
Total	3 298	4.3	34.1	1.4	3 057	3.0	28.9	1.8

(a) Data are for public and most private hospitals. Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) (National Centre for Classification in Health 2000). ICD-10-AM codes I00–I99, refer to Appendix 4 for specific ICD-10-AM codes used.

(b) Percentage of hospital separations for Indigenous patients in 2000–01.

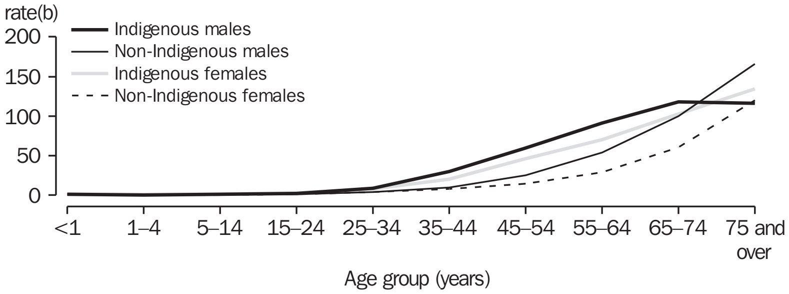
(c) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

(d) Rate ratio is equal to the rate of Indigenous separations divided by the rate of non-Indigenous separations.

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

Source: AIHW National Hospital Morbidity Database.

7.4 AGE-SPECIFIC HOSPITAL(a) SEPARATION RATES FOR PRINCIPAL DIAGNOSIS OF DISEASES OF THE CIRCULATORY SYSTEM — 2000–01



(a) Data are for public and most private hospitals.
(b) Per 1,000 population.

Source: AIHW National Hospital Morbidity Database.

Indigenous persons experienced higher separation rates for most types of ‘circulatory system diseases’ than the non-Indigenous population. Most notably, the rate for Indigenous males for ‘rheumatic heart disease’ (box 7.5) was 5.8 times as high as separations for non-Indigenous males. The separation rate for Indigenous females was 8.2 times as high as for non-Indigenous females. The separation rates for hypertensive disease were also substantially higher in the Indigenous population than in the non-Indigenous population. For the most common type of circulatory system disease (ischaemic heart disease) the Indigenous separation rates were 1.4 times as high for males and 2.4 as high for females (table 7.3).

Deaths from circulatory system diseases

In 1999–2001, in Queensland, South Australia, Western Australia and the Northern Territory, diseases of the circulatory system accounted for 24% of Indigenous deaths. Compared with death rates for diseases of the circulatory system among all Australians, the Indigenous death rates were 3.2 and 2.8 times higher than expected for males and females, respectively (refer to Chapter 9).

7.5 RHEUMATIC FEVER AND RHEUMATIC HEART DISEASE

Rheumatic fever is a delayed complication of a throat or skin infection caused by group A streptococcus bacteria. It occurs mainly in children and young adults and may affect the heart valves, the heart muscle and its lining, the brain and the joints. After an attack of rheumatic fever an individual is at high risk of developing recurrences. Recurrences lead to cumulative heart damage but can be almost completely prevented by strict follow-up and monthly injections of penicillin. Rheumatic heart disease is the longer term damage done to the heart muscle and heart valves by acute rheumatic fever.

Although this type of cardiovascular disease is rare among the Australian population overall, its prevalence among Indigenous Australians living in remote areas is very high. Since the 1950s, acute rheumatic fever and rheumatic heart disease have largely become diseases of economically disadvantaged persons. Poverty and overcrowding, poor sanitary conditions, lack of education and limited access to medical care for diagnosis and treatment are contributing factors to this disease in Australia.

A register of persons with known or suspected rheumatic fever and rheumatic heart disease operates in the Top End of the Northern Territory. In 2001, there were 660 persons with rheumatic heart disease on the register, of whom 93% were Indigenous Australians (617 cases). Rheumatic heart disease was present in 57 children aged 5–14 years, all of whom were Indigenous. The prevalence of rheumatic heart disease among Indigenous Australians in the Top End was 1,640 per 100,000 in 2001 compared with 38 per 100,000 among non-Indigenous Australians in the area (AIHW 2002c).

Diabetes

Diabetes is a significant health issue for Indigenous Australians. In recognition of this, the 2001 edition of this publication included a ‘feature chapter’ on diabetes and its effects on Aboriginal and Torres Strait Islander peoples.

There are three main types of diabetes — Type 1, Type 2 and gestational diabetes. Type 1 diabetes is marked by a total or near total lack of insulin, while Type 2 diabetes is marked by a reduced level of insulin or the inability of the body to use insulin properly (i.e. insulin resistance) (AIHW 2002e). Gestational diabetes occurs during pregnancy in about 3–8% of females not previously diagnosed with diabetes and usually disappears after the baby is born (AIHW 2002e).

The majority (98–99%) of cases of diabetes among Indigenous Australians are thought to be Type 2 (de Courten et al. 1998). Type 1 diabetes is generally considered rare in the Indigenous population. There are limited national data available to accurately measure the extent of gestational diabetes among Indigenous women, however the incidence rate may be as high as 20% (Colagiuri et al. 1998).

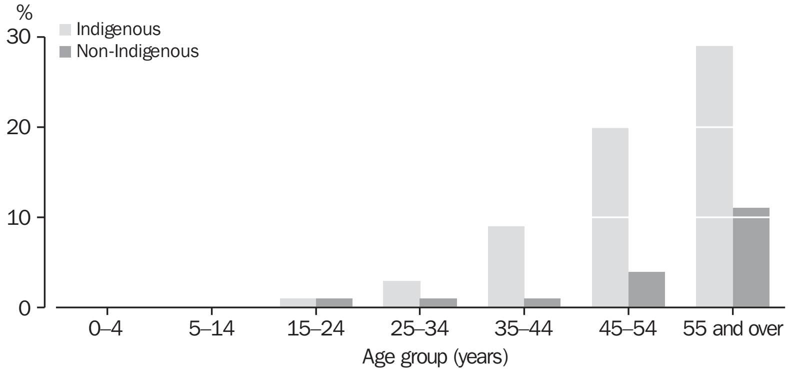
Prevalence of diabetes

In 2001, the age-standardised prevalence of self-reported diabetes among Indigenous Australians was 11%. In comparison, the corresponding proportion among the non-Indigenous population was 3%. Indigenous Australians from remote areas were almost two times more likely than those from non-remote areas to report having diabetes (16% compared with 9%) and Indigenous females were slightly more likely to report some form of diabetes than Indigenous males (12% compared with 9%) (ABS 2002e).

It should be noted that the prevalence of diabetes based on self-reported data underestimates the true prevalence. The Australian Diabetes, Obesity and Lifestyle Study, which was conducted in 1999–2000 and measured the prevalence of diabetes objectively, found that for every known case of diabetes, there was one undiagnosed case (Dunstan et al. 2001).

The prevalence of self-reported diabetes among Indigenous Australians was 1% for those aged 15–24 years, 3% for 25–34 year olds, 9% for 35–44 year olds, 20% for 45–54 year olds and 29% for those aged 55 years and over (graph 7.6). In contrast, the proportion of non-Indigenous Australians reporting diabetes was 1% for those aged 15–44 years, 4% at age 45–54 years and 11% for those aged 55 years and over. From age 25 years and over, diabetes was more prevalent among Indigenous Australians than non-Indigenous Australians. While in both populations prevalence is progressively higher in older age groups, the prevalence among Indigenous Australians aged 35–44 years is almost as high as among non-Indigenous Australians aged 55 years and over.

7.6 SELF-REPORTED DIABETES — 2001

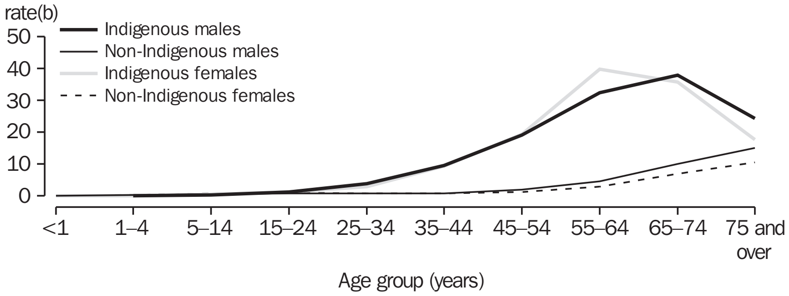


Source: ABS 2002e.

Hospital visits for diabetes

Diabetes was the main reason for hospitalisation in just over 1% of male and female Indigenous separations in 2000–01. Despite a relatively low population prevalence of Type 1 diabetes, 20% of hospital visits with diabetes as the principal diagnosis were for Type 1 diabetes. The hospital separation rate for Indigenous males was four times that for non-Indigenous males, while for Indigenous females the rate was six times as high as that for non-Indigenous females.

7.7 AGE-SPECIFIC HOSPITAL(a) SEPARATION RATES FOR PRINCIPAL DIAGNOSIS OF DIABETES — 2000–01



(a) Data are for public and most private hospitals.
(b) Per 1,000 population.
Source: AIHW National Hospital Morbidity Database.

Separation rates for diabetes for Indigenous patients increased rapidly from age 15–24 years (1.3 and 1.2 separations per 1,000 population for males and females respectively) to age 55 years for Indigenous females (39.8 separations per 1,000 population) and 65 years for Indigenous males (38.0 separations per 1,000 population) (graph 7.7). At each age, from age 15 years and over, separation rates for Indigenous males and females were considerably higher than for non-Indigenous males and females.

It should be noted that hospitalisation statistics are not a measure of prevalence or incidence. The data reported here are for diabetes as a principal diagnosis only, which may tend to reflect the more severe cases. However diabetes is more frequently reported as an additional diagnosis than a principal diagnosis. It should also be noted that the identification of Aboriginal and Torres Strait Islander patients in hospital records is considered to be incomplete in most jurisdictions and therefore the true hospital separation rates for Aboriginal and Torres Strait Islander peoples is likely to be even higher than reported here.

Deaths from diabetes

The number of deaths due to diabetes provides an indication of the burden of disease in the population. However, diabetes may be under-reported in mortality data because certifying doctors do not always record diabetes as an underlying cause of death on death certificates. In addition, the overall number of deaths registered as Indigenous is likely to be an underestimate because not all death registration records correctly identify Aboriginal and Torres Strait Islander peoples (Chapter 9). For the period 1999–2001, identification of Indigenous Australians in death registrations data is considered to be of sufficient quality only for Queensland, South Australia, Western Australia and Northern Territory (Chapter 9) and therefore only data from these jurisdictions are reported here.

Deaths from diabetes *continued*

In 1999–2001, in Queensland, South Australia, Western Australia and Northern Territory, diabetes was recorded as the underlying cause of death for 373 Indigenous persons. These deaths represented 6.2% of all Indigenous male deaths and 11.7% of all Indigenous female deaths in these jurisdictions. Diabetes accounted for 10.6 times as many deaths as expected for Indigenous males and 17.6 as many deaths as expected for Indigenous females based on total Australian male and female rates. A further 432 deaths of Indigenous Australians were reported with diabetes as an associated cause. Overall in 1999–2001, diabetes was recorded as either the underlying or associated cause of death for 18% of all deaths recorded as Indigenous.

Kidney disease

Kidney disease was the topic of a special chapter in the 1999 edition of this publication. That chapter pointed out that kidney disease is much more prevalent in the Indigenous Australian population than in non-Indigenous Australians. The main focus of the following section is on end-stage renal disease (ESRD), the last and most debilitating stage of chronic kidney disease in which dialysis or kidney transplantation is necessary to maintain life. Information on persons with ESRD is available from the Australian and New Zealand Dialysis and Transplant Registry (ANZDATA) (box 7.8).

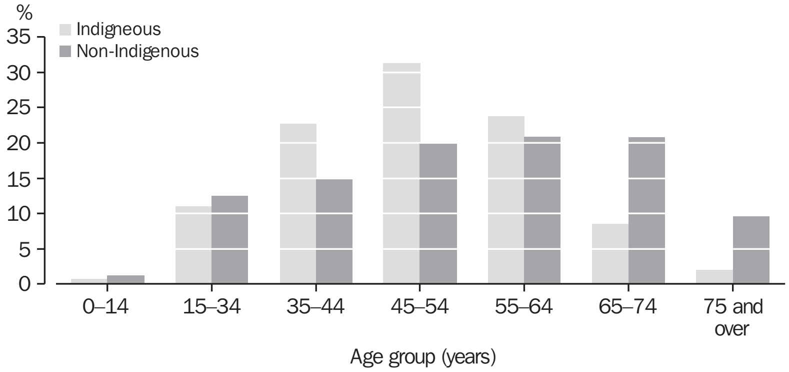
7.8 THE AUSTRALIAN AND NEW ZEALAND DIALYSIS AND TRANSPLANT REGISTRY (ANZDATA)

In Australia, persons who develop ESRD and undertake the life sustaining treatments of dialysis or kidney transplantation, are registered with ANZDATA. The registry is the most comprehensive and reliable source of information on persons treated for ESRD. It compiles data on incidence and prevalence, renal complications, co-morbidities and patient deaths. Demographic information collected by the registry allows for the identification of Aboriginal and Torres Strait Islander patients.

Source: Russ 2002.

In 2001, 6.2% (761) of the 12,278 persons registered with ANZDATA were identified as Indigenous Australians (Russ 2002). This compares unfavourably with Indigenous representation in the total population of 2.4%. About two-thirds (66%) of Aboriginal and Torres Strait Islander peoples registered with ANZDATA were aged less than 55 years, whereas less than half (49%) of registered non-Indigenous Australians were below that age (graph 7.9). Two major causal factors leading to kidney disease are streptococcal infections and diabetes, both of which are more common among Indigenous Australians.

7.9 AGE DISTRIBUTION OF END-STAGE RENAL DISEASE PATIENTS — 2001



Source: Russ 2002.

New cases

Of the 1,883 patients starting ESRD treatment in 2001, 170 (9.0%) were Indigenous Australians. Ten years earlier, 42 of the 979 new cases of ESRD (4.3%) were Indigenous (Russ 2002). These figures indicate that numbers of persons commencing treatment for ESRD are rising, with the rate for Indigenous persons increasing faster than the rate for non-Indigenous persons.

New Indigenous patients were typically younger than non-Indigenous patients. More Indigenous females (101) than males (69) commenced treatment for ESRD in 2001, which contrasts with the overall pattern where more males (1,100) than females (783) began treatment that year (Russ 2002) (table 7.10).

For all states and territories, Indigenous Australians accounted for a disproportionate number of new cases. In the Northern Territory, Aboriginal and Torres Strait Islander peoples accounted for about four in five new patients, much higher than the proportion of the Northern Territory population reporting as Indigenous (approximately 30%). In remote regions, standardised ESRD incidence among Indigenous Australians has been shown to be up to 30 times the national incidence for the total Australian population (Cass et al. 2001).

7.10 INCIDENCE OF END-STAGE RENAL DISEASE — 2001

	New South Wales(a)	*Queensland*	*South Australia*	*Western Australia*	*Northern Territory*	*Australia(b)*
		MALES				
Total (no.)	348	180	100	107	29	1 100
Indigenous (no.)	10	20	9	6	23	69
Indigenous (%)	2.9	11.1	9.0	5.6	79.3	6.3
Indigenous population as a % of total	2.0	3.4	1.7	3.5	27.6	2.4
		FEMALES				
Total (no.)	268	150	53	79	35	783
Indigenous (no.)	11	29	6	21	30	101
Indigenous (%)	4.1	19.3	11.3	26.6	85.7	12.9
Indigenous population as a % of total	2.0	3.5	1.7	3.5	30.1	2.4

(a) Includes Australian Capital Territory.

(b) Includes Victoria and Tasmania.

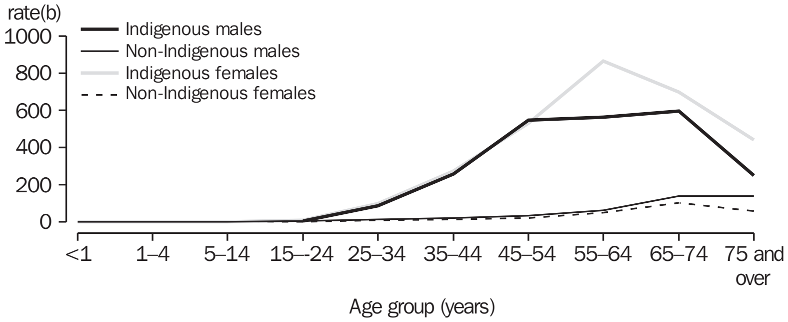
Source: Russ 2002.

Management of ESRD

ESRD patients require either kidney transplantation or dialysis to maintain the functions typically performed by the kidneys. Patterns of treatment for ESRD differed between Indigenous and non-Indigenous patients. The majority (84%) of Indigenous Australians being treated for ESRD were reliant on dialysis, with about one in six (16%) living with kidney transplants. In comparison, half (54%) of non-Indigenous Australians living with ESRD were reliant on dialysis, the remaining 46% lived with functioning kidney transplants (Russ 2002). These patterns reflect such things as disparities in availability of treatment and differences in the health of Indigenous and non-Indigenous Australians upon presentation for treatment (Cass et al. 2001; Thomas 1998).

In 2000–01, there were 54,784 dialysis procedures in hospitals and clinics for Indigenous Australians. The rates for these procedures were markedly higher in older age groups, peaking in males aged 65–74 years at 598 per 1,000 and in females aged 55–64 years at 867 per 1,000 (graph 7.11). In contrast, the rates for non-Indigenous persons peaked at ages 65–74 at much lower levels, 139 per 1,000 for males and 104 per 1,000 for females. It should be noted that the rates of use of dialysis procedures is actually the outcome of a few individuals accessing services many times, for example an individual reliant on treatment may undergo dialysis 2–3 times a week.

7.11 HAEMODIALYSIS PROCEDURES(a) — 2000–01



(a) Data are for public and most private hospitals.
(b) Per 1,000 population.
Source: AIHW National Hospital Morbidity Database.

Deaths from chronic kidney disease

Chronic kidney disease (ICD-10 codes N01–N07, N11–N12, N14–N15, N18–N20, N25.8, N26, N28, Q61) was listed as the underlying cause of death for 108 Indigenous persons in Queensland, South Australia, Western Australia and the Northern Territory in 1999–2001. The Indigenous death rate was about eight times the total Australian rate.

Deaths from chronic kidney disease represented 2.5% of all Indigenous deaths in the four jurisdictions in 1991–2001. Of 108 deaths, 42 (39%) were males and 66 (61%) were females.

Cancer

Cancers (malignant neoplasms) result from the growth and spread of abnormal cells throughout the body. Cancer is a leading cause of death for Indigenous and non-Indigenous Australians alike. Mortality data from 1999–2001 indicate that there were 60% more observed deaths from cancer among Indigenous persons in Western Australia, South Australia, Queensland and the Northern Territory combined, than would have been expected, if deaths from the disease occurred at the same rates as found in the total population (Chapter 9).

Information on cancer incidence (i.e. new cases) comes from the state and territory cancer registries. The registries collect data on all malignant tumours except for non-melanoma skin cancers. These are referred to as the 'registrable' cancers. They do not include tumours classified as benign, in-situ or of uncertain behaviour. All the data reported in this section relate to registrable cancers.

It is believed that there is considerable under-identification of Aboriginal and Torres Strait Islander peoples in cancer registrations, although the exact extent of this has not been quantified. It is likely that even for the four jurisdictions for which information has been presented in this section (table 7.12), there is some level of under-identification. For this reason, and because the total numbers of cancers reported for Indigenous persons are small, the numbers and rates in table 7.12 should be interpreted with caution. The focus should be on broad patterns rather than precise figures, and comparisons should be made within jurisdictions rather than between jurisdictions.

Cancer *continued*

Indigenous cancer incidence rates have been reported to be lower than non-Indigenous rates in several states, but it is known that not all Indigenous persons are correctly identified in cancer registries. It appears likely that the incidence of cancer in Indigenous Australians is similar to that of other Australians. There are, however, considerable differences in incidence of cancer at particular sites, though some of these differences can be explained, in part at least, by differences in risk factor prevalence (Condon et al. 2003).

The cancer mortality rates presented in table 7.12 are generally higher for Indigenous persons than for the rest of the population. However, survival may be poorer among Indigenous cancer patients because of later diagnosis and higher rates of typically fatal cancers (South Australian Cancer Registry 1997).

7.12 CANCER INCIDENCE AND MORTALITY, EXCLUDING NON-MELANOMA SKIN CANCER, SELECTED YEARS

	Incidence(a)		*Mortality(b)*	
	Cases *no.*	*Mean annual rate(c)*	*Deaths* *no.*	*Mean annual rate(c)*
Queensland				
Indigenous males	366	454	166	359
Indigenous females	390	334	131	200
Non-Indigenous males(d)	41 749	510	10 948	212
Non-Indigenous females(d)	34 155	369	7 764	126
South Australia				
Indigenous males	n.a.	n.a.	27	196
Indigenous females	n.a.	n.a.	26	170
Non-Indigenous males(d)	n.a.	n.a.	5 350	209
Non-Indigenous females(d)	n.a.	n.a.	4 117	127
Western Australia				
Indigenous males	164	320	73	295
Indigenous females	162	255	47	139
Non-Indigenous males(d)	18 913	449	5 202	205
Non-Indigenous females(d)	16 153	330	3 971	127
Northern Territory				
Indigenous males	196	401	74	270
Indigenous females	204	327	77	229
Non-Indigenous males(d)	960	451	227	203
Non-Indigenous females(d)	653	322	139	140
All Australia(e)				
Total males	**n.a.**	**470**	**n.a.**	**210**
Total females	**n.a.**	**339**	**n.a.**	**127**

(a) Western Australian incidence data are for the period 1997–2001. Northern Territory and Queensland incidence data are for the period 1996–2000.

(b) Mortality data for Queensland, South Australia, Western Australia, and Northern Territory are for the period 1999–2001.

(c) Rate per 100,000. Directly age-standardised using the 1991 Australian Standard Population.

(d) Includes those for whom Indigenous status information was not known.

(e) Data for All Australians category is for 1999.

Source: National Cancer Statistics Clearing House and AIHW National Mortality Database.

Cancer *continued*

The age-standardised incidence rates for cancers of the lung and liver were higher among Indigenous males than non-Indigenous males in both Queensland and the Northern Territory for 1996–2000. In addition the rate for cancer of the pancreas was higher among Indigenous males than non-Indigenous males in the Northern Territory, while the rate for cancer of the oesophagus was higher among Indigenous males than non-Indigenous males in Queensland. The age-standardised incidence rates for cancers of the liver, pancreas and larynx in Western Australia, for 1997–2001, were higher among Indigenous males than non-Indigenous males but the rate for lung cancer was similar between the two groups.

Cancer of the cervix was higher among Indigenous women than non-Indigenous women in both Queensland and the Northern Territory for 1996–2000. In addition, myeloid leukemia was higher among Indigenous women than non-Indigenous women in the Northern Territory while lung cancer was higher among Indigenous women than non-Indigenous women in Queensland. Cancers of the gallbladder and of unknown primary site were higher among Indigenous women in Western Australia for 1997–2001 but the rate for cancer of the cervix was similar between the two groups.

The incidence rates of breast cancer, prostate cancer, colorectal cancer, and skin cancer (melanoma) were lower among Indigenous Australians than non-Indigenous Australians in all three jurisdictions.

Among Indigenous females in the Northern Territory, cancers of the breast, lung, unknown primary site and cervix were the most common. The most common cancers among Indigenous females in Western Australia were cancers of the breast and lung, colorectal cancer and cancers of unknown primary site. The most common cancers among Indigenous females in Queensland were cancers of the breast and lung, colorectal cancer and cancer of the cervix.

Indigenous males in the Northern Territory were most commonly affected by lung, liver, and colorectal cancers and cancers of unknown primary site. Indigenous males in Western Australia and Queensland were most commonly affected by prostate, lung, and colorectal cancers and cancers of unknown primary site.

Respiratory diseases

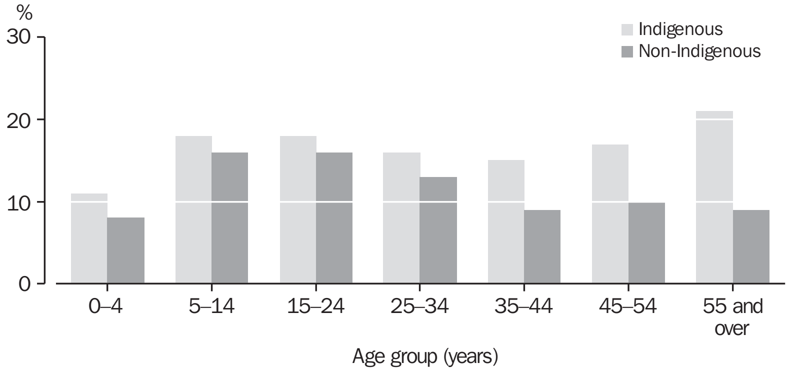
Respiratory diseases, including pneumonia and influenza, are a leading cause of illness, disability and mortality in human populations around the world. Common respiratory diseases include asthma, chronic obstructive pulmonary disease (COPD — comprising both chronic bronchitis and emphysema), influenza and pneumonia. While all these respiratory diseases are leading causes of illness resulting in a high use of health services, influenza and pneumonia (combined) and COPD are leading underlying causes of death.

Prevalence

Respiratory diseases are prevalent in both the Indigenous and non-Indigenous populations of Australia. At a broader level, according to the 2001 NHS, about one-third (33%) of Aboriginal and Torres Strait Islander peoples reported having a respiratory disease compared with 30% of non-Indigenous Australians. However, asthma is more prevalent in Indigenous than non-Indigenous Australians (17% compared to 12% in 2001).

The higher prevalence of asthma in Indigenous Australians is noted across all age groups. The prevalence of asthma in Indigenous Australians generally increases as age increases (graph 7.13), with peaks at ages 5–24 years (18%) and 55 years and over (21%). In comparison, among non-Indigenous Australians, the prevalence of asthma peaks among those aged 5–24 years (16%).

7.13 SELF-REPORTED ASTHMA — 2001



Source: ABS 2002e.

Use of health services

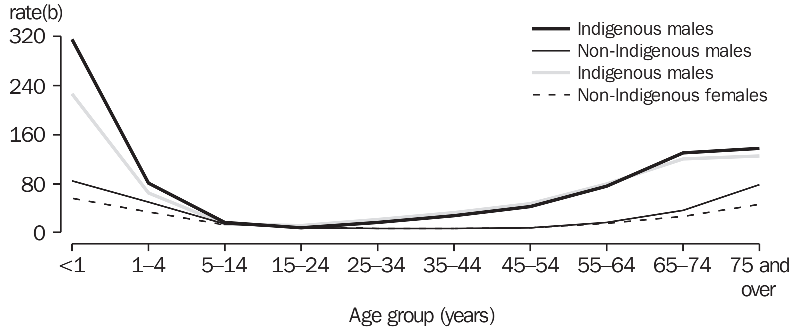
Respiratory diseases are a major factor for health service use. This includes visits to primary providers (general practitioner consultations, emergency department attendances, etc.) as well as hospitalisation in severe cases. According to the 2000–01 Bettering the Evaluation And Care of Health survey, general practitioners managed respiratory diseases at a rate of about 22 problems per 100 encounters in the Indigenous and total Australian populations. However, asthma was managed more often among Indigenous persons, at about twice the total population rate (5.0 compared to 2.8 per 100 total encounters), again reflecting the self-reported prevalence levels in the 2001 NHS. Asthma was the third most commonly managed problem in Indigenous persons compared with seventh in the total population (Britt et al. 2002).

About 15,700 hospital separations with a principal diagnosis of respiratory disease were Indigenous in 2000–01, representing about 9% of all Indigenous hospital separations. The Indigenous rates (46.0 and 45.2 per 1,000 males and females respectively) were about three times the non-Indigenous rates.

Use of health services *continued*

The age-specific distribution of hospital separations for respiratory disease is U-shaped in both Indigenous and non-Indigenous Australians. However, in 2000–01 the rates among Indigenous infants (under one year) were about four times the non-Indigenous rates; among those aged 55 years and over the Indigenous rates were about three times the non-Indigenous rates (graph 7.14).

7.14 AGE-SPECIFIC HOSPITAL(a) SEPARATION RATES FOR RESPIRATORY DISEASES — 2000–01



(a) Data are for public and most private hospitals.
(b) Per 1,000 population.
Source: AIHW National Hospital Morbidity Database.

Influenza and pneumonia (combined), COPD and asthma were principal diagnoses with higher rates of hospital separations among Indigenous than non-Indigenous Australians. In 2000–01, the Indigenous separation rates for influenza and pneumonia (combined) were nearly five times the non-Indigenous rates, the Indigenous COPD rates were 4–5 times the non-Indigenous rates, and the asthma rates about 2–3 times the non-Indigenous rates.

Deaths from respiratory diseases

Respiratory diseases are a major underlying cause of death. In 1999–2001 there were 360 Indigenous deaths in Queensland, South Australia, Western Australia and the Northern Territory with respiratory diseases as the underlying cause of death, representing 8.2% of all Indigenous deaths in those jurisdictions. The Indigenous death rate from respiratory diseases in those jurisdictions was about four times the total Australian rate.

COPD was the major cause of respiratory deaths during 1999–2001 with 149 deaths, or 3.4% of all Indigenous deaths in the same four jurisdictions. Influenza and pneumonia (combined) were the underlying cause of 110 Indigenous deaths (2.5%) and asthma was the underlying cause of 18 Indigenous deaths (0.4%).

Deaths from respiratory diseases *continued*

The Indigenous death rates for COPD were 3–4 times the total Australian rate. For influenza and pneumonia combined, the relative difference between the Indigenous and total Australian death rates was greater in males than females. While the death rate for Indigenous males was eight times the total Australian rate, among Indigenous females the rate was four times the total Australian rate (table 7.15).

7.15 DEATH RATES FOR RESPIRATORY DISEASES(a) — 1999–2001

	Males			*Females*		
Respiratory disease	*Indigenous rate(b)*	*Total Australian rate(c)*	*Rate ratio(d)*	*Indigenous rate(b)*	*Total Australian rate(c)*	*Rate ratio(d)*
Asthma	4.6	1.8	2.6	6.9	2.7	2.5
Chronic obstructive pulmonary disease	114.2	34.3	3.3	83.0	21.5	3.9
Influenza and pneumonia	85.9	11.1	7.7	61.4	14.4	4.3
All respiratory diseases(e)	259.8	59.2	4.4	192.5	49.0	3.9

(a) Rates are given as number of deaths per 100,000 population, directly age-standardised using the total Australian population at 30 June 1991.

(b) Data are for Indigenous deaths for usual residents of Queensland, South Australia, Western Australia and the Northern Territory combined. Based on year of registration.

(c) Data are for all deaths of usual residents of Australia, including Indigenous deaths.

(d) Rate ratio is equal to Indigenous rate divided by total Australian rate. The rates are subject to rounding, therefore the rate ratios may not equal the value calculated using reported rates.

(e) Data are for ICD-10 codes J00–J99.

Source: AIHW National Mortality Database.

Communicable diseases (and HIV/AIDS)

This section compares the occurrence of communicable diseases in Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians. Data presented here include notification of communicable diseases and hospital use. The evidence from these analyses reinforces the fact that the burden of communicable diseases in Indigenous Australians is far greater than that of non-Indigenous Australians.

Identification of Indigenous Australians within data collections continues to be a problem due to a number of factors, and the magnitude of the differences in illness is still marked. Indigenous persons suffer a greater burden of ill health from communicable diseases than non-Indigenous Australians.

Communicable disease surveillance and reporting

In Australia, communicable diseases of particular public health importance are classified as 'notifiable' and under legislation each case must be notified to state and territory health authorities. Notifications are received from hospitals, general practitioners and diagnostic laboratories. While each Australian state and territory have their own set of notifiable diseases, a set of 56 diseases and conditions are nationally notifiable. Data on all these cases are forwarded to the National Notifiable Diseases Surveillance System (NNDSS), managed by the Commonwealth Department of Health and Ageing. The number of notifications, however, represent a variable proportion of all incident cases of any disease, with the proportion of milder conditions notified likely to be less than the proportion of more serious diseases.

In some jurisdictions, namely the Northern Territory, Western Australia and South Australia, reporting of Indigenous status has been relatively complete for most diseases reported to NNDSS. Table 7.16 shows notifications and rates for selected notifiable diseases for the Northern Territory, South Australia and Western Australia combined in 2001.

Notifications of tuberculosis (TB) are reported to the National Mycobacterial Surveillance System. In 2001, 77% of TB notifications were in overseas-born Australians (Miller et al. 2002). Therefore, so as to avoid distorting proportions when comparing rates of TB notifications for Indigenous persons to those for non-Indigenous persons, overseas-born Australians were excluded from proportion calculations in table 7.16, and only calculations for Australian-born non-Indigenous persons are shown in table 7.16 (see footnote (e)). Notifications of invasive pneumococcal disease to the NNDSS began in 2001 and additional data was provided through enhanced surveillance systems in metropolitan New South Wales, Tasmania, Victoria, South Australia, Western Australia and the Northern Territory. Data are drawn from this dataset (table 7.16) and should be interpreted with caution, since national totals are likely to be incomplete (Roche & Krause 2002).

Rates of sexually transmissible infections (STIs) were higher in Indigenous persons than in non-Indigenous Australians, with the highest ratios for gonococcal infection and syphilis. The substantially higher levels of chlamydia, gonorrhoea and syphilis among Indigenous persons compared to non-Indigenous persons may also facilitate human immunodeficiency virus (HIV) transmission in the Indigenous population (Grosskurth et al. 1995).

Communicable disease surveillance and reporting *continued*

Between 1992 and 2001, 167 notifications of newly diagnosed HIV infection and 69 notifications of acquired immune deficiency syndrome (AIDS) were recorded in the Indigenous population. Overall age-standardised incidence rates of newly diagnosed HIV and AIDS in Indigenous Australians were similar to those in non-Indigenous Australians. However, while the incidence rate of AIDS diagnosis in both the Indigenous and non-Indigenous populations declined from a peak in 1994, the rate of decline in AIDS diagnoses in the Indigenous population was significantly slower than in the non-Indigenous population. Differences in the rate of decline in AIDS diagnoses between the Indigenous and non-Indigenous populations may be due to differences in access, uptake or effectiveness of antiretroviral treatment for HIV infection (NCHECR 2002).

The proportion of female cases in newly diagnosed HIV infections is higher in the Indigenous population than in the total population (27% compared with 11%) for the period 1999–2001 (NCHECR 2002).

7.16 NOTIFICATIONS OF SELECTED DISEASES TO THE NATIONAL NOTIFIABLE DISEASES SURVEILLANCE SYSTEM(a) — 2001

		Proportion of notifications identified as			*Crude rate per 100,000 population(b)*		
	Notifications	*Indigenous*	*Non-Indigenous*	*Unknown*	*Indigenous*	*Non-Indigenous*	*Rate ratio(c)*
Disease	*no.*	*%*	*%*	*%*			
Chlamydial infection	9 825	32.5	52.8	14.7	1 213.3	66.5	18.2
Donovanosis(d)	23	91.3	8.7	—	8.0	<0.1	. .
Gonococcal infection	4 319	64.6	29.1	6.3	1 059.2	15.4	68.8
Haemophilus influenzae type b	16	18.8	75.0	6.3	1.1	0.1	11.0
Hepatitis A	290	16.9	72.4	10.7	18.6	2.4	7.8
Hepatitis B (incident)	153	19.0	68.0	13.1	11.0	1.2	9.2
Hepatitis C (incident)	489	19.6	57.3	23.1	36.5	3.9	9.4
Leprosy	5	60.0	40.0	0.0	1.1	<0.1	. .
Measles	45	6.7	86.7	6.7	1.1	0.4	2.8
Meningococcal infection	358	14.8	78.2	7.0	20.1	3.1	6.5
Mumps	70	17.1	54.3	28.6	4.6	0.6	7.7
Pertussis	6 817	13.7	72.8	13.5	353.6	59.1	6.0
Pneumococcal disease (invasive)	1 446	8.0	86.0	6.0	39.0	8.7	4.5
Ross River virus infection	1 283	16.4	69.7	14.0	79.7	10.8	7.4
Rubella	66	10.6	81.8	7.6	2.7	0.6	4.5
Salmonellosis	3 520	17.8	63.9	18.2	238.1	29.0	8.2
Shigellosis	348	54.0	33.0	12.9	71.4	1.6	44.6
Syphilis	1 134	52.3	40.6	7.1	225.2	5.4	41.7
Tuberculosis(e)	997	4.2	15.6	3.0	9.8	1.0	9.8

(a) Data from South Australia, Western Australia and the Northern Territory are combined. Except for pneumococcal disease (invasive) where data from enhanced surveillance from metropolitan New South Wales, Victoria, South Australia, Western Australia, Tasmania, and the Northern Territory for 2001 are shown (Roche & Krause, 2002).

(b) Based on projections from 1996 census (ABS 1998b).

(c) Rate ratio is equal to the rate of Indigenous notifications divided by the rate of non-Indigenous notifications and does not include notifications where Indigenous status was not known.

(d) Donovanosis not notifiable in and South Australia.

(e) Notifications number includes people born outside Australia. Proportions are based on only Australian born cases.

Source: NNDSS.

Hospital separations

The illnesses classified in Chapter 1 of the International Classification of Diseases (ICD) represents a grouping of infectious and parasitic diseases. Yet, many other diseases of a communicable nature are found in other chapters of the ICD-10 classification including meningitis, rheumatic heart disease (discussed in detail within circulatory system diseases of this Chapter), kidney infections, influenza and pneumonia. This section describes hospital separations for some major communicable illnesses.

The hospital separation rate for Indigenous persons was more than twice that of non-Indigenous Australians for infectious and parasitic diseases and a set of other communicable diseases (table 7.17). In 2000–01, the communicable diseases listed in table 7.17 were the main reason requiring a hospital stay in 6.7% of Indigenous males and 5.2% of Indigenous females. The majority of these illnesses caused Indigenous Australians to be hospitalised at higher rates. For example, Indigenous Australians were four times more likely to require a hospital visit for the treatment of pneumonia than non-Indigenous Australians.

7.17 HOSPITAL SEPARATIONS FOR SELECTED INFECTIOUS AND PARASITIC DISEASES(a) — 2000–01

	Indigenous males				*Indigenous females*			
	no.	*%(b)*	*rate(c)*	*rate ratio(d)*	*no.*	*%(b)*	*rate(c)*	*rate ratio(d)*
Infectious and parasitic diseases								
Intestinal infectious diseases	1 369	1.8	3.9	2.3	1 298	1.3	4.3	2.3
Tuberculosis	21	0.0	0.2	4.5	18	0.0	0.1	2.5
Other bacterial diseases	311	0.4	2.5	3.4	330	0.3	2.4	4.3
Septicaemia	233	0.3	2.3	4.0	277	0.3	2.2	5.2
Pneumococcal septicaemia	20	0.0	0.1	5.2	17	0.0	0.1	3.9
Infections, sexual transmission	37	0.0	0.2	2.6	129	0.1	0.6	4.7
Viral infections	168	0.2	0.7	1.0	161	0.2	0.7	1.2
Viral hepatitis	40	0.1	0.2	1.1	24	0.0	0.1	1.4
Other and unspecified infectious and parasitic diseases	712	0.9	3.0	2.2	736	0.7	3.3	2.7
Meningitis	45	0.1	0.2	3.2	31	0.0	0.1	2.0
Influenza	68	0.1	0.4	3.5	87	0.1	0.5	3.8
Pneumonia	2 335	3.1	13.6	4.4	2 034	2.0	11.6	5.0
pneumococcal pneumonia	126	0.2	0.7	7.8	101	0.1	0.7	9.9
Kidney infections	66	0.1	0.5	3.5	429	0.4	2.4	3.9
Total	**5 132**	**6.7**	**27.3**	**2.7**	**5 253**	**5.2**	**28.1**	**3.1**

(a) Data are for public and most private hospitals. Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) (National Centre for Classification in Health 2000). ICD-10-AM codes A00–B99, G00–G03, J10–J18, N10–N12, N13.6 and N15.1. Refer to Appendix 4 for specific ICD-10-AM codes used.

(b) Percentage of all Indigenous hospital separations in 2000–01.

(c) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

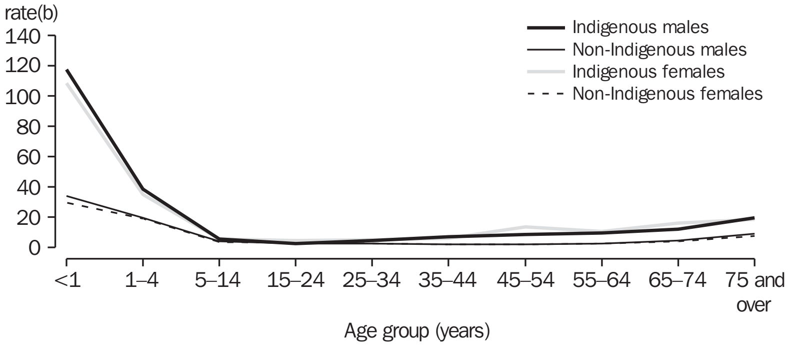
(d) Rate ratio is equal to the rate of Indigenous separations divided by the rate of non-Indigenous separations.

Source: AIHW National Hospital Morbidity Database.

Hospital separations *continued*

An analysis of hospital separations for 'Infectious and parasitic diseases' shows the extent of the differences by age and Indigenous status. The highest rates occurred in Indigenous children less than one year of age (males 117.8 per 1,000 population, females 108.8 per 1,000 population) followed by those aged 1–4 years (males 38.8 per 1,000 population, females 35.0 per 1,000 population). Indigenous Australians had higher age-specific hospitalisation rates than non-Indigenous Australians (graph 7.18).

7.18 AGE-SPECIFIC HOSPITAL(a) SEPARATION RATES FOR PRINCIPAL DIAGNOSIS OF INFECTIOUS AND PARASITIC DISEASES — 2000–01



(a) Data are for public and most private hospitals. Data are only for ICD-10-AM 'Certain infectious and parasitic diseases' (A00–B99).
(b) Per 1,000 population.

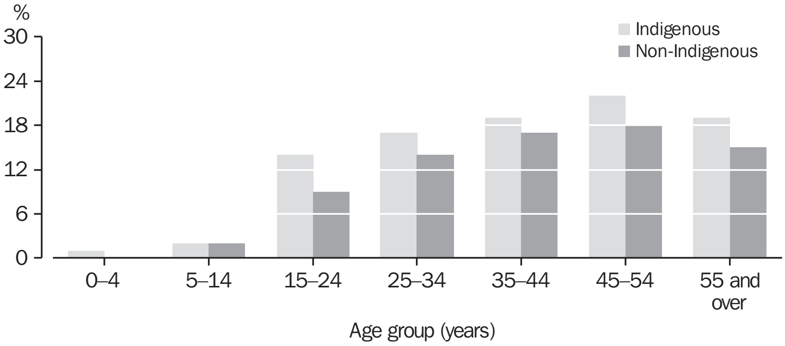
Source: AIHW National Hospital Morbidity Database.

Infectious respiratory diseases are a major cause of illness in Aboriginal and Torres Strait Islander peoples. The National Indigenous Pneumococcal and Influenza Immunisation Program provides free vaccines to Indigenous persons to protect them from two communicable respiratory illnesses, pneumococcal disease and influenza. A serious complication of these illnesses is pneumonia, especially in persons with pre-existing heart or lung illness (NHMRC 2000a).

Injury

Data from the 2001 NHS show that a higher proportion of Indigenous persons than non-Indigenous persons reported a condition as a result of an injury or accident (graph 7.19).

7.19 SELF-REPORTED CONDITION AS A RESULT OF AN INJURY OR ACCIDENT — 2001



Source: ABS 2002e.

In 2000–01, over 16,000 separations from hospital by Indigenous patients had a principal diagnosis of injury or poisoning (table 7.20). Of these, 56% were males. This corresponds to an estimated rate of 48.6 injury separations per 1,000 Indigenous males, and 38.3 per 1,000 Indigenous females.

7.20 HOSPITAL SEPARATIONS FOR PRINCIPAL DIAGNOSIS OF INJURY OR POISONING(a) — 2000–01

	Males				*Females*			
	no.	*%(b)*	*rate(c)*	*rate ratio(d)*	*no.*	*%(b)*	*rate(c)*	*rate ratio(d)*
Injuries	7 188	9.4	36.8	1.9	5 084	5.0	26.1	2.4
Burns and frostbite	289	0.4	1.4	2.8	209	0.2	1.0	4.4
Poisoning	434	0.6	2.2	1.7	703	0.7	3.5	1.8
Toxic effects	186	0.2	0.9	1.8	134	0.1	0.6	1.9
Other effects of external causes, early complications of trauma	288	0.4	1.7	3.6	247	0.2	1.3	3.9
Complications of surgical and medical care, n.e.c.	709	0.9	5.7	1.7	807	0.8	5.9	2.0
Total(e)	9 095	11.9	48.6	1.9	7 184	7.1	38.3	2.3

(a) Data are for public and most private hospitals. Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) (National Centre for Classification in Health 2000). ICD-10-AM codes S00–T98 & V01–Y98, refer to Appendix 4 for specific ICD-10-AM codes used.

(b) Percentage of all Indigenous hospital separations in 2000–01.

(c) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

(d) Rate ratio is equal to the rate of Indigenous separations divided by the rate of non-Indigenous separations.

(e) Total includes sequelae of injuries, poisoning, external causes.

Source: AIHW National Hospital Morbidity Database.

Nearly all separations with a principal diagnosis of injury include a code that indicates the external cause of the injury. (External causes include things like a car crash, fall, or stabbing, which result in an injury such as a fracture, laceration or burn.) In 2000–01, as in previous years, common types of external causes of hospitalised injury were assault (23% of Indigenous male and 31% of Indigenous female injury separations), accidental falls (males 17%; females 15%), complications of medical or surgical care (males 10%; females 14%), and transport-related injuries (males 11%; females 7%) (table 7.21).

Injury *continued*

Rates of hospitalised injury in Australia were about twice as high for Indigenous persons as for non-Indigenous Australians (ratio of age-standardised rates: 1.9 for males and 2.3 for females). The rate ratio was less than this (though still above one) for some external causes of injury, such as accidental falls (ratio of age-standardised rates: 1.5 for males and 1.2 for females) and transport-related injuries (ratio of age-standardised rates: 1.4 for males and 1.6 for females). However, rates of hospitalisation for injury recorded as being due to assault were very much higher for Indigenous Australians than for non-Indigenous Australians, ratios of age-standardised rates being 8.3 for males and 28.0 for females.

7.21 HOSPITAL SEPARATIONS FOR EXTERNAL CAUSES OF INJURY OR POISONING(a) — 2000–01

	Indigenous males				*Indigenous females*			
	no.	*%(b)*	*rate(c)*	*rate ratio(d)*	*no.*	*%(b)*	*rate(c)*	*rate ratio(d)*
Transport accidents	1 015	1.3	4.8	1.4	524	0.5	2.6	1.6
Accidental falls	1 550	2.0	8.6	1.5	1 077	1.1	6.4	1.2
Exposure to inanimate mechanical forces	1 186	1.6	5.4	1.4	603	0.6	2.6	1.9
Exposure to animate mechanical forces	370	0.5	1.8	2.2	186	0.2	0.9	2.5
Exposure to electric current/smoke/fire/animals/nature(e)	385	0.5	2.0	2.7	282	0.3	1.4	3.5
Accidental poisoning	241	0.3	1.2	1.8	215	0.2	1.0	1.9
Other accidental exposures(f)	599	0.8	3.3	1.2	426	0.4	2.3	1.8
Intentional self-harm	452	0.6	2.4	2.2	522	0.5	2.6	2.0
Assault(g)	2 114	2.8	11.3	8.3	2 196	2.2	10.9	28.0
Complications of medical and surgical care	945	1.2	6.6	1.5	996	1.0	6.9	1.9
Other external causes	205	0.3	1.1	2.5	135	0.1	0.6	2.1
Total(h)	9 095	11.9	48.6	1.9	7 184	7.1	38.3	2.3

(a) Data are for public and most private hospitals. Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) (National Centre for Classification in Health 2000). Cause of injury is based on the first reported external cause where the principal diagnosis was 'Injury, poisoning and certain other consequences of external causes'. ICD-10-AM codes S00–T98 & V01–Y98, refer to Appendix 4 for specific ICD-10-AM codes used.

(b) Percentage of all Indigenous hospital separations in 2000–01.

(c) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

(d) Rate ratio is equal to the rate of Indigenous separations divided by the rate of non-Indigenous separations.

(e) Includes exposure to electric current, radiation, extreme ambient air temperature and pressure, smoke, fire, flames, forces of nature, contact with heat and hot substances, and contact with venomous animals and plants.

(f) Includes overexertion, travel and privation, accidental exposure to other and unspecified factors.

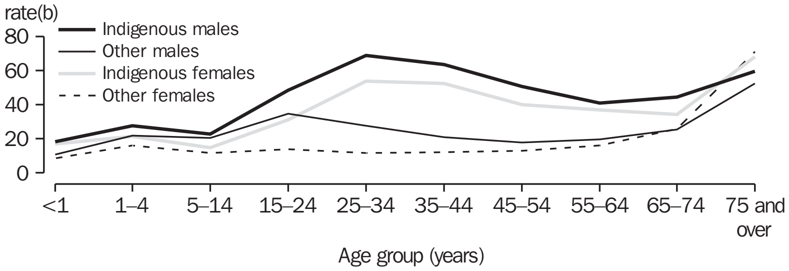
(g) These figures should be interpreted with caution, as injuries purposely inflicted by others may be under-reported by women.

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

Source: AIHW National Hospital Morbidity Database.

Rates of hospitalisation due to injury varied with age (graph 7.22). For Indigenous persons, rates were highest from 25 to 44 years of age, and were also high at ages 75 years and older. Most of the excess of injury hospitalisation between the ages of 15–54 years is due to cases attributed to assault (graph 7.23).

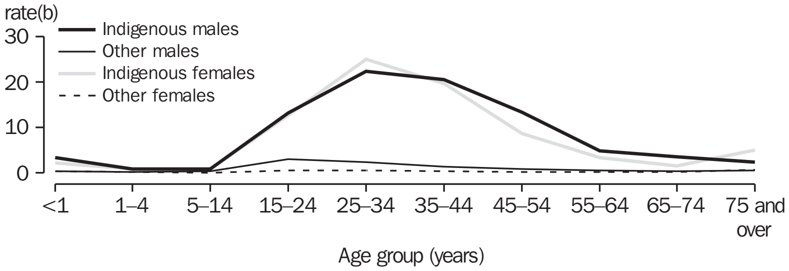
7.22 AGE-SPECIFIC HOSPITAL SEPARATION RATES FOR PRINCIPAL DIAGNOSIS OF INJURY OR POISONING(a) — 2000–01



(a) Data are for public and most private hospitals, includes cases where principal diagnosis is injury or poisoning (ICD-10-AM S00–T98).
(b) Per 1,000 population.

Source: AIHW National Hospital Morbidity Database.

7.23 AGE-SPECIFIC HOSPITAL SEPARATION RATES FOR PRINCIPAL DIAGNOSIS OF ASSAULT(a) — 2000–01



(a) Data are for public and most private hospitals. Includes cases where principal diagnosis is injury or poisoning (ICD-10-AM S00–T98) and external causes in assault (X85–Y09).
(b) Per 1,000 population.

Source: AIHW National Hospital Morbidity Database.

Deaths from injury

Mortality data show a broadly similar pattern to hospitalised injury information. Rates of death due to injury and poisoning are considerably higher for Indigenous persons than the Australian population. During the three years from 1999 to 2001, and considering deaths registered in the four jurisdictions in which Indigenous identification is more complete, the ratios of age-standardised injury death rates were 3.2 for Indigenous males and 3.3 for Indigenous females. As with hospitalisation data, the injury death rates for Indigenous persons are highest in mid-life. The high injury mortality rates contribute to the lower life expectancy of Indigenous Australians.

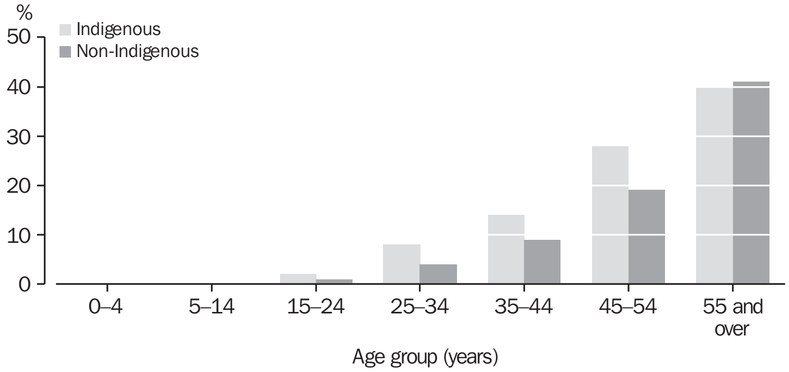
Common external causes of fatal injury were suicide (33% of male and 15% of female Indigenous injury deaths), transport-related injuries (males 24%; females 28%), and intentional interpersonal harm (males 11%; females 22%). Ratios between age-standardised death rates for Indigenous and non-Indigenous Australians were particularly high for intentional interpersonal harm (males 11; females 16), and for exposure to fire and hot objects and substances (males 9; females 16) (Chapter 9).

Arthritis and musculoskeletal conditions

Arthritis and musculoskeletal conditions are a large cause of pain and disability in Australia's ageing population. Their prevalence among Indigenous Australians is similar to that in non-Indigenous Australians. According to the 2001 NHS, about 35% of Indigenous Australians reported having a long-term health condition associated with these conditions, similar to non-Indigenous Australians (32%).

Arthritis is a heterogenous group of disorders in which there may be inflammation of the joints, causing chronic pain, stiffness, functional limitations and deformity. Its two most common forms are osteoarthritis and rheumatoid arthritis. During 2001, about 16% of Indigenous Australians reported some form of long-term arthritis compared to 13% of non-Indigenous Australians. The higher prevalence was reported for all age groups, except those aged 55 years and over (graph 7.24).

7.24 SELF-REPORTED ARTHRITIS — 2001



Source: ABS 2002e.

A large proportion of arthritis reported by Indigenous Australians is osteoarthritis, a highly age-associated condition. In comparison, rheumatoid arthritis appears to be relatively uncommon among Indigenous persons (Chin & Segasothy 2000). On the other hand, systemic lupus erythematosus, a connective tissue disorder, appears to be more common among Indigenous Australians from north Queensland and the Northern Territory (Anstey et al. 1995; Grennan & Bossingham 1995).

Although arthritis and musculoskeletal conditions are not immediately life threatening, they are a major cause of disability. At present, there are no national data on the prevalence of arthritis-related disability among Indigenous Australians. In 2000–01, joint and back problems were the main reason for hospitalisation in around 1% of Indigenous hospital separations.

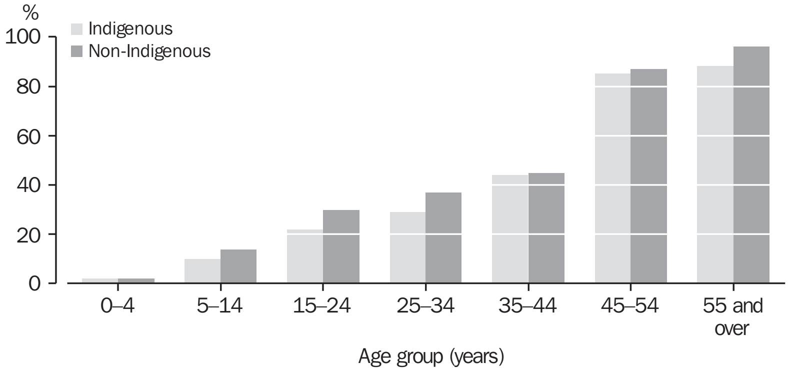
Eye and vision problems

Eye and vision problems are the most commonly reported long-term health conditions among both the Indigenous and non-Indigenous populations (ABS 2002e). The most frequently reported problems are long-sightedness (hyperopia) and short-sightedness (myopia), which are correctable with lenses. More serious eye diseases and conditions include partial or total vision loss, cataract, and among Indigenous persons, trachoma.

Eye and vision problems *continued*

Eye and vision problems are reported less frequently by Indigenous persons (46%) compared to non-Indigenous persons (51%), and this pattern is consistent across all age groups. The prevalence of eye and vision problems increases with age, to 85% and 96% for Indigenous and non-Indigenous Australians respectively (graph 7.25). Within the Indigenous population, those living in non-remote areas are more likely to report eye and sight problems (49%) than those living in remote areas (38%) (ABS 2002e). Since Indigenous persons living in remote areas have limited access to specialist eye health services, they may be less likely to report eye and vision problems, or to be diagnosed with such disorders.

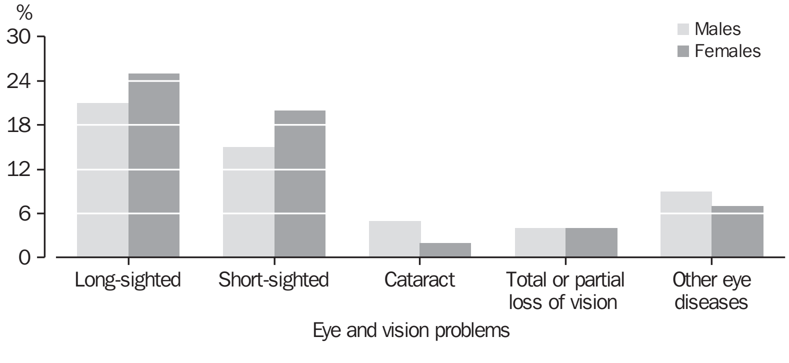
7.25 SELF-REPORTED EYE AND VISION PROBLEMS — 2001



Source: ABS 2002e.

The prevalence rates for the most frequently reported conditions are higher among Indigenous females than males. On the other hand, cataracts are more common among Indigenous males than females. Around 4% of both Indigenous males and females reported total or partial loss of vision in 2001 (graph 7.26).

7.26 PREVALENCE OF EYE AND VISION PROBLEMS, INDIGENOUS POPULATION — 2001



Source: ABS 2002e.

Eye and vision problems *continued*

The occurrence of cataract doubles with each decade after the age of 40. Cataract is correctable by surgical replacement of the lens. However, cataract has a greater impact on the vision of Indigenous Australians as they usually present for cataract surgery at a more advanced stage than those in the general community. This is due in part to later diagnosis, and concerns about moving away from the community for surgery (Taylor 1997). Although there is limited data on the prevalence of Indigenous diabetic retinopathy (damage to the small blood vessels in the retina), Taylor (1997) states that it is a major problem in Indigenous communities. All persons with diabetes are at increased risk of developing retinopathy, which can lead to blindness. Most of this can be prevented by regular screening followed by laser treatment. There is an increased prevalence and severity of diabetic retinopathy in Indigenous persons which is associated with poor diabetes control, late presentation and irregular monitoring (Taylor 1997).

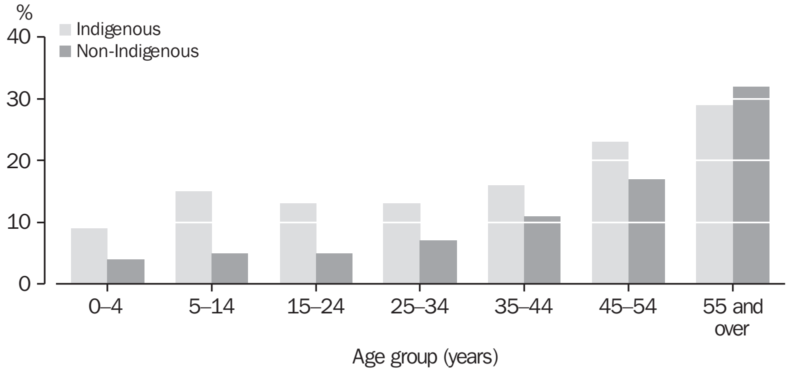
Trachoma, a preventable disease caused by the bacterium *Chlamydia trachomatis*, is found almost exclusively in Australia among Indigenous communities, particularly among children. Chronic or recurrent trachoma infection can lead to conjunctival scarring, trichiasis (inturned eye lashes which damage the cornea) and blindness through corneal opacification (Ewald et al. 2003). Considerable attention was given to trachoma in Indigenous communities in the 1970s and 1980s, with the result that in some areas the prevalence and severity of active trachoma has decreased considerably and even disappeared. However, in some communities the prevalence and intensity of trachoma has remained unchanged over the past 20 years (Taylor 1997; Thomson & Paterson 1998).

Ear and hearing problems

Ear and hearing problems were the second most common long-term health conditions reported by Australians in 2001 (ABS 2002e). Indigenous persons reported more ear and hearing problems (18%) than non-Indigenous persons (14%) and the prevalence increases with age. Total or partial hearing loss was reported by 13% of Indigenous and 10% of non-Indigenous Australians.

Aboriginal and Torres Strait Islander children are reported as having ear and hearing problems twice as often as non-Indigenous children (graph 7.27). This is due in part to high rates of otitis media (middle ear infection) among children in many Indigenous communities (Couzos et al. 2001). Otitis media, a common childhood disease, is often the result of a pneumococcal invasion of the nasopharynx. Recurrent or chronic otitis media is often characterised by a perforated tympanic membrane, which can lead to hearing loss, deafness and further complications such as learning difficulties (Coates et al. 2002). The World Health Organization (2003) recognises that the prevalence of otitis media greater than 4% in a population is indicative of a massive public health problem. Otitis media affects up to ten times this proportion of children in many Indigenous communities (Coates et al. 2002).

7.27 SELF-REPORTED EAR AND HEARING PROBLEMS — 2001



Source: ABS 2002e.

Hospital separation rates for ear and hearing problems (which peak in the age group 1–4 years) are similar between Indigenous and non-Indigenous peoples. Slightly more (67%) of all separations for Indigenous persons are due to otitis media compared to 60% of non-Indigenous separations. A further 14% of Indigenous hospitalisations for ear problems are due to perforation of the tympanic membrane, in contrast to 7% of non-Indigenous separations.

The chronicity of ear and hearing problems is also greater among Indigenous children than non-Indigenous children. According to Coates (2002), Indigenous children and young adults between the ages of two and 20 years experience approximately 32 weeks of middle ear disease and hearing loss compared to an average of 2 weeks for non-Indigenous children.

7.28 SWIMMING POOLS PROMOTING HEALTH IN REMOTE ABORIGINAL COMMUNITIES

Interventions to improve health need not always be medical. An example of direct health, as well as social benefits, from a non-medical intervention in remote Aboriginal communities comes from Western Australia. The intervention was the construction and management of swimming pools in three remote Aboriginal communities.

Indigenous Australian children living in remote areas have very high rates of skin sores (pyoderma) and middle-ear infections (otitis media). In some remote communities as many as 70% of children have sores. The same agent that causes skin sores (Group A streptococcus) can also cause acute rheumatic fever (which causes heart disease) and kidney failure. Ear infections cause deafness (a considerable number of Indigenous children have perforated ear drums as a result of ear infections) that impairs learning at school, which consequently makes it difficult to gain employment, and leads to low incomes.

In the past it has been noticed that where children had access to places to swim, the number of skin infections was significantly lower. A survey of communities in Central Australia suggested that swimming pools would confer social benefits as well as health benefits.

On the basis of these reports, the Western Australian Government built public swimming pools in three remote Aboriginal communities. Following the construction of the pools, a study was carried out by the Telethon Institute for Child Health Research to see whether or not the pools resulted in a reduction in skin and middle-ear infections and if the pools also provided social benefits to these remote communities.

There have been significant health improvements in the two communities studied. The number of children with skin infections has declined markedly which is likely to result in less work for clinic staff, less use of antibiotics and a reduction in subsequent chronic kidney failure and heart disease in the adult population.

Furthermore, the proportion of children with perforated eardrums has declined. Children also benefit from the regular exercise and are taught how to swim and skills such as water safety, lifesaving and resuscitation, which are very important in preventing deaths by drowning in Aboriginal communities.

The pools are managed by the Royal Life Saving Association and water quality is monitored according to statewide regulations. There have been no pool-related disease outbreaks; however, continued maintenance of water quality will be important.

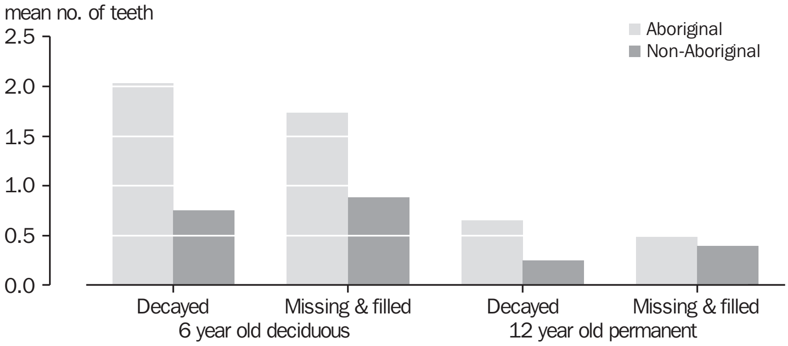
Source: Deborah Lehmann, Child Health Research Institute, Western Australia.

Oral health

Child oral health

Dental decay among South Australian Aboriginal children was about twice the level compared with non-Aboriginal children in both the deciduous and permanent teeth. The proportion of dental decay which was untreated was also greater (graph 7.29). These comparisons are similar to previously published results for the Northern Territory for 1999 (AIHW DSRU 2002). A previous study by Bourke et al. (1999) in South Australia found that dental decay levels in deciduous teeth among Aboriginal children differed by geographic location, being lowest in remote communities (mean dmfs=1.9) but higher in other non-metropolitan areas (mean dmfs=7.9) and in Adelaide (mean dmfs=5.2). Similar geographic variation was observed in the permanent teeth.

7.29 CUMULATIVE HISTORY OF DENTAL DECAY, ABORIGINAL AND NON-ABORIGINAL CHILDREN, SOUTH AUSTRALIA — 2001



Source: AIHW Dental Statistics Research Unit.

Adult oral health

Tooth loss

Complete loss of all natural teeth (edentulism) is an adverse outcome of the cumulative effects of oral disease. Previous research reports noted a higher percentage of Aboriginal and Torres Strait Islander persons with no natural teeth (16.3%) than among non-Indigenous Australians (10.2%) (AIHW DSRU 2000).

Tooth loss is strongly associated with non-insulin-dependent diabetes (Taylor et al. 1996), a condition that is common among Aboriginal and Torres Strait Islander peoples. In the two remote communities of central Australia where data were collected, persons with diabetes had over three times the number of missing teeth than those without diabetes. One remote community which in 1987 had no edentulous persons had 10 in 2000, all of whom had diabetes (in a sample of 345 persons from a community of 1,706 adults).

Dental decay

After adjusting for age, cumulative history of dental decay among Aboriginal Dental Clinic (ADC) patients in remote communities in South Australia was approximately 50% lower than each of three other groups in non-remote areas: ADC patients in Adelaide, Aboriginal patients of public dental clinics in non-remote South Australia and New South Wales, and Aboriginal patients of regional New South Wales. For example, among 18–24 year olds, the mean DMFT values were 3.6, 10.6, 10.8 and 8.4, respectively. Among persons aged 45 years and over, the mean DMFT values were 8.5, 18.5, 16.7 and 16.3, respectively.

The distribution of components of decay reveals that the filled teeth component is lower among persons living in remote areas compared with those living in metropolitan and other (non-remote) locations. This pattern was consistent among all age groups. Untreated decay was responsible for the majority of the decay experienced in the 18–24 year old group but decreased in other age groups. Missing teeth was the predominant component in the oldest age group in both remote areas and Public Dental Services (PDS); however, in remote areas missing teeth comprise almost 75% of caries experience.

7.30 MEASURES OF TOOTH DECAY AND DATA SOURCES

The cumulative history of dental decay in permanent teeth was measured by the mean number of teeth that were decayed (DT), missing because of decay (MT) or filled because of decay (FT). Corresponding measures for deciduous teeth were dt, mt and ft. At the tooth surface level DS, MS and FS, and ds, ms and fs indices were used. Gum disease, (also called periodontal disease) was measured using the Community Periodontal Index (CPI), a World Health Organization measure of periodontal health. Each person was categorised according to the most severe periodontal condition found by the examining dentist: 0 indicating satisfactory periodontal health, 1 — gingival bleeding, 2 — presence of calculus (tartar), 3 — periodontal pocket depth of 4–5 mm and 4 — periodontal pocket depth of 6+ mm.

Unless otherwise stated, data in this report come from studies conducted by the Australian Institute of Health and Welfare's Dental Statistics and Research Unit. Child oral health data were collected from all children in South Australia who used the South Australian Dental Service (SADS) in a six-month period during 2001 and included 900 Aboriginal children. Data from remote communities not served by SADS were collected in 1999–2000 (n=412) in South Australia and the Northern Territory. Oral health data for adults were collected in 1999–2000 among patients seeking dental care in one South Australian metropolitan (n=147) and two remote Aboriginal Dental Clinics (ADCs, n=534; AIHW DSRU 2003). Data from Aboriginal patients were also collected through public dental services (PDS) in South Australia and New South Wales (n=243; AIHW DSRU 2003). Due to the sampling design, these data may not be representative of Aboriginal persons in Australia and should be regarded as indicative only.

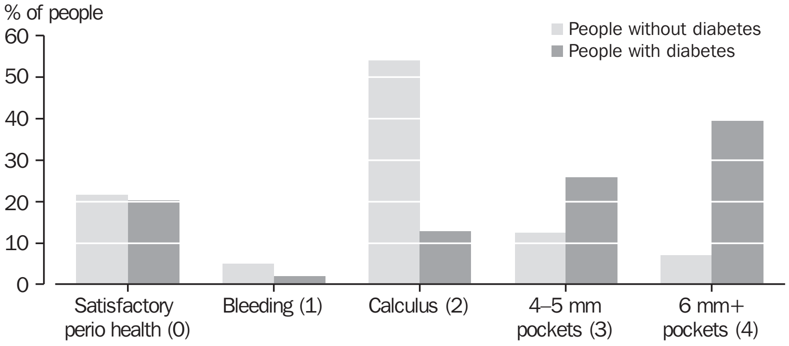
There is some evidence that decay rates in adults are increasing in remote communities. In one remote community of central Australia, caries experience doubled between 1987 and 1999, the number of missing teeth increased twofold and the number of filled teeth increased more than threefold.

Gum disease (periodontal status)

Among Aboriginal patients receiving care at public dental services and ADCs, the presence of calculus was the most common periodontal condition observed by examining dentists in persons below 45 years of age: 63% among 18–24 year olds and 48% among 25–44 year olds. However, in the 45 and over age group 23% had periodontal pockets of 6 mm plus and 25% had periodontal pockets of 4–5 mm.

The link between periodontal disease and diabetes is well established (Löe 1993). In these data, the percentage of persons with diabetes is 10.9% in the 25–44 year age group and 50.6% in the 45 and over age group. The distribution of Community Peridontal Index (CPI) scores shows marked differences between those with diabetes and those without (graph 7.31). Among non-diabetics, a score of two, indicating the presence of calculus, was the most common score. However, among persons with diabetes the most frequent CPI score was four, indicating periodontal pockets of 6 mm plus.

7.31 GUM DISEASE AMONG INDIGENOUS PEOPLE, AS MEASURED USING THE COMMUNITY PERIODONTAL INDEX — 2000



Source: AIHW Dental Statistics Research Unit.

Mental health and emotional wellbeing

The large difference in the mental health and emotional wellbeing of Indigenous peoples compared with non-Indigenous peoples and the importance of policy initiatives to overcome this inequality has long been recognised (HREOC 1993, HREOC 1997; New South Wales Health Department 2002). However, large discrepancies in the mental wellbeing of Indigenous peoples compared with non-Indigenous peoples still remain.

Mental health and emotional wellbeing *continued*

Information related to the mental health of Indigenous persons presented here includes hospitalisation and mortality which result from mental illness, rates of self-harm and assault, and incarceration rates. This information is collected from a number of sources including the National Hospital Morbidity Database, National Mortality Database and the National Prison Census. Data are also available on child protection services (Chapter 5) and substance misuse (Chapter 8), as well as the use of alcohol and other drug treatment services (Chapter 4). While these sources of information do not provide a complete account of a person's environment or cause of mental illness, they can give an indication of the burden of distress and mental illness experienced. The NHS 2001 did not include information on Indigenous mental health due to concerns about the cultural appropriateness of the mental health-related questions in that survey (ABS 2002e).

Compared with the rates of the general population there were more hospital separations for Indigenous persons than expected for most types of mental and behavioural disorders (table 7.32). The overall rate ratios for Indigenous males and females were 2.2 and 1.5 respectively. Particularly, the rate that Indigenous persons were hospitalised for 'mental and behavioural disorders due to psychoactive substance use' was higher than that of the non-Indigenous population (4.8 times higher for Indigenous males and 3.6 times higher for Indigenous females).

Those hospitalised for mental and behavioural disorders can receive treatment in a unit or ward dedicated to the treatment of patients with psychiatric conditions (specialised psychiatric care) or in general wards. Indigenous persons have proportionally less specialised care for mental disorders and behavioural disorders. In 2000–01, Indigenous males received specialised care in 53% of separations for mental and behavioural disorders (standardised based on the categories in table 7.32), compared with 67% for non-Indigenous males. Indigenous females were admitted to specialised care for 46% of mental health separations, compared with 69% for non-Indigenous females.

7.32 HOSPITAL SEPARATIONS FOR PRINCIPAL DIAGNOSIS OF MENTAL AND BEHAVIOURAL DISORDERS(a) — 2000–01

	Indigenous males				*Indigenous females*			
	no.	*%(b)*	*rate(c)*	*rate ratio(d)*	*no.*	*%(b)*	*rate(c)*	*rate ratio(d)*
Organic mental disorders	92	0.1	1.2	2.0	68	0.1	0.9	1.8
Mental disorders due to psychoactive substance use	2 095	2.7	12.6	4.8	1 002	1.0	5.2	3.6
Schizophrenia, schizotypal & delusional disorders	1 165	1.5	5.9	2.3	728	0.7	3.7	2.1
Mood and neurotic disorders	1 005	1.3	6.0	1.1	1 685	1.7	9.4	1.2
Other mental disorders(e)	226	0.3	0.9	0.9	247	0.2	1.2	0.6
Total	**4 583**	**6.0**	**26.7**	**2.2**	**3 730**	**3.7**	**20.4**	**1.5**

(a) Data are for public and most private hospitals. Categories are based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) (National Centre for Classification in Health 2000) ICD-10-AM codes F00–F99, refer to Appendix 4 for specific ICD-10-AM codes used.

(b) Percentage of all Indigenous hospital separations in 2000–01.

(c) Per 1,000 population. Directly age-standardised using the total Australian population as at 30 June 1991.

(d) Rate ratio is equal to the rate of Indigenous separations divided by the rate of non-Indigenous separations.

(e) Includes eating disorders, sleeping disorders, disorders of personality and behaviour, mental retardation, disorders of psychological development and unspecified mental disorders.

Source: AIHW National Hospital Morbidity Database.

In 1999–2001, 103 Indigenous persons died as a result of mental and behavioural disorders in Queensland, South Australia, Western Australia and the Northern Territory (Chapter 9). Mental and behavioural disorders accounted for 4.1 times as many deaths as expected for Indigenous males, based on total Australian rates. For Indigenous females, mental disorders accounted for 2.1 times as many deaths as expected, based on total Australian rates.

Hospitalisation and mortality rates for intentional injury, such as assault or suicide, may also be indicative of mental illness and distress. In 2000–01 Indigenous Australians were more likely to be hospitalised as a result of assault compared with non-Indigenous Australians (8.3 times more likely for Indigenous males and 28.0 times more likely for Indigenous females) (table 7.21). Indigenous Australians also had a higher rate of hospitalisation for intentional self-harm (2.2 times higher for Indigenous males, 2.0 times higher for Indigenous females).

Mental health and emotional wellbeing *continued*

Aboriginal and Torres Strait Islander peoples were also more likely to die from assault or suicide (Chapter 9). In 1999–2001, 96 Indigneous Australians died as a result of assault in Queensland, South Australia, Western Australia and the Northern Territory. Assault accounted for 7.2 times as many deaths as expected for Indigenous males based on total Australian male rates and 10.2 times as many deaths as expected for Indigenous females based on total Australian female rates. In Queensland, South Australia, Western Australia and the Northern Territory there were 198 Indigenous deaths from suicides in 1999–2001. For Indigenous males, suicide accounted for 2.8 times as many deaths as expected based on total Australian male rates. For Indigenous females, suicide accounted for 1.9 times as many deaths as expected based on total Australian female rates. The sex and age groups with the highest rates of suicide among Indigenous persons were males aged 15–24 years (85 per 100,000 population) and males aged 25–34 years (109 per 100,000 population), which were higher than total Australian rates (21 per 100,000 for males aged 15–24 years and 34 per 100,000 for males aged 25–34 years). Due to the problems with identification of Indigenous persons in death records, these figures are likely to be underestimates (ABS 2002c).

The National Inquiry into the Human Rights of People with Mental Illness (HREOC 1993) found that anti-social and self-destructive behaviour, often the result of undiagnosed mental and social distress, brought Indigenous people into frequent contact with the criminal justice system. The national prison census reports that Indigenous males aged 17 and over were imprisoned at the rate of 3,479 per 100,000 population compared with 285 for all males, at 30 June 2001 (ABS 2002h). Indigenous females also had a higher rate of imprisonment (294 per 100,000 population) compared with all females (20 per 100,000 population). Indigenous youth (aged 10–17) also had high rates of imprisonment. At 30 June 2001, Indigenous youth were incarcerated at a rate of 284 per 100,000 compared with 28.2 for the general population (Cahill & Marshall 2002). Although the rates are not adjusted for the younger age structure of the Indigenous population, this would only account for a small part of the striking differences in the rates.

Indigenous mental illness and/or emotional distress may not only cause Indigenous Australians to come into contact with the criminal justice system but incarceration may be a risk factor for mental illness (HREOC 1993). Incarceration separates Indigenous persons from their communities and culture. Imprisoned Indigenous persons frequently experience depressive symptoms associated with unresolved anger resulting in suicide attempts. The number of Indigenous deaths in custody was also relatively high. Of the 87 deaths in custody in 2001, 19 (22%) were Indigenous persons (Collins 2002). On release from prison some Indigenous persons may then turn to substance misuse or violence and continue their decline of mental health with further contact with the criminal justice system (HREOC 1993).

SUMMARY

While self-reported data indicate that a similar proportion of Indigenous and non-Indigenous Australians had a long-term condition (78%), these proportions do not reflect the marked differentials in the incidence, prevalence and the burden of ill-health on Indigenous peoples compared with the non-Indigenous population.

The diseases and conditions examined in this Chapter include circulatory system diseases, diabetes, chronic kidney disease, cancer, respiratory diseases, communicable diseases, injury and poisoning, vision and hearing problems, oral health and mental health. For most of these conditions Indigenous peoples had higher prevalence rates, higher hospitalisation rates and higher death rates than non-Indigenous Australians. Moreover, some of the chronic diseases described here are diagnosed at a younger age in Indigenous persons than non-Indigenous persons, resulting in a lower quality of life at younger ages and premature mortality.

CHAPTER 8 HEALTH RISK FACTORS

INTRODUCTION

Health risk factors impact on the onset, maintenance and prognosis of a variety of chronic diseases. A wide body of research has demonstrated complex yet robust connections between a number of biomedical and behavioural factors and major chronic diseases and conditions (AIHW 2002d), including the fact that the major chronic diseases share common risk factors (WHO 2000). Though their role is less certain, environmental factors from cultural, socioeconomic, and physical domains have also been shown to have a strong association with both disease and behavioural and biomedical risk factors.

Understanding risk factors facilitates early intervention and management strategies to prevent or ameliorate disease and so achieve health gains for individuals and populations (NPHP 2001). 'Much is known about the prevention of noncommunicable diseases. Experience clearly shows that they are to a great extent preventable through interventions against the major risk factors and their environmental, economic, social and behavioural determinants in the population' (WHO 2000).

The health risk factors presented in this Chapter focus predominantly on behavioural risk factors, including smoking, the use of alcohol and other drugs, breastfeeding, immunisation, and nutrition. Data on the prevalence of biomedical risk factors, such as levels of blood pressure and blood cholesterol, are currently limited for the Indigenous population, with the exception of body weight, which is presented in this Chapter. Exposure to violence is presented as an environmental risk factor. The health and welfare of Indigenous Australians is also likely to be affected by exposure to other risk factors such as poor housing and inadequate environmental infrastructure (Chapter 3). The majority of the health risk factors presented in this Chapter are consistently recognised within the public health debate as impacting on health, and are responsible for a large proportion of the total burden of disease in Australia (Mathers et al. 1999; AIHW 2002c). They are also an important component of the greater burden of ill health experienced by Aboriginal and Torres Strait Islander peoples when compared with non-Indigenous Australians.

The Indigenous component of the 2001 National Health Survey (NHS) provides the most recent data for the majority of risk factors presented in this Chapter. Many of the following estimates presented from the 2001 NHS are subject to large sampling error. The *National Health Survey: User's Guide* (cat. no. 4363.0.55.001), available free of charge from the ABS web site <http://www.abs.gov.au>, provides further details about the reliability of the results. Given the increasing interest in regional differences in health status, where possible, comparisons have been made between remote and non-remote areas of Australia. In addition, data from various other sources, including the Australian Institute of Health and Welfare's (AIHW) 2001 National Drug Strategy Household Survey (NDSHS) and the National Hospital Morbidity Database (NHMD) are discussed (see Explanatory Notes for further details of these sources).

BREASTFEEDING

Breastfeeding is associated with improvements in health outcomes, through reduction in child and infant mortality and morbidity (SIGNAL 2001). Specific benefits identified include reduction in otitis media, gastrointestinal infections, and sudden infant death syndrome (NHMRC 2001). In a traditional Indigenous setting, children were breastfed until at least two years of age. More recently, Indigenous children in more urban areas are increasingly weaned onto diets relatively high in sugar, fats and protein at a younger age, which may impact on health outcomes throughout adulthood (Gracey 2000).

In 2001, 78% of Indigenous children aged under four years were breastfed. While the proportion of the non-Indigenous children reported to have been breastfed was higher (87%), it can not be stated with confidence that there is any difference between the two populations in their likelihood to have been breastfed. Indigenous children living in non-remote areas are less likely than non-Indigenous children to have been breastfed for more than six months (table 8.1).

In non-remote areas in 2001, (77%) of Indigenous children aged under four had been or were currently being breastfed for at least some time, similar to the proportion in 1995 (75%) (table 8.1).

8.1 CHILDREN AGED UNDER 4 YEARS, BREASTFEEDING STATUS — NON-REMOTE AREAS(a)

	1995		*2001*	
	Indigenous	*Non-Indigenous*	*Indigenous*	*Non-Indigenous*
	PROPORTION (%)			
Child has been breastfed for				
Less than 1 month	**11	13	15	11
1 to less than 6 months	*18	25	25	24
6 to less than 12 months	*15	21	*12	19
12 months or more	14	13	*12	16
Total(b)	*59*	*72*	*64*	*71*
Child currently being breastfed	16	14	13	16
Child has never been breastfed	25	14	23	12
Total children aged under 4 years(c)	100	100	100	100
	NUMBER ('000)			
Total children aged under 4 years	32	972	36	962

(a) Indigenous data for 1995 are only available for non-remote areas. As a result, non-Indigenous and time series comparisons are made on this basis.

(b) Includes 'length of time child has been breastfed' not known.

(c) Includes 'child breastfeeding status' not known.

Source: ABS 2002e.

IMMUNISATION

Given that Aboriginal and Torres Strait Islander peoples suffer a much higher burden of disease from infectious diseases than do non-Indigenous Australians, there are extra vaccinations recommended for Indigenous Australians in addition to the Australian Standard Vaccination Schedule. The detailed recommendations for all vaccines can be found in the Australian Immunisation Handbook (NHMRC 2003).

As noted in Chapter 7, the Indigenous hospital separation rates for influenza and pneumonia (combined) in 2000–01 were about five times the non-Indigenous rates. Due to these higher rates of influenza and pneumonia and pneumococcal disease, vaccination for influenza and pneumococcal disease is recommended by the National Health Medical Research Council (NHMRC) to commence at a younger age for Aboriginal and Torres Strait Islander peoples (50 years of age) than non-Indigenous Australians (65 years). The NHMRC also recommends that Indigenous adults aged 15–49 years with underlying medical conditions (e.g. diabetes, chronic heart disease or severe asthma) should be vaccinated. The National Indigenous Pneumococcal and Influenza Immunisation Program funds free vaccines and promotes vaccination in these risk groups.

National data on vaccination coverage in Indigenous Australians became available for the first time in the 2001 NHS (ABS 2002d). The discussion compares Indigenous adults aged 50 years of age or more with non-Indigenous peoples over 65 years. For Indigenous adults, self-reported vaccination coverage for influenza in the past year was 51%, similar to the coverage in the non-indigenous population; and for pneumococcal disease in the past five years, was 25% higher than the coverage in the non-Indigenous population (14%). For Indigenous adults, coverage was considerably higher in remote areas compared to non-remote for both influenza (almost twice as high) and pneumococcal disease (more than double) (table 8.2).

For Indigenous children aged under seven years, vaccination data were available for non-remote areas only. For diphtheria, tetanus, whooping cough, hepatitis B, polio, measles, mumps and rubella, the proportion of Indigenous children who were fully vaccinated ranged from 60% (whooping cough), to 78% (measles, mumps, rubella) (table 8.2). Negotiations are currently occurring between jurisdictional health departments and community controlled health organisations for the release of data on vaccination coverage in Indigenous children from the Australian Childhood Immunisation Register. It is anticipated that national level data will be published in 2004.

8.2 IMMUNISATION STATUS, NON-REMOTE AREAS — 2001

	Indigenous	*Non-Indigenous*
	%	%
CHILDREN AGED UNDER 7 YEARS		
Diphtheria, tetanus		
Fully immunised	66	78
Partially immunised	20	14
Not immunised	*2	2
Total(a)	*100*	*100*
Whooping cough		
Fully immunised	60	73
Partially immunised	26	19
Not immunised	*2	2
Total(a)	*100*	*100*
Hepatitis B(b)		
Fully immunised	76	77
Partially immunised	*16	14
Not immunised	n.p.	*5
Total(a)(c)	*100*	*100*
Polio		
Fully immunised	71	84
Partially immunised	14	8
Not immunised	*2	2
Total(a)	*100*	*100*
Measles, mumps, rubella		
Fully immunised	78	87
Partially immunised	7	7
Not immunised	7	4
Total(a)	*100*	*100*
ADULTS(d)		
Influenza		
Had vaccination in last 12 months	45	75
Had vaccination but not in last 12 months	11	7
Never had vaccination	43	18
Total persons(e)	*100*	*100*
Pneumonia		
Had vaccination in last five years	19	28
Had vaccination but not in last five years	**4	*1
Never had vaccination	75	69
Total persons(f)	*100*	*100*

(a) Includes 'immunisation status' not known.

(b) Introduced in the recommended immunisation schedule in May 2000. Therefore data only apply to children under 18 months of age.

(c) Includes 'immunisation status' not applicable.

(d) Includes only adults in age groups recommended to be vaccinated, that is Indigenous adults over 50 years, and non-Indigenous adults over 65 years.

(e) Includes 'whether had influenza vaccination in the 12 months prior to interview' and 'whether had influenza vaccination' not known.

(f) Includes 'whether had pneumonia vaccination in the five years prior to interview' and 'whether had pneumonia vaccination' not known.

Source: ABS 2002e.

NUTRITION

Nutrition-related diseases such as heart disease, Type 2 diabetes, obesity, and renal disease are principal causes of ill health among Aboriginal and Torres Strait Islander peoples (NHMRC 2000a; SIGNAL 2001). While the relationship between health and nutrition is widely accepted, less well understood are the complex interrelationships between nutrition and health risk factors. For example, diet-related diseases may be associated with environmental, behavioural, biological and genetic factors, making it difficult to determine the extent to which diet contributes to disease (AIHW 2000). The diets of many Aboriginal and Torres Strait Islander peoples have undergone rapid change, from a fibre-rich, high protein, low saturated fat 'traditional' diet, to one in which refined carbohydrates and saturated fats predominate (NHMRC 2000a). In addition, external factors, such as the physical environment, dispossession of land, socioeconomic status, historical and cultural issues, and access to fresh food in remote areas, all impact on the choices Indigenous Australians have in terms of nutrition and diet.

The NHMRC recommends that a balanced diet should include, among other items, plenty of fruit and vegetables, reduced fat dairy foods and/or alternatives, and limited intake of saturated/total fat and salt in foods (NHMRC 2001). After adjusting for age differences, 42% of Aboriginal and Torres Strait Islander adults living in non-remote areas were estimated to have a medium to high fruit intake (2 or more serves per day), compared to 52% of the non-Indigenous population. However, 83% of Indigenous adults were estimated to have a medium to high vegetable intake (2 or more serves per day), compared to 77% of the non-Indigenous population (table 8.3). Indigenous adults in non-remote areas were also more likely than non-Indigenous adults in non-remote areas to consume whole (full cream) milk, rather than reduced fat alternatives, and add salt to their meals after cooking (table 8.3). These trends were apparent across all age groups (ABS 2002e).

A healthy diet also is dependent on the supply of appropriate foods, at both an individual and community level. Many Aboriginal and Torres Strait Islander peoples in remote communities do not have access to the same range and cost options for healthy food as non-Indigenous Australians (Public Health Services; Queensland Health 2001; Stewart 1997). Even where healthy food is available, education, availability of traditional foods, and limited access to income (including financial control and management) can influence decision making. The ability to store and prepare fresh food is also limited by the lack of adequate facilities and infrastructure such as kitchens, storage facilities, and a reliable source of electricity (Chapter 3).

8.3 SELECTED DIETARY BEHAVIOURS, NON-REMOTE AREAS(a) — 2001

	Indigenous	*Non-Indigenous*
	%	%
Usual daily serves of vegetables		
Do not eat vegetables	1	1
1 serve or less	17	22
2–3 serves	47	48
4–5 serves	32	25
6 serves or more	4	5
Total	*100*	*100*
Usual daily serve of fruit		
Do not eat fruit	11	6
1 serve or less	47	41
2–3 serves	32	42
4–5 serves	9	8
6 serves or more	*2	2
Total	*100*	*100*
Usual type of milk		
Whole	67	48
Low/reduced fat	18	30
Skim	6	12
Soy	*2	4
None of the above(b)	6	5
Total(c)	*100*	*100*
Salt added after cooking		
Never/rarely	39	55
Sometimes	19	20
Usually	42	25
Total	*100*	*100*

(a) Persons aged 12 years and over. Directly age-standardised using the total Australian population as at 30 June 2001.

(b) Includes ‘evaporated or sweetened condensed milk’.

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

Source: ABS data available on request, 2001 NHS.

BODY WEIGHT

Relative body weight is important both as an indicator of past and current health, and as a predictor of future health. Being underweight may reflect poor nutrition or illness, and under-nutrition is still a significant health problem, particularly for children in some Indigenous communities (NHMRC 2000b). Obesity is a risk factor for diabetes and heart disease, among other conditions.

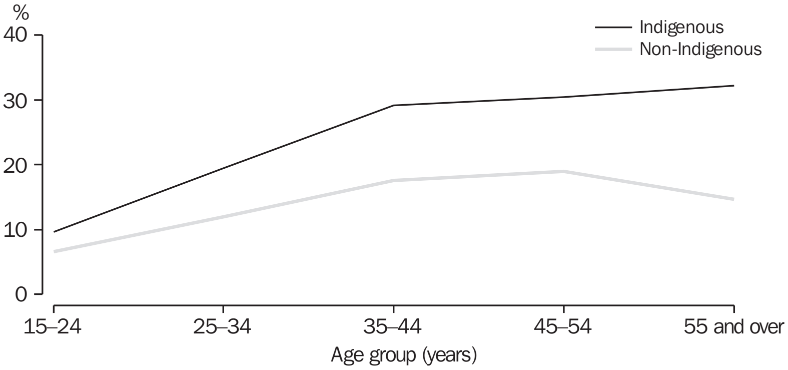
BODY WEIGHT *continued*

Self-reported measurements of height and weight were collected in the 2001 NHS and used as the basis for allocating Body Mass Index (BMI — see Glossary) for persons aged 15 years and over. Although a comparison of data from the 1995 NHS and 1995 National Nutrition Survey indicated that self-reported measurements were shown to underestimate BMI (ABS 1998c), the lack of alternative means of gathering data necessitated the use of self-reporting in the 2001 NHS. Classification of the 2001 NHS data into relative weight categories (i.e. underweight, acceptable weight, overweight and obese) was consistent with recommendations of the NHMRC (1985) and those of the World Health Organisation (WHO) (1995). Height and weight information could not be obtained for approximately 20% of Aboriginal and Torres Strait Islander peoples and 8% of non-Indigenous Australians.

In the 2001 NHS, persons with a BMI of between 25 to less than 30 were classified as overweight, while persons with a BMI of 30 or more were classified as obese (see Glossary). Results from the 2001 NHS indicate that after adjusting for age differences and non-response, Indigenous adults aged 15 years and over were more likely (61%) to be classified as overweight or obese when compared with non-Indigenous adults (48%). The proportion of both Indigenous and non-Indigenous persons, aged 18 years and over and classified as obese, has increased since 1995.

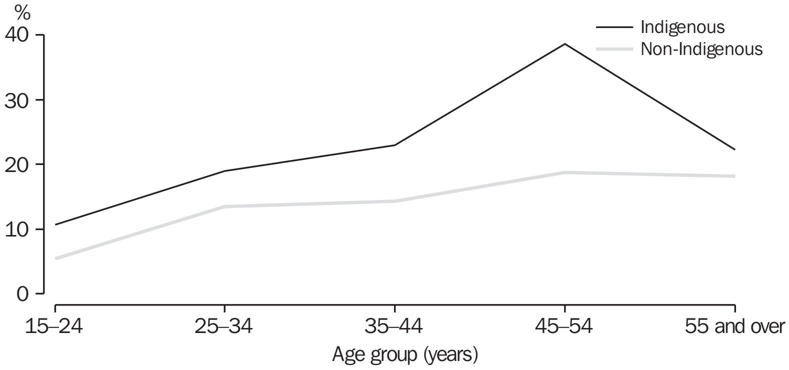
As shown in the following graphs, Indigenous males and females in each age group were more likely to be classified as obese than non-Indigenous Australians in the same groupings.

8.4 OBESE MALES — 2001



Source: ABS 2002e.

8.5 OBESE FEMALES — 2001



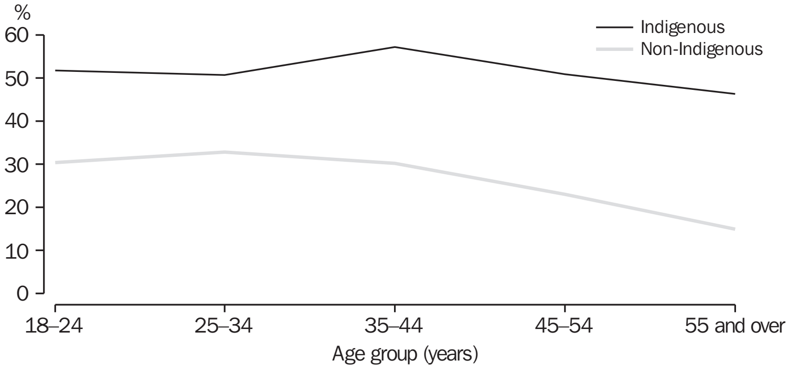
Source: ABS 2002e.

SMOKING

Smoking tobacco increases the risk of coronary heart disease, stroke, peripheral vascular disease, numerous cancers and a variety of other diseases and conditions. As a single risk factor, it causes the greatest burden of disease for the total Australian population (Mathers et al. 1999; AIHW 2002c). As Chapters 7 and 9 show, Aboriginal and Torres Strait Islander peoples are at greater risk than non-Indigenous Australians of hospitalisation and/or death from these conditions. Smoking during pregnancy is also a risk factor for low birthweight which, as Chapter 6 indicates, is about twice as common among babies born to Indigenous mothers as it is among non-Indigenous babies.

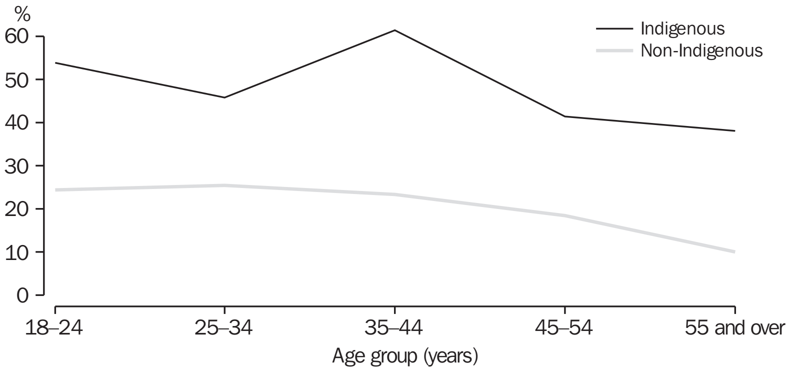
After adjusting for age differences, 51% of Indigenous persons aged 18 years were current smokers, compared to 24% of non-Indigenous persons. As shown in the following graphs, smoking was more commonly reported in 2001 among Indigenous males and females in every age group when compared with the non-Indigenous population (graphs 8.6 and 8.7).

8.6 MALE SMOKERS — 2001



Source: ABS 2002e.

8.7 FEMALE SMOKERS — 2001



Source: ABS 2002e.

Results from the 2001 NDSHS indicate very similar trends to the 2001 NHS in regard to the smoker status of Indigenous and non-Indigenous Australians (see Explanatory Notes for further details of the NDSHS). According to the 2001 NDSHS, 45% of all Aboriginal and Torres Strait Islander peoples aged 14 years and over reported being daily smokers, compared to 19% of non-Indigenous peoples (AIHW 2003j).

ALCOHOL CONSUMPTION

The excessive consumption of alcohol is a major risk factor for conditions such as liver disease, pancreatitis, diabetes, some cancers and epilepsy. Alcohol is frequently a contributor in injuries from motor vehicle accidents, falls, burns, and suicide (AIHW 2002c), and has the potential to contribute to domestic violence, family breakdown and anti-social behaviour. Excessive alcohol consumption was associated with 3.4% of deaths in Australia in 1996 and 4.8% of the total burden of disease (Mathers et al. 1999).

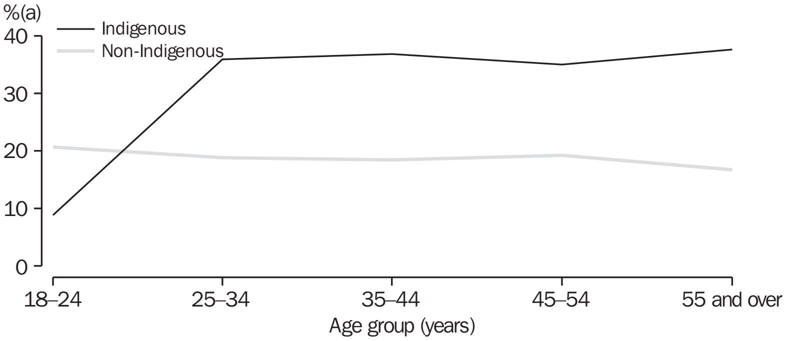
There is a growing body of research providing information on alcohol consumption patterns of Indigenous and non-Indigenous Australians. Broad level results from these surveys are similar, although detailed results vary slightly due to differences in definitions, field operations, time frames and geography. It is important to note that although the majority of this research focuses on the consumption of alcohol by individuals, the political economy governing the supply of alcohol is a key factor in patterns of alcohol use (eds Gray & Saggers 2002).

While several surveys have shown that Aboriginal and Torres Strait Islander peoples are less likely than non-Indigenous Australians to drink alcohol, those who do so are more likely to consume it at hazardous levels (ABS & AIHW 1999; ABS 2002e; AIHW 2003j). Results from the 2001 NHS indicate that Indigenous adults were less likely (42%) than non-Indigenous adults (62%) to have consumed alcohol in the week prior to interview (ABS 2002e).

ALCOHOL CONSUMPTION
continued

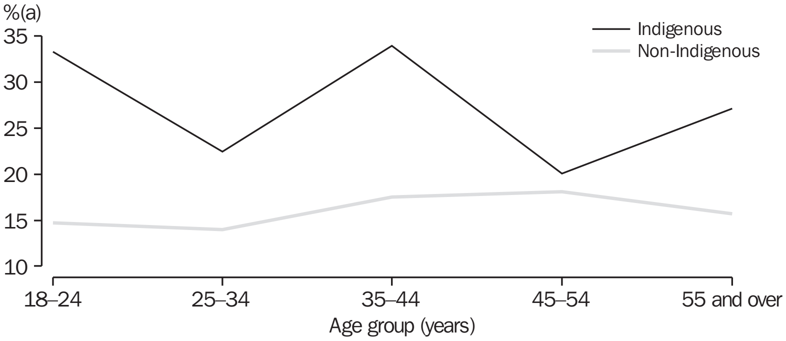
Of those that did consume alcohol, Indigenous Australians were more likely to consume at risky/high risk levels (29%) compared with non-Indigenous Australians (17%). Indigenous and non-Indigenous males were both more likely than Indigenous females and non-Indigenous females respectively to consume alcohol at risky/high risk levels (graphs 8.8 and 8.9). The highest proportion of risky/high risk alcohol consumption was recorded for Indigenous males aged 55 years and over at 38%. However, younger Indigenous males (18–24 years) were less likely than non-Indigenous males in the same age group to consume alcohol at risky or high risk levels (9% and 21% respectively).

8.8 RISKY/HIGH RISK ALCOHOL CONSUMPTION, MALES — 2001



(a) Proportion of respondents who reported consuming alcohol in the week prior to interview.
Source: ABS data available on request, 2001 NHS.

8.9 RISKY/HIGH RISK ALCOHOL CONSUMPTION, FEMALES — 2001



(a) Proportion of respondents who reported consuming alcohol in the week prior to interview.
Source: ABS data available on request, 2001 NHS.

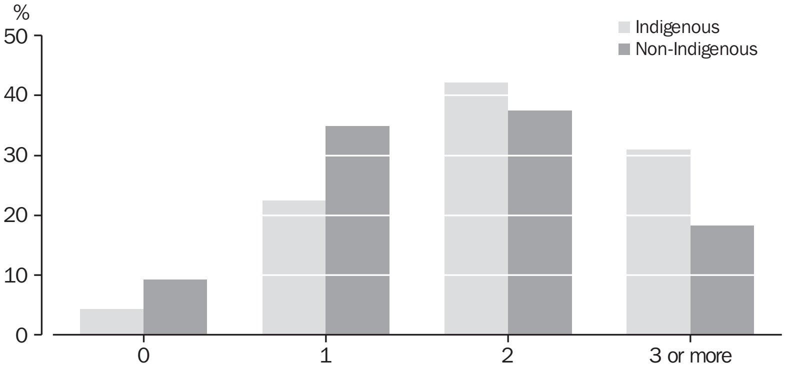
According to the 2001 NDSHS, Indigenous Australians aged 14 years and over who consumed alcohol were twice as likely (20%) as non-Indigenous Australians to consume alcohol at risky or high risk levels over the course of a year (AIHW 2003j). It is important to note that specific definitions and methodology used in the 2001 NDSHS differ from those in the 2001 NHS.

MULTIPLE RISK FACTORS: OBESITY, SMOKING, ALCOHOL CONSUMPTION AND LOW EXERCISE LEVEL

In the sections above, risk factors such as obesity, smoking and alcohol consumption have been assessed largely in isolation from one another. However, the level of risk of a particular factor may depend on whether other factors are also present, as risk factors tend to coexist and be interactive in their effects (AIHW 2002d). For example, for smokers who are obese, the risks associated with smoking may combine with those of obesity so that the health consequences are greater than what would be expected from one of these factors alone.

As discussed above, Indigenous adults were more likely than non-Indigenous adults to smoke, to be classified as obese, and to be categorised as a high risk drinker. In addition, results from the 2001 NHS indicate that the majority (around 70%) of both Indigenous and non-Indigenous adults living in non-remote areas reported their levels of exercise for recreation, sport or fitness as either sedentary or low (ABS 2002e). As graph 8.10 shows, Indigenous adults living in non-remote areas were more likely than non-Indigenous adults to be exposed to more than one of these four risk factors.

8.10 NUMBER OF RISK FACTORS REPORTED(a) — 2001



(a) Adults aged 18 years and over living in non-remote areas. Risk factors include overweight/ obesity (according to NHMRC BMI guidelines), sedentary/low exercise level, risky/high alcohol risk, and cigarette smoking.

Source: ABS data available on request, 2001 NHS.

ILLICIT DRUG USE

The term 'illicit drugs' refers to a variety of substances that are either illegal to possess (e.g. marijuana, heroin), or legally available, but used inappropriately (e.g. misuse of prescription medication, inhalation of petrol) (AIHW 2002c). Illicit drug use may have severe social and economic impacts on individuals and communities. For individuals, the use of illicit drugs is linked to various medical conditions. Injecting drug users, for example, have an increased risk of blood-borne viruses such as Hepatitis C. For communities, there are additional issues associated with social disruption, such as domestic violence, crime and assaults, consequences which can be more apparent in smaller remote and rural Indigenous communities (McAllister & Makkai 2001; Gray et al. 2002).

ILLICIT DRUG USE *continued*

Illicit drug use is an important health risk factor for Indigenous Australians. The 2001 NDSHS indicates that illicit drug use among Aboriginal and Torres Strait Islander peoples was higher than for non-Indigenous Australians (AIHW 2003j). Over half (57%) of Indigenous respondents indicated that they had tried an illicit drug, compared to 37% of non-Indigenous respondents. This pattern was similar for marijuana/cannabis and 'any other illicit drug' (table 8.11).

8.11 SUMMARY OF ILLICIT DRUG USE(a)(b) — 2001

	Indigenous	*Non-Indigenous*
	%	%
Ever used		
Marijuana/cannabis	50	33
Any illicit drug	57	37
Any illicit drug other than marijuana/cannabis	25	18
Used in the last 12 months		
Marijuana/cannabis	27	13
Any illicit drug	32	17
Any illicit drug other than marijuana/cannabis	13	8

(a) There were 415 Indigenous respondents in the NDSHS 2001. Results should therefore be interpreted with caution.

(b) Persons aged 14 years and over. Data are not age-standardised.

Source: AIHW National Drug Strategy Household Survey 2001.

EXPOSURE TO VIOLENCE

The recent WHO report 'World Report on Violence and Health' divides violence into three broad categories — self-inflicted, interpersonal and collective (eds Krug et al. 2002). To some extent, the former two can be investigated in an Indigenous experience using selected survey and hospitalisation data (ABS & AIHW 2001). It has been argued, however, that there is a lack of any discussion of the magnitude of collective violence against Aboriginal and Torres Strait Islander peoples (Anderson 2002).

Violence is a health risk factor that is at times overlooked. It can result in injury, psychological trauma and even death. In the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS), the first national data on the personal safety of Indigenous Australians became available. In the year preceding the NATSIS, 14% of Indigenous males and 12% of Indigenous females aged 13 years and over said that they had been verbally threatened or physically attacked (ABS 1995).

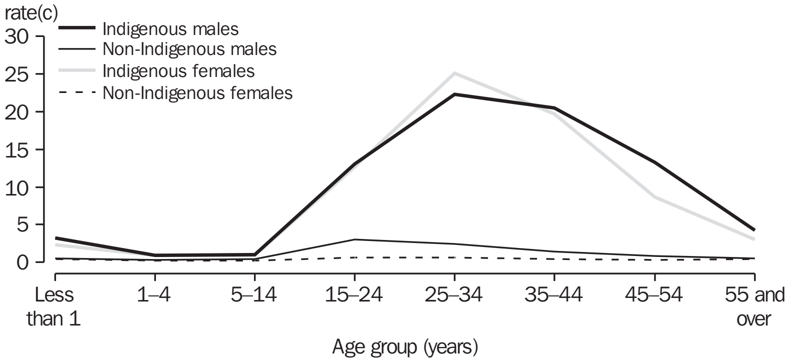
These figures suggest that the problem of violence-related injury is not a minor one, supported by data on the rates of hospitalisation experienced by Aboriginal and Torres Strait Islander peoples as a result of interpersonal violence. As noted in Chapter 7, rates of hospitalisation in 2000–01 for injury or poisoning (ICD-10-AM chapter 'Injury, poisoning and certain other consequences of external causes'), were 1.9 times higher for Indigenous males and 2.4 times higher for Indigenous females compared with non-Indigenous males and females respectively. In cases where the principal diagnosis was injury or poisoning, Indigenous males

EXPOSURE TO VIOLENCE
continued

were 8.4 times more likely to have 'Assault' coded as the first reported external cause than non-Indigenous males. Similarly, Indigenous females were 28.3 times more likely than non-Indigenous females to have 'Assault' coded as the first reported external cause of injury (AIHW NHMD). This trend was apparent across every age group for both males and females (graph 8.12).

Available data on deaths caused by 'Assault' also show significantly higher age specific death rates for Indigenous males and females between 15 and 54, compared to the relevant age specific rates for the total Australian population (Chapter 9).

8.12 HOSPITAL SEPARATIONS FOR ASSAULT(a)(b) — 2000–01



(a) Data are for public and most private hospitals, for separations with an external cause of injury or poisoning coded as 'assault'. Based on the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Australian Modification (ICD-10-AM) (National Centre for Classification in Health 2000).
(b) These figures should be interpreted with caution, as injuries purposely inflicted by others may be under-reported by women.
(c) Age-specific rate per 1,000 population.

Source: AIHW, National Hospital Morbidity Database.

SUMMARY

The relative socioeconomic disadvantage experienced by Aboriginal and Torres Strait Islander peoples compared with non-Indigenous Australians places them at greater risk of ill health (Chapter 2). Results from the 2001 NHS indicate that Indigenous children were less likely to have been breastfed for as long as non-Indigenous children. After adjusting for age differences and non-response, Indigenous Australians aged 18 years and over were twice as likely as non-Indigenous Australians to be current smokers (table 8.13). Indigenous adults aged 18 years and over were less likely (42%) than non-Indigenous adults (62%) to have consumed alcohol in the week prior to interview (ABS 2002e). Of those that did consume alcohol, Indigenous Australians were more likely to consume at risky/high risk levels (29%) compared with non-Indigenous Australians (17%) (table 8.13). Illicit drug use among Aboriginal and Torres Strait Islander peoples appears to be higher than for non-Indigenous peoples (AIHW 2003j). Indigenous Australians were more likely to be classified as overweight or obese when compared with non-Indigenous Australians (61% to 48% respectively). Indigenous persons aged 12 years and over were more likely to have a low daily fruit intake than non-Indigenous persons, but less likely to have a low daily vegetable intake.

CHAPTER 9 MORTALITY

INTRODUCTION

The Australian population as a whole enjoys good health by world standards, but Aboriginal and Torres Strait Islander peoples experience far higher death rates than non-Indigenous Australians across all age groups. In 1999–2001, for Queensland, South Australia, Western Australia and the Northern Territory, where about 60% of the Indigenous population reside, there were approximately three times as many deaths as expected for all causes of death, based on total Australian rates, for both Indigenous males and females. The highest standardised mortality ratios (SMRs) for Indigenous males and females were for 'Endocrine, nutritional and metabolic diseases', predominantly due to deaths as a result of diabetes mellitus. The exact magnitude of the difference between the Indigenous and non-Indigenous populations is difficult to establish conclusively. Reasons include the incomplete recording of Aboriginal and Torres Strait Islander status on death records, and the experimental nature of estimates of the Indigenous population. These limitations inhibit precise analysis of the data and present difficulties in the monitoring of mortality trends over time. However, the available statistics provide useful measures of Aboriginal and Torres Strait Islander health, and comparisons with the health of the total Australian population.

This Chapter examines the mortality of the Aboriginal and Torres Strait Islander population using death registrations for the period 1999–2001. Mortality data for Queensland, South Australia, Western Australia and the Northern Territory, have been used to present a picture of Indigenous mortality. These jurisdictions are considered to have the most complete coverage of Indigenous deaths for the given period. (Coverage issues are discussed later in this Chapter and in Chapter 11.)

Data quality and availability

Almost all deaths in Australia are registered. However the Indigenous status of the deceased is not always recorded, or recorded correctly. The incompleteness of Indigenous identification means that the number of deaths registered as Indigenous is an underestimate of the actual number of deaths which occur in the Aboriginal and Torres Strait Islander population. The extent to which the identification of Indigenous Australians occurs in data collections is referred to as 'coverage' or 'completeness of coverage'. While there is incomplete coverage of Indigenous deaths in all state and territory registration systems, some jurisdictions have been assessed by the Australian Bureau of Statistics (ABS) as having a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced. These jurisdictions comprise Queensland, South Australia, Western Australia and the Northern Territory and their data have been combined for 1999–2001 for analysis of Indigenous causes of death. Longer term mortality trend discussion in this Chapter is limited to an analysis of data from three jurisdictions: South Australia, Western Australia and the Northern Territory, being the only jurisdictions with 10 years of reasonable coverage of Indigenous deaths in their registration systems.

Data quality and availability *continued*

The ABS continues to work with state and territory Registrars of Births, Deaths and Marriages to improve the coverage in all jurisdictions to a level which would allow inclusion of data for all jurisdictions in future publications.

Deaths by year of registration, rather than year of occurrence, for 1999–2001 have been used for this publication. While the majority of deaths are registered in the year they occur, some of those registered in a given period have occurred in previous years, and some which have occurred in that period are not registered until subsequent years. The likelihood of a death being registered in a year following its occurrence increases markedly for those deaths which occur close to the end of the year. Delays in registration also occur when the deaths are subject to the findings of a coroner. Late registrations are more common in relation to Indigenous deaths, and therefore have a greater impact on mortality statistics.

The extent to which deaths occurring in any reference year may have been missed from the deaths registration data for the same year can only be gauged from historical data. Thus for all the deaths in Australia that occurred in 2000 (as seen at the end of 2001), 95% were registered in the year in which they occurred while 5% were registered in 2001. For Indigenous deaths the corresponding figures were 88% registered in the year they occurred and 12% in 2001. These proportions have been fairly stable for a number of years. The relatively high proportion of late registrations evident for Indigenous deaths occurs for various reasons. These include the relative remoteness of many Indigenous deaths and the fact that a larger proportion of Indigenous deaths are referred to state or territory coroners.

Over the period 1999–2001, there have been some fluctuations in the estimated coverage of Indigenous deaths recorded in most jurisdictions. These variations could be the result of various factors including late registrations, fewer identified Indigenous deaths, changes to death forms and/or processing systems by state and territory Registrars of deaths. These factors can affect Indigenous mortality rates within a given period of time due to the small size of the Indigenous population.

Cause of death statistics provided in this Chapter are based on the tenth revision of the International Classification of Diseases (ICD-10). Mortality coding using ICD-10 was introduced in Australia for deaths registered from 1 January 1997.

All rates and ratios derived in this Chapter are calculated using the ‘low series’ from ABS experimental population projections of the Indigenous population. The ‘low series’ makes certain assumptions on Indigenous mortality (Chapter 11).

9.1 MEASURING MORTALITY

There are a number of ways to quantify the mortality experience of a population. They include:

Crude death rates

Dividing the number of deaths in a year by the 30 June population for the year gives a 'crude death rate', (usually expressed as deaths per 1,000 or per 100,000 population). The crude rate allows comparisons between populations with the same or similar age structures. However, the age structure of the Indigenous population is very different to that of the total Australian population. Because death is closely related to age, it is important to adjust for the effect of age before meaningful comparisons can be made. Hence crude rates are not used here.

Age-specific death rates

Relates to deaths for age groups and are the number of deaths in a year per 100,000 mid-year estimated resident population in the same group. Age-specific death rates are effectively crude rates for a particular age cohort.

Standardised death rates

Enable the comparison of death rates between populations with different age structures by relating them to a standard population (usually the total Australian population). They are usually expressed as deaths per 100,000 population. There are two methods of calculating standardised death rates, namely:

- The direct method — used when the populations under study are large and the age-specific death rates are reliable. It is the overall death rate that would have prevailed in the standard population if it had experienced at each age the death rates of the population under study.

- The indirect method — used when the populations under study are small and the age-specific death rates are unreliable or unknown. It is an adjustment to the crude death rate of the standard population to account for the variation between the actual number of deaths in the population under study and the number of deaths which would have occurred if the population under study had experienced the age-specific death rates of the standard population. The indirect method is more appropriate when calculating standardised death rates for the Indigenous population.

Standardised Mortality Ratio (SMR)

The SMR provides a relative assessment of the health status of a particular population by comparing the *actual* number of deaths for that population to the *expected* number of deaths that would have occurred if that population had the same mortality experience as the reference (or total) population. If the SMR is greater than 1.0, there were more deaths than expected; if the ratio is less than 1.0, there were fewer than the expected number of deaths.

In this publication, the *expected number of deaths* are calculated by applying the age and sex-specific death rates of the Australian population to the relevant Indigenous population. For example, if Indigenous females had experienced the same age-specific death rates as total Australian females in 1999–2001, the number of expected deaths would have been 622. The actual number of deaths recorded, however, was 1,867. Dividing the actual number of deaths by the expected number gives a standardised mortality ratio of 3.0. As these calculations are age and sex specific, male and female rates cannot be compared.

Infant mortality rate

Relates to the number of deaths of children under one year of age in a calendar year per 1,000 live births in the same calendar year.

LIFE EXPECTANCY

The estimates of life expectancy presented here are drawn from the Australian life tables, 1999–2001, and the *Experimental Indigenous Abridged life tables, 1999–2001* (ABS 2001e). The life expectancies for Indigenous males and females have been calculated based on data for all jurisdictions in Australia, except Tasmania and the Australian Capital Territory.

Life expectancy refers to the average number of years a person of a given age and sex can expect to live, if current age-sex-specific death rates continue to apply throughout his or her lifetime. A life table uses age-specific death rates to calculate values which measure mortality, survivorship and life expectancy. To construct a life table, data on population, births and deaths are needed, and the accuracy of the life table depends upon the completeness of these data. Because of uncertainty about the estimates of these components for Aboriginal and Torres Strait Islander peoples, experimental methods are used to calculate life expectancies for the Indigenous population. It is recommended that these experimental life expectancies should only be used as an indicative summary measure of the level of mortality of the Indigenous population.

In the period 1999–2001, using current methodology, the life expectancy at birth for Indigenous Australians was estimated to be 56 years for males and 63 years for females. In contrast, the life expectancy at birth for all Australians was 77 years for males and 82 years for females.

DEATHS 1999–2001

For the period 1999–2001, there were 4,385 Indigenous deaths, (2,518 males and 1,867 females) for persons registered as usual residents of Queensland, South Australia, Western Australia and the Northern Territory. These deaths accounted for 3.2% of all deaths of usual residents of these four jurisdictions, and 71% of all identified Aboriginal and Torres Strait Islander deaths in Australia. In 2001, Aboriginal and Torres Strait Islander peoples in these jurisdictions represented 61% of the total estimated Australian Indigenous population.

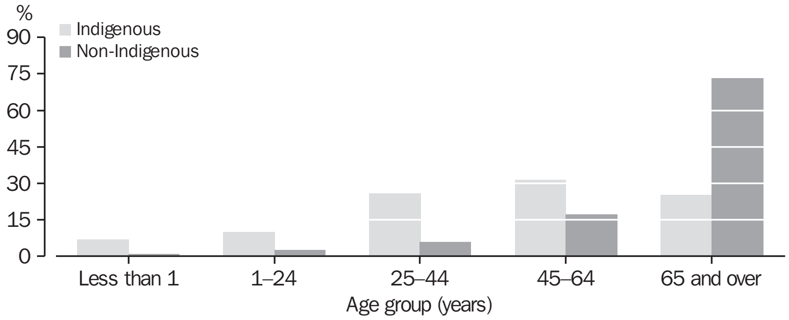
The total number of deaths registered for the period 1999–2001 for usual residents of Queensland, South Australia, Western Australia and the Northern Territory, was 138,092, 36% of total Australian deaths (384,937). These four jurisdictions account for 37% of the total Australian population.

Age at death

In Queensland, South Australia, Western Australia and the Northern Territory, approximately three-quarters (74.5%) of Indigenous males and two-thirds (64.6%) of Indigenous female deaths were before the age of 65 years. While the Indigenous population has a much younger age profile, this is still a stark contrast to the non-Indigenous population where approximately one-quarter (26.7%) of total male deaths and one-sixth (16.1%) of total female deaths occurred before 65 years of age (graph 9.2 and graph 9.3).

The difference in the contribution of infant deaths (deaths under one year) to total deaths is quite marked. For the period 1999–2001, Indigenous infant deaths accounted for 6.8% of total Indigenous male deaths and 6.7% of total Indigenous female deaths compared to 1% and 0.8% of the total for corresponding non-Indigenous infant deaths. The 25–44 year age group accounted for 26% of total Indigenous male deaths compared with 6.1% of total non-Indigenous male deaths, while the 45–64 year age group accounted for 32% of total Indigenous female deaths compared with 10.9% of total non-Indigenous female deaths (table 9.4).

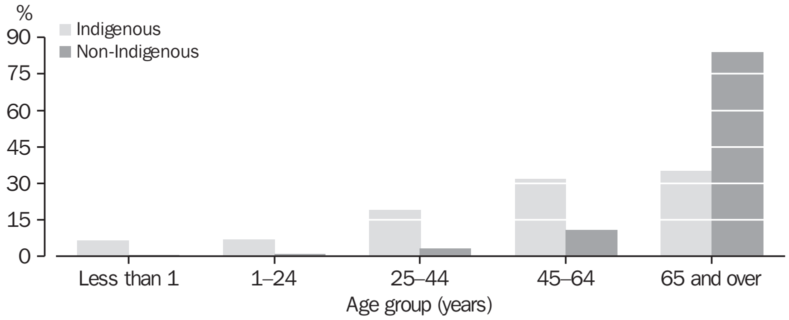
9.2 AGE DISTRIBUTION OF DEATHS(a), MALES — 1999–2001



(a) Data for Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration.

Source: ABS data available on request, Deaths Registration Database.

9.3 AGE DISTRIBUTION OF DEATHS(a), FEMALES — 1999–2001



(a) Data for Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration.

Source: ABS data available on request, Deaths Registration Database.

Age at death *continued*

For the four states–territory included in this analysis, Indigenous Australians were over-represented in mortality statistics, relative to their proportion of the total population, in every age group. Table 9.4 shows the proportion of Indigenous deaths as a proportion of total deaths by age groups in 1999–2001 and their respective proportions of the total population for this period.

9.4 INDIGENOUS DEATHS(a) — 1999–2001

Age group (years)	*Indigenous deaths as a proportion of total deaths* %	*Indigenous persons as a proportion of total population* %
Less than 1	19.1	7.4
1–4	16.6	7.1
5–14	14.5	6.4
15–24	12.6	4.9
25–34	13.5	3.9
35–44	13.6	2.8
45–54	9.0	1.9
55–64	5.5	1.4
65–74	2.6	1.0
75 and over	0.8	0.5

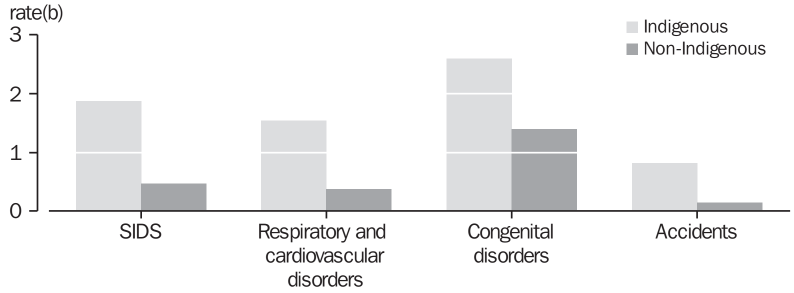
(a) Data are for Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration.

Source: ABS data available on request, Deaths Registration Database.

Infant deaths

Infant deaths are deaths of live-born children which occur before reaching their first birthday. In 1999–2000, the infant mortality rate for Indigenous infants was two and a half times greater than for non-Indigenous infants (table 9.6). Indigenous infant deaths accounted for 31% of total infant deaths caused by accidents (including motor vehicle accidents), 25% of deaths from respiratory and cardiovascular disorders specific to the perinatal (under one month) period and 24% of deaths from Sudden Infant Death Syndrome. The Indigenous age-specific death rates for these causes are approximately four times those of the non-Indigenous age-specific rates (graph 9.5).

9.5 INFANT DEATHS(a), SELECTED CAUSES — 1999–2001



(a) Data are for Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration.
(b) Per 1,000 live births.

Source: ABS data available on request, Deaths Registration Database.

Age-specific death rates

Age-specific death rates for Indigenous males and females across all age groups in Queensland, South Australia, Western Australia and the Northern Territory were higher than the total male and female rates for these jurisdictions. Apart from the 75 years and over age group, the age-specific death rates were at least double those experienced by the total population. The greatest differences occurred among those in the 35–44 and 45–54 year age groups, where the rates for Indigenous males and females were up to five times greater than those recorded for the total population (table 9.6).

9.6 AGE-SPECIFIC DEATH RATES(a) — 1999–2001

	Males				*Females*			
Age group (years)	*Indigenous rate(b)*	*Total rate(c)*	*Rate ratio(d)*	*Total Australian rate*	*Indigenous rate(b)*	*Total rate(c)*	*Rate ratio(d)*	*Total Australian rate*
Less than 1(e)	16	6	2.6	6	12	5	2.5	5
1–4	74	36	2.0	30	67	24	2.8	24
5–14	37	17	2.2	16	30	12	2.4	11
15–24	252	99	2.5	89	100	35	2.8	34
25–34	448	134	3.3	126	201	52	3.9	47
35–44	873	174	5.0	161	467	89	4.7	89
45–54	1 562	318	4.9	310	975	199	4.9	196
55–64	3 107	838	3.7	832	2 147	481	4.5	484
65–74	6 085	2 418	2.5	2 426	4 182	1 342	3.1	1 348
75 and over	11 006	8 158	1.3	8 179	9 326	6 508	1.4	6 546

(a) Per 100,000 population.

(b) Data are for Indigenous deaths for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration.

(c) Data are for total deaths of usual residents of Queensland, South Australia, Western Australia and Northern Territory combined, including Indigenous deaths. Based on year of registration.

(d) Indigenous rate divided by the total rate.

(e) Per 1,000 live births.

Source: ABS data available on request, Deaths Registration Database.

For the age groups in which differences in death rates between Indigenous and total population deaths are greatest, table 9.7 shows how the Indigenous age-specific death rates are influenced by conditions such as ischaemic heart disease, diabetes, respiratory and liver diseases as well as the impact of greater exposure to accidents and violence as causes of death. While some rate figures have been derived from a relatively small number of actual deaths, the difference between the two population groups is still considerable.

9.7 AGE-SPECIFIC DEATH RATES(a), SELECTED CAUSES

	Males				*Females*			
	35–44 years		*45–54 years*		*35–44 years*		*45–54 years*	
Selected causes	Indigenous(b)	Total	Indigenous(b)	Total	Indigenous(b)	Total	Indigenous(b)	Total
Malignant neoplasms of digestive organs (C15–C26)	23	8	70	35	4	6	41	21
Malignant neoplasms of respiratory organs (C30–C39)	9	4	74	23	2	3	41	15
Diabetes mellitus (E10–E14)	39	2	148	8	34	1	137	4
Mental and behavioural disorders (F10–F19)	39	8	70	5	6	2	10	1
Ischaemic heart diseases (I20–I25)	177	18	421	60	61	4	181	12
Cerebrovascular diseases (I60–I69)	21	4	62	9	19	3	41	8
Influenza and pneumonia (J10–J18)	23	1	62	2	8	1	7	1
Chronic lower respiratory diseases (J40–J47)	25	1	39	5	21	1	27	5
Diseases of liver (K70–K77)	58	5	93	14	44	3	55	5
Pedestrian injured in transport accident (V01–V09)	30	2	19	2	13	1	17	1
Car occupant injured in transport accident (V40–V49)	21	6	8	5	8	3	14	3
Accidental drowning and submersion (W65–W74)	23	2	12	2	2	0	0	1
Intentional self-harm (X60–X84)	53	30	23	23	6	8	7	7
Assault (X85–Y09)	30	3	43	2	25	2	3	1

(a) Per 100,000 population.

(b) Data are for Indigenous deaths for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration. Denominator based on Experimental Projections of the Aboriginal and Torres Strait Islander Population.

Source: ABS data available on request, Deaths Registration Database.

TRENDS IN MORTALITY

Various measures may be used to assess trends in mortality over time. The life table based measure, life expectancy at birth, is usually preferred as it takes into account age–sex specific death rates at all ages. However, the construction of this measure depends on the availability of an accurate (preferably annual) series of age–sex specific population estimates (ABS Indigenous estimates are experimental) together with an accurate series of age–sex specific counts of deaths. The ABS is reviewing the quality of the information needed to produce Indigenous life-tables taking into account newly available experimental population estimates based on data from the 2001 Census. Emphasis is being given to the possibilities of producing a revised series of life-table based measures to help assess trends over time (Chapter 11).

Another useful approach to measuring mortality trends is to examine annual changes in the age distributions of deaths. Increases in the proportions of deaths occurring at older ages (or decreases in proportions of deaths at younger ages) can reveal changes in mortality over time. The median age at death is one convenient summary measure which has been used (ABS 2002c). However, the median age of death (i.e. the age at which 50% of all deaths occur after all deaths are ranked by age) only refers to one point in the distribution and does not necessarily reflect changes in the age patterns of mortality occurring at younger or older ages. Dividing total deaths into quartiles (i.e. the first quartile being the point below which 25% of all deaths fall and the third quartile being the point below which 75% of all deaths fall) will permit examination of trends at older and younger age groupings as well as providing the median age at death. It should be noted however, that median age at death is affected by changes in the age distribution due to changes in fertility; and will only provide comparable data if fertility rates remain constant over the period for which median age at death is compared. These measures are presented below.

Trends in mortality are often slow moving so that real changes are usually best seen over long periods of time. However, the possibility of assessing long-term trends in Indigenous mortality is greatly constrained by the availability of accurate data in earlier years. When assessed in terms of consistency in the number of deaths recorded each year (indicating fairly steady coverage), South Australia, Western Australia and the Northern Territory have had comparative annual data since 1991.

A further constraint in assessing time series trends in Indigenous mortality is that the annual numbers of deaths recorded in each jurisdiction have, for statistical purposes, been quite small. Between 1991 and 2001, annual deaths for South Australia, Western Australia and the Northern Territory averaged 121, 371 and 403 respectively. Because the numbers involved are small, year to year fluctuations in the relative number of deaths occurring at different ages become more likely, and therefore it is not meaningful to either look at changes in mortality from one year to the next or to precisely measure the magnitude of changes seen over longer periods of time. When presented for long periods of time the data can nonetheless be useful in helping to determine whether ages at death are generally increasing, falling or remaining stable over the longer term.

It is important in interpreting these age at death statistics to note that Indigenous populations of South Australia, Western Australia, and the Northern Territory refer to a minority of the Indigenous population in Australia. In 2001, the estimated share of Australia's total Indigenous population who were usual residents of these jurisdictions was 32.4% (5.6% in South Australia, 14.4% in Western Australia, and 12.4% in the Northern Territory). As a consequence, possible trends in ages at death in these three jurisdictions only give, at best, a partial account of trends in Indigenous mortality in Australia.

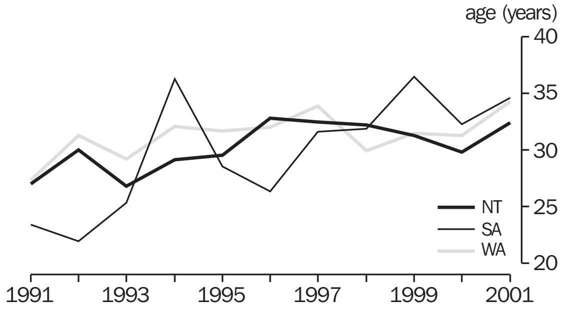
Graphs 9.8, 9.9 and 9.10 present data both separately for South Australia, Western Australia and Northern Territory, and combined for all three states–territory, over the period 1991 to 2001 providing some longer term trend analysis. Data for males and females are presented separately. The graphs show that Indigenous females have consistently had higher ages at death than Indigenous males.

Indigenous deaths 1991 to 2001

Based on an examination of deaths data from South Australia, Western Australia and the Northern Territory over the period 1991 to 2001, no definitive conclusions about changes in mortality among Indigenous Australians living in these jurisdictions can be made.

9.8 TRENDS IN INDIGENOUS AGE AT DEATH (FIRST QUARTILE): SA, WA and NT — 1991 to 2001

FIRST QUARTILE AGE AT DEATH, MALES

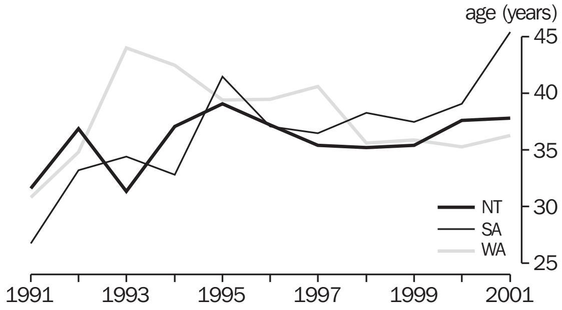


Source: *ABS 2002c; ABS data available on request, Deaths Registration Database.*

FIRST QUARTILE AGE AT DEATH, MALES, SA, WA, AND NT

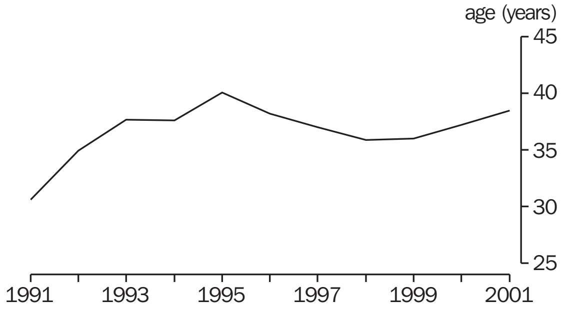
Source: *ABS 2002c; ABS data available on request, Deaths Registration Database.*

FIRST QUARTILE AGE AT DEATH, FEMALES



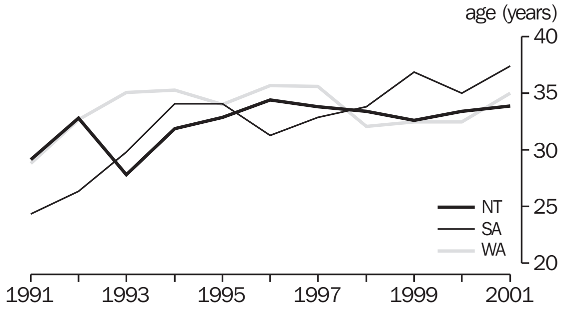
Source: *ABS 2002c; ABS data available on request, Deaths Registration Database.*

FIRST QUARTILE AGE AT DEATH, FEMALES, SA, WA, AND NT



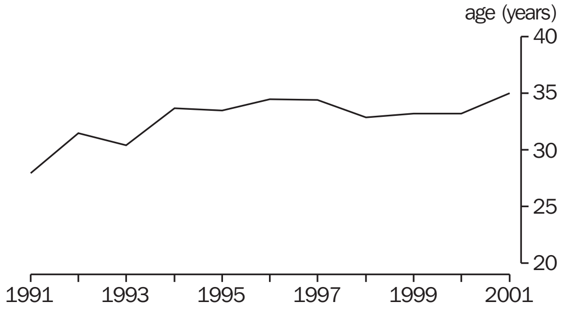
Source: *ABS 2002c; ABS data available on request, Deaths Registration Database.*

FIRST QUARTILE AGE AT DEATH, PERSONS



Source: *ABS 2002c; ABS data available on request, Deaths Registration Database.*

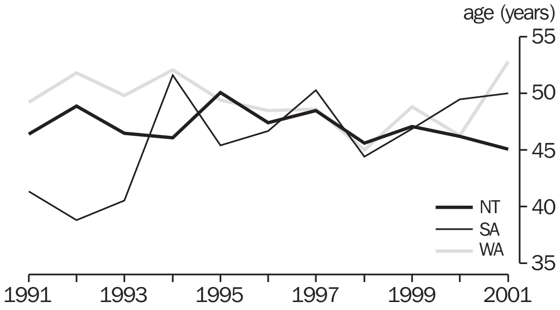
FIRST QUARTILE AGE AT DEATH, PERSONS, SA, WA, AND NT



Source: *ABS 2002c; ABS data available on request, Deaths Registration Database.*

9.9 TRENDS IN INDIGENOUS AGE AT DEATH (MEDIAN AGE): SA, WA and NT — 1991 to 2001

MEDIAN AGE AT DEATH, MALES

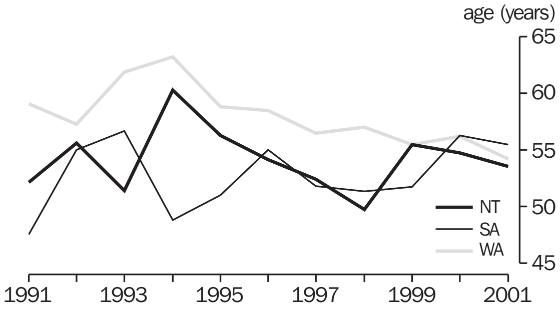


Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

MEDIAN AGE AT DEATH, MALES, SA, WA AND NT

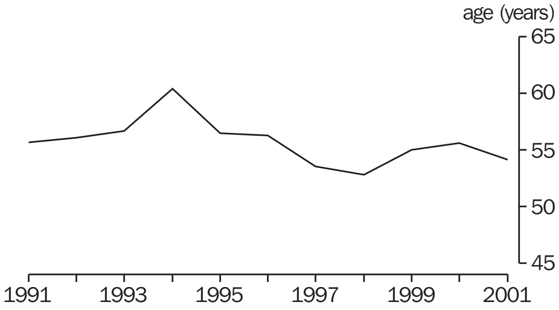
Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

MEDIAN AGE AT DEATH, FEMALES



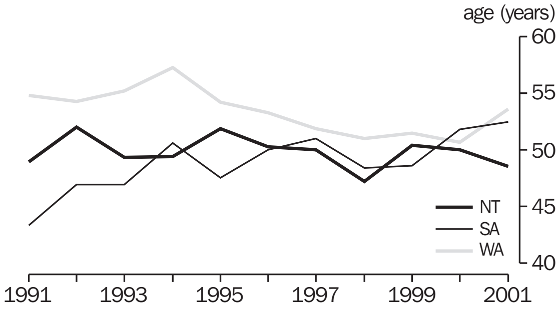
Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

MEDIAN AGE AT DEATH, FEMALES, SA, WA AND NT



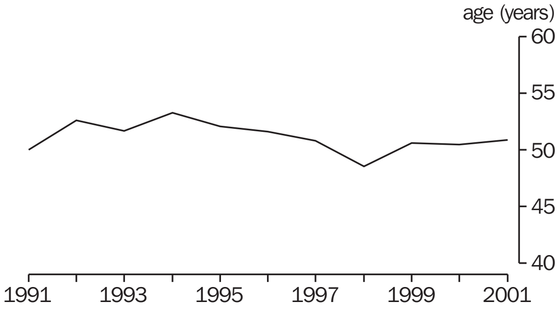
Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

MEDIAN AGE AT DEATH, PERSONS



Source: ABS 20012c; ABS data available on request, Deaths Registration Database.

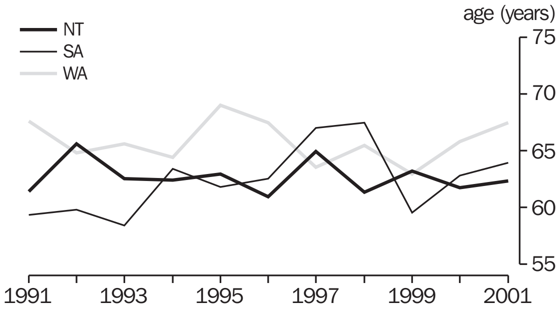
MEDIAN AGE AT DEATH, PERSONS, SA, WA AND NT



Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

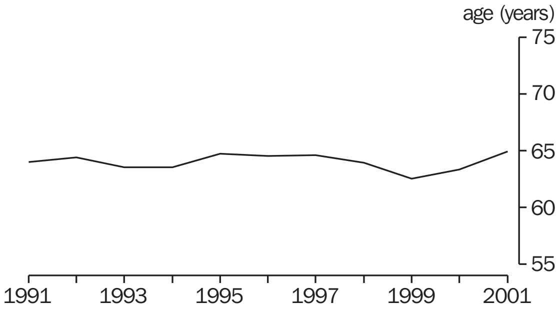
9.10 TRENDS IN INDIGENOUS AGE AT DEATH (THIRD QUARTILE): SA, WA and NT — 1991 to 2001

THIRD QUARTILE AGE AT DEATH, MALES



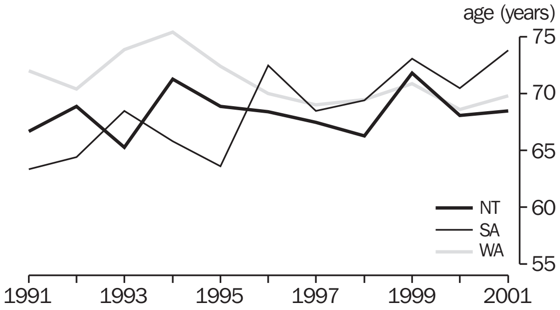
Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

THIRD QUARTILE AGE AT DEATH, MALES, SA, WA AND NT



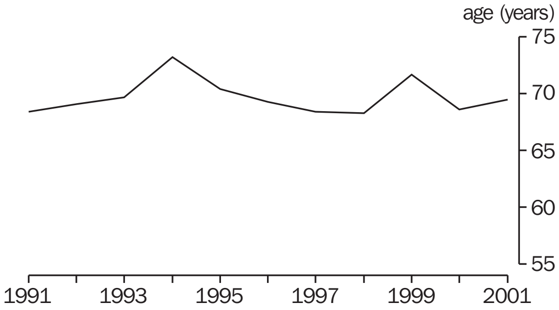
Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

THIRD QUARTILE AGE AT DEATH, FEMALES



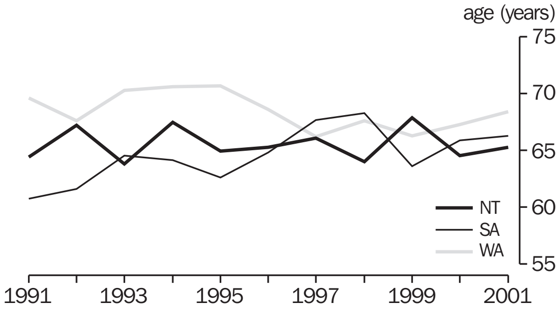
Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

THIRD QUARTILE AGE AT DEATH, FEMALES, SA, WA AND NT



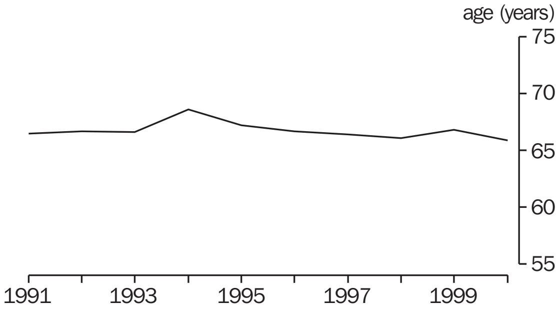
Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

THIRD QUARTILE AGE AT DEATH, PERSONS



Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

THIRD QUARTILE AGE AT DEATH, PERSONS, SA, WA AND NT



Source: ABS 2002c; ABS data available on request, Deaths Registration Database.

CAUSES OF DEATH

Analysis of causes of deaths in this section is based on recorded Indigenous deaths in Queensland, South Australia, Western Australia and the Northern Territory. References to Indigenous deaths throughout this section refer only to Indigenous deaths recorded in these jurisdictions.

Based on 1999–2001 death registrations, the three leading causes of death for Aboriginal and Torres Strait Islander peoples usually resident in Queensland, South Australia, Western Australia and the Northern Territory were 'Diseases of the circulatory system', 'External causes of morbidity and mortality' (referred to as external causes — predominantly accidents, 'Intentional self-harm' and 'Assault') and 'Neoplasms' (cancer). Deaths due to these causes accounted for almost 60% of all Indigenous deaths in these states–territory. These were also the leading causes of death among the Australian population as a whole, accounting for about 75% of all deaths.

As noted in the introduction, in 1999–2001, there were approximately three times as many deaths as expected for all causes of death, based on total Australian rates, for both Indigenous males and females. The highest standardised mortality ratios (SMRs) for Indigenous males and females were for 'Endocrine, nutritional and metabolic diseases', predominantly due to deaths as a result of 'Diabetes mellitus'. The SMRs for these diseases were 8 and 12 times the respective total Australian male and female rates (table 9.11).

9.11 INDIGENOUS DEATHS, SELECTED CAUSES(a) — 1999–2001

	Males		*Females*	
	Deaths	*SMR(b)*	*Deaths*	*SMR(b)*
Diseases of the circulatory system (I00–I99)	680	3.2	519	2.8
External causes of morbidity and mortality (V01–Y98)	512	2.9	203	3.2
Neoplasms (C00–D48)	347	1.6	289	1.6
Diseases of the respiratory system (J00–J99)	206	4.4	154	3.9
Endocrine, nutritional and metabolic diseases (E00–E90)	181	7.9	236	11.7
Diseases of the digestive system (K00–K93)	110	4.8	89	4.8
Mental and behavioural disorders (F00–F99)	77	4.1	26	1.9
Certain infectious and parasitic diseases (A00–B99)	68	5.2	48	5.3
Diseases of the nervous system (G00–G99)	59	2.4	48	2.1
Diseases of the genitourinary system (N00–N99)	56	6.2	94	8.7
Symptoms, signs and abnormal findings n.e.c. (R00–R99)	74	6.1	40	5.0
All causes	**2 518**	**3.1**	**1 867**	**3.0**

(a) Data are for Indigenous deaths for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration.

(b) Standardised mortality rate = observed deaths divided by expected deaths, based on total Australian age, sex and cause-specific rates.

Source: ABS data available on request, Deaths Registration Database.

CAUSES OF DEATH *continued*

The SMRs like those presented in table 9.11 are used to enable meaningful comparisons of death rates between two populations with different age structures, such as the Indigenous and total Australian populations. The SMRs express the actual number of deaths in the Indigenous population as a ratio of the expected number of deaths (box 9.1). Deaths over and above the number expected are referred to as 'excess' deaths.

'Diseases of the circulatory system' accounted for the highest proportion of excess deaths. Other major causes of excess deaths were external causes, 'Endocrine, nutritional and metabolic diseases', and 'Diseases of the respiratory system'. Deaths due to these causes were responsible for over two-thirds of excess deaths among Indigenous males and females (table 9.12).

9.12 MAIN CAUSES OF EXCESS DEATHS(a)(b) — 1999–2001

	Indigenous males	*Indigenous females*
	Proportion of excess	*Proportion of excess*
Causes of death	%	%
Diseases of the circulatory system (I00–I99)	27.7	27.0
External causes of morbidity and mortality (V01–Y98)	20.0	11.3
Neoplasms (C00–D48)	8.0	8.3
Diseases of the respiratory system (J00–J99)	9.4	9.2
Endocrine, nutritional and metabolic diseases (E00–E90)	9.3	17.4
Diseases of the digestive system (K00–K93)	5.1	5.7
All other causes	20.5	21.2
All causes	100.0	100.0

(a) Excess deaths are equal to observed deaths minus expected deaths (based on 1999–2001 total Australian age, sex and cause specific rates).

(b) Data are for Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration.

Source: ABS data available on request, Deaths Registration Database.

The following disease-specific analysis highlights different patterns of mortality experienced by the Indigenous and total Australian population. The proportion of deaths due to any one disease or disease group is affected by the overall pattern of deaths within the respective population. For this reason it is important to have regard to the overall pattern of deaths when interpreting comparisons that are made of proportions that are due to one cause or a group of causes (table 9.22).

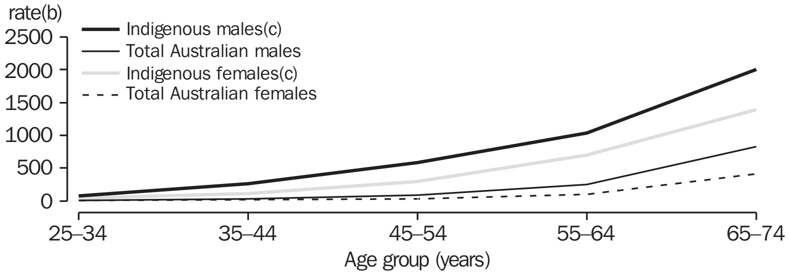
Diseases of the circulatory system

'Diseases of the circulatory system' were responsible for 27% of total Indigenous male deaths and 28% of total Indigenous female deaths for the period 1999–2001. This was less than the total Australian population where 'Diseases of the circulatory system' accounted for 36% of total male deaths and 42% of total female deaths. 'Ischaemic heart diseases' (heart attack, angina) were responsible for 62% of total Indigenous male deaths and 50% of total Indigenous female deaths attributed to 'Diseases of the circulatory system', while 'Cerebrovascular disease' (stroke) accounted for 17% (males) and 21% (females) respectively.

Circulatory diseases *continued*

Both Indigenous males and females experienced higher rates of mortality from 'Diseases of the circulatory system' in every age group, when compared to the total Australian population. The greatest differences in age-specific death rates for males occurred in the age groups 25–34 and 35–44 years, with Indigenous males respectively recording rates 8 and 9 times higher than the total Australian male rates. Indigenous females recorded rates 10 times higher than the total Australian female rates for the 25–34, 35–44 and 45–54 year age groups (graph 9.13).

9.13 DISEASES OF THE CIRCULATORY SYSTEM(a)



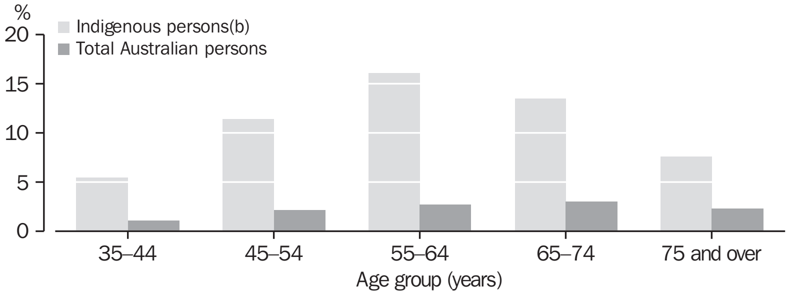
(a) Data are for years 1999–2001 combined, based on year of registration.
(b) Per 100,000 population.
(c) Indigenous data are for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined.

Source: ABS data available on request, Deaths Registration Database.

Diabetes

Diabetes has a far greater impact on mortality of the Indigenous population than the total Australian population. For the period 1999–2001 diabetes was responsible for 8.5% of the total Indigenous deaths compared to 2.3% of total Australian deaths. For the total Australian population, the proportion of total deaths caused by diabetes remained constant (2.3%) for all age groups over 45–54 years. For the Indigenous population, diabetes was responsible for a varying proportion of total deaths in different age groups. In the 55–64 years age group, diabetes was responsible for 16% of total Indigenous deaths (graph 9.14).

9.14 DIABETES DEATHS(a), PROPORTION OF TOTAL DEATHS



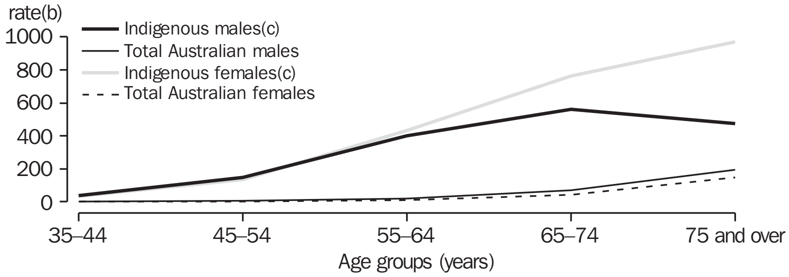
(a) Data are for years 1999–2001 combined, based on year of registration.
(b) Indigenous data are for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined.

Source: ABS data available on request, Deaths Registrations Database.

Diabetes *continued*

The earlier onset of diabetes experienced by the Indigenous population is reflected in the differences in age-specific death rates (Chapter 7). For the period 1999–2001, Indigenous males in the 35–44, 45–54 and 55–64 years age groups experienced age-specific death rates 20 times higher than the corresponding total Australian male rates. For the same age groups, the rates experienced by Indigenous females were 33 times higher than the corresponding total Australian female rates (graph 9.15).

9.15 DIABETES(a), AGE SPECIFIC RATES



(a) Data are for years 1999–2001 combined, based on year of registration.
(b) Per 100,000 population.
(c) Indigenous data are for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined.

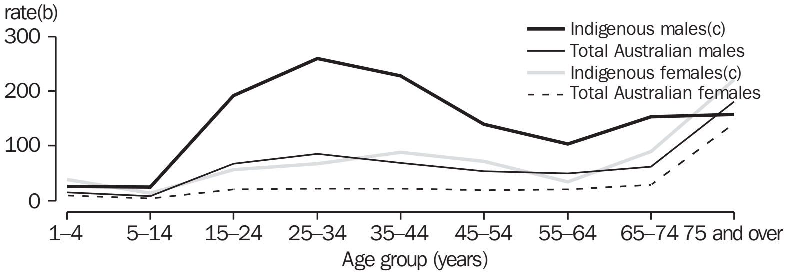
Source: ABS data available on request, Deaths Registrations Database.

External causes of morbidity and mortality

Deaths due to external causes, such as accidents, 'Intentional self-harm' (suicide) and 'Assault', are a major contributor to premature mortality. In Australia in 2001, the ABS estimates that over 230,000 years of potential life was lost in premature mortality due to external causes (ABS 2001c). Deaths due to external causes have a major impact on the Indigenous population. For the period 1999–2001, these deaths accounted for 16% of all Indigenous deaths, compared to 6% of all deaths for the total Australian population. For both populations, males accounted for approximately 70% of the total deaths. For Indigenous males, the leading cause of death from external causes was 'Intentional self-harm' (33%), 'Transport accidents' (24%) and 'Assault' (10%), while for Indigenous females the leading causes were 'Transport accidents' (28%), 'Assault' (22%) and 'Intentional self-harm' (15%).

The 1999–2001 age-specific death rates for external causes were substantially higher among Indigenous males than among total Australian males for all age groups with the exception of 75 years and over. For most age groups, the Indigenous male age-specific rates were 2 to 3 times higher than the corresponding total Australian males rates. Indigenous females experienced substantially higher age-specific death rates than total Australian females in every age group for the 1999–2001 period, with the greatest difference occurring in the 1–4 and 35–44 years group. In these age groups, Indigenous females recorded a rate more than four times higher than that of the corresponding total Australian females age group (graph 9.16).

9.16 EXTERNAL CAUSES OF MORBIDITY AND MORTALITY(a)



(a) Data are for years 1999–2001 combined, based on year of registration.
(b) Per 100,000 population.
(c) Indigenous data are for the usual residents of Queensland, South Australia, Western Australia and Northern Territory combined.

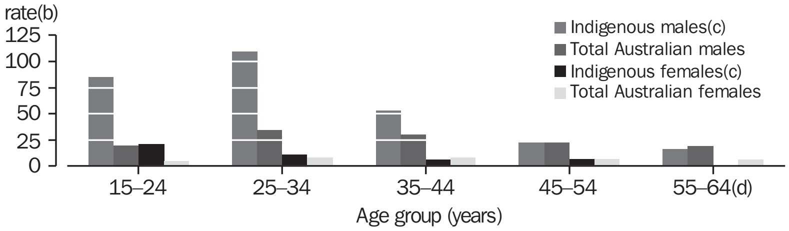
Source: ABS data available on request, Deaths Registration Database.

Intentional self-harm

'Intentional self-harm' was the leading cause of death from external causes for Indigenous males for the 1999–2001 period. While the overall death rate was nearly three times higher than the corresponding total Australian males rates, the major differences occurred in the younger age groups. For the 15–24 years age group, the Indigenous male age-specific rate was over four times higher than the corresponding age-specific rate for total Australian males, while for the 25–34 years age group, the rate was three times higher. For the 45–54 years age group, the Indigenous male age-specific rate was equivalent to the corresponding age-specific rate for total Australian males, while for age groups 55–64 years and above, the Indigenous male age-specific rates were lower than the corresponding total Australian males rates (graph 9.17).

With the exception of the 15–24 years age group, the Indigenous female age-specific rates for 'Intentional self-harm' were similar to, or lower than the corresponding total Australian females rates. The 15–24 years age-specific rate was four times higher than the corresponding age-specific rate for total Australian females. For the period 1999–2001, there were no recorded Indigenous female deaths from 'Intentional self-harm' for age groups 55–64 years and over (graph 9.17).

9.17 INTENTIONAL SELF-HARM(a)

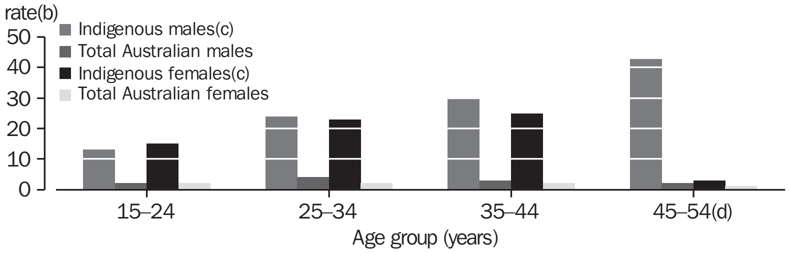


(a) Data are for years 1999–2001 combined, based on year of registration.
(b) Per 100,000 population.
(c) Indigenous data are for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined.
(d) Indigenous female rate is zero.

Source: ABS data available on request, Deaths Registration Database.

Assault ‘Assault’ is a significant cause of deaths for both male and female Indigenous persons, particularly in the 15–24, 25–34, 35–44 and 45–54 years age groups for males and the 15–24, 25–34, 35–44 years age groups for females. Over the period 1999–2001, the male age-specific death rates for these groups were between 6 and 22 times higher than the corresponding age-specific rate for total Australian males, while the female age-specific death rates ranged between 7 and 13 times the equivalent age-specific rate for total Australian females (graph 9.18).

9.18 ASSAULT(a)



(a) Data are for years 1999–2001 combined, based on year of registration.
(b) Per 100,000 population.
(c) Indigenous data are for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined.
(d) Total Australian female rate is one.

Source: ABS data available on request, Deaths Registrations Database.

Neoplasms (cancers) ‘Neoplasms’ were responsible for 15% of total Indigenous deaths for the period 1999–2001, markedly less than the total Australian population where neoplasms accounted for 29% of total deaths. The major causes of cancer deaths for Indigenous males were ‘Malignant neoplasms of the respiratory and intrathoracic organs’ (35% of total), ‘Malignant neoplasms of the digestive organs’ (31%), and ‘Malignant neoplasms of lip, oral cavity and pharynx’ (8%), while for Indigenous females the major causes were ‘Malignant neoplasms of the respiratory and intrathoracic organs’ (20% of total), ‘Malignant neoplasms of the digestive organs’ (20%), and ‘Malignant neoplasms of the female genital organs’ (17%).

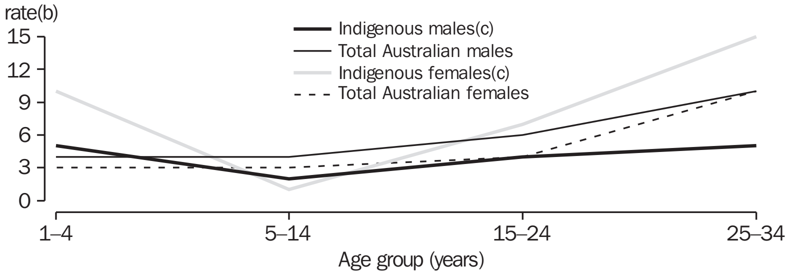
Indigenous persons were under represented in a number of cancer groups, including ‘Melanoma’ and other ‘Malignant neoplasms of skin’ (1% of total indigenous cancer deaths compared with 4% of total Australian cancer deaths), ‘Malignant neoplasms of lymphoid, haematopoietic and related tissue’ (6% Indigenous, 10% total Australian) and ‘Malignant neoplasms of male genital organs’ (7% total Indigenous males, 13% total Australian males).

Indigenous persons were over represented in other cancer groups, including ‘Malignant neoplasms of lip, oral cavity and pharynx’ (8% of total Indigenous male cancer deaths compared with 2% of total Australian male cancer deaths), and ‘Malignant neoplasms of female genital organs’ (17% total Indigenous females, 9% total Australian females).

Neoplasms (cancers) *continued*

The 1999–2001 age-specific death rates for neoplasms indicate that for age groups up to 25–34 years, the rates for Indigenous males and females are closer to those for total Australian males and females (graph 9.19) than for age groups 35–44 years and above. With the exception of females 75 years and over, age-specific rates for Indigenous males and females in these older age groups were up to twice those for the corresponding total Australian males and females rates (graph 9.20).

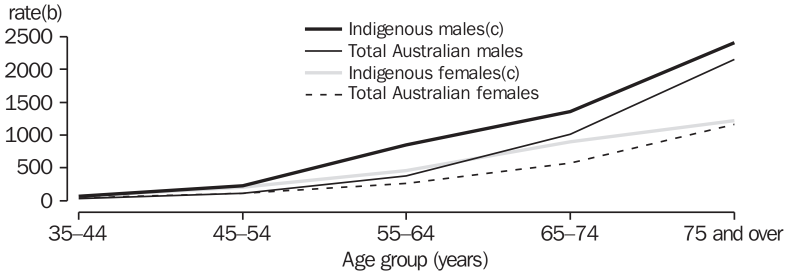
9.19 NEOPLASMS(a), PERSONS AGED UNDER 35 YEARS



(a) Data are for years 1999–2001 combined, based on year of registration.
(b) Per 100,000 population.
(c) Indigenous data are for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined.

Source: ABS data available on request, Deaths Registration Database.

9.20 NEOPLASMS(a), PERSONS AGED 35 YEARS AND OVER



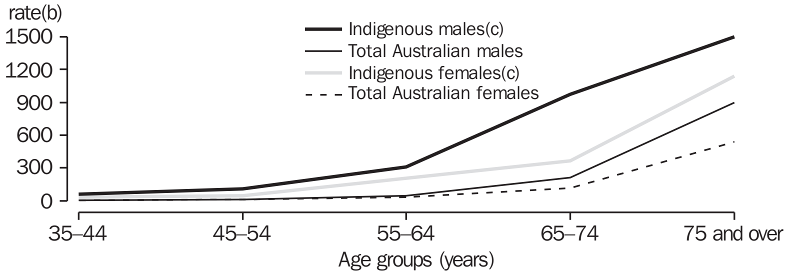
(a) Data are for years 1999–2001 combined, based on year of registration.
(b) Per 100,000 population.
(c) Indigenous data are for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined.

Source: ABS data available on request, Deaths Registration Database.

Diseases of the respiratory system

Respiratory diseases, which include 'Influenza' and 'Pneumonia' and 'Chronic lower respiratory diseases' (including asthma, bronchitis and emphysema) were responsible for 8% of total Indigenous deaths for the period 1999–2001. As with diabetes, respiratory diseases affects the Indigenous population to a much larger degree at younger age groups than the total Australian population, and this is reflected in the differences in age-specific death rates. For the period 1999–2001, Indigenous males in the 35–44 years age group experienced age-specific death rates 20 times higher than the corresponding total Australian male rates, while the rate for Indigenous females in this age group was 10 times higher than that for the corresponding total Australian female rates (graph 9.21).

9.21 DISEASES OF THE RESPIRATORY SYSTEM(a)



(a) Data are for years 1999–2001 combined, based on year of registration.
(b) Per 100,000 population.
(c) Indigenous data are for usual residents of Queensland, South Australia, Western Australia and Northern Territory combined.

Source: ABS data available on request, Deaths Registration Database.

Multiple causes of death

Multiple causes of death include all causes and conditions reported on the medical cause of death certificate. Since 1997, the ABS has coded all causes of death reported on each death certificate, including the underlying, immediate and other associated causes of death. While only one cause can be recorded as the underlying cause of death, many deaths due to chronic diseases, such as heart disease, kidney disease and diabetes often occur with concurrent, or co-existing conditions present. It is useful, therefore, to describe the extent to which any or all of these conditions have been reported. For deaths where the underlying cause was identified as an external cause, multiple causes include circumstances of injury, the nature of injury as well as any other conditions reported on the death certificate.

For the 4,385 Indigenous deaths registered in Queensland, South Australia, Western Australia and the Northern Territory for 1999–2001, there was a total of 13,233 causes reported, an average of three causes relating to each death. On average there were 2.9 causes reported for each male death and 3.2 causes for each female death, compared to 2.9 causes for each total Australian male death and 2.8 causes for each total Australian female death. Deaths where a single cause was reported occurred in 17% of total Indigenous male deaths and 16% of total Indigenous female deaths, less than the total Australian figures of 20% (males) and 21% (females). Table 9.22 shows the relationships between a number of underlying causes of death and associated causes for the Indigenous and total Australian populations including the influence that diabetes, circulatory and respiratory diseases have on the Indigenous population. For deaths from 'Ischaemic heart diseases', Indigenous males recorded associated diabetes at twice the rate of the total Australian male population while the rate for Indigenous females was three times that of the corresponding total Australian female population. Indigenous males and females recorded associated renal failure at twice the rate of the total Australian male and female populations for deaths from diabetes.

9.22 UNDERLYING CAUSES OF DEATH AND ASSOCIATED CAUSES — 1999–2001

	Indigenous males(a) proportion of total	*Indigenous females(a) proportion of total*	*Australian males(a) proportion of total*	*Australian females(a) proportion of total*
	%	%	%	%
Neoplasms (C00–D48)				
Reported alone	31.1	30.4	37.1	40.6
Reported with				
Septicaemia	4.6	5.9	3.9	3.8
Diabetes mellitus	8.6	9.0	4.3	3.4
Ischaemic heart diseases	5.8	6.9	8.0	5.3
Cerebrovascular diseases	3.2	3.1	3.7	3.7
Influenza and pneumonia	14.4	6.9	9.8	7.5
Renal failure	5.5	7.6	5.9	4.5
Chronic lower respiratory diseases	12.1	6.6	7.1	4.0
Diabetes mellitus (E10–E14)				
Reported alone	0.0	1.4	1.7	1.3
Reported with				
Septicaemia	16.1	18.8	8.8	9.4
Ischaemic heart diseases	49.0	41.7	54.5	47.6
Cerebrovascular diseases	14.2	12.4	21.0	22.6
Influenza and pneumonia	9.7	7.8	11.8	9.6
Renal failure	40.0	43.1	21.8	22.1
Chronic lower respiratory diseases	7.1	6.4	6.8	4.7
Ischaemic heart diseases (120–125)				
Reported alone	22.0	18.4	14.6	11.9
Reported with				
Diabetes mellitus	16.7	28.7	9.9	9.0
Cerebrovascular diseases	4.8	10.0	7.8	10.2
Influenza and pneumonia	3.6	5.0	5.1	5.9
Renal failure	7.4	15.3	9.4	8.7
Chronic lower respiratory diseases	9.3	10.3	11.7	7.8
Malignant neoplasms	2.1	2.7	6.7	4.1
Renal failure (N17–N19)				
Reported alone	9.7	11.4	6.9	8.0
Reported with				
Septicaemia	19.4	13.6	12.9	11.1
Diabetes mellitus	19.4	15.9	7.7	7.3
Ischaemic heart diseases	29.0	15.9	28.2	23.0
Cerebrovascular diseases	3.2	2.3	7.5	7.9
Influenza and pneumonia	12.9	15.9	16.1	14.8
Chronic lower respiratory diseases	6.5	11.4	8.3	3.9

(a) Data from Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration.

Source: ABS data available on request, Deaths Registration Database.

Table 9.23 aligns the type and extent of ‘Injuries’ sustained by Indigenous persons whose deaths were due to external causes. For the period 1999–2001, ‘Transport accidents’ were associated with ‘Injuries’ to various parts of the body, while 3.5% of deaths from ‘Intentional self-harm’ involved ‘Poisoning’.

9.23 INDIGENOUS DEATHS(a), NATURE OF INJURY — 1999–2001

	External causes					
	Transport accidents proportion of total	*Other accidents proportion of total*	*Intentional self-harm proportion of total*	*Assault proportion of total*	*Other proportion of total*	*Total proportion of total*
	%	%	%	%	%	%
Injuries to the head	25.6	14.8	3.5	32.8	—	16.9
Injuries to the neck	7.4	1.7	9.6	3.8	—	5.4
Injuries to the thorax	15.9	1.3	2.6	24.4	11.4	9.1
Injuries to the abdomen, lower back, lumbar spine, pelvis, hip and thigh	7.8	5.4	2.6	16.0	0.0	6.6
Injuries involving multiple body regions	31.4	0.7	1.7	7.6	2.9	10.3
Injuries to unspecified part of trunk, limb or body region	3.5	2.7	—	9.9	—	3.2
Effects of foreign body entering through natural orifice	0.8	5.0	—	—	2.9	1.9
Burns and corrosions	—	4.0	0.9	—	—	1.5
Poisoning by drugs, medicaments and biological substances	—	19.1	3.5	—	14.3	7.4
Toxic effects of substances chiefly non-medicinal as to source	1.9	10.7	2.6	1.5	—	4.7
Other and unspecified effects of external causes	1.2	29.9	71.7	1.5	14.3	27.7
Total injuries	100.0	100.0	100.0	100.0	100.0	100.0

(a) Data from Queensland, South Australia, Western Australia and Northern Territory combined. Based on year of registration.

Source: ABS data available on request, Deaths Registration Database.

SUMMARY

Australia's Indigenous population does not experience the same health status, in terms of mortality, as that experienced by the total Australian population. The estimated life expectancy at birth for Aboriginal and Torres Strait Islander males and females is approximately 20 years below that of the total Australian population.

Indigenous Australians in the four jurisdictions for which deaths data are combined in this report (Queensland, South Australia, Western Australia and the Northern Territory), experience higher death rates, with major differences occurring between ages 35–54 years where age-specific death rates are five times higher than the corresponding total Australian rates. 'Diseases of the circulatory system', 'External causes of morbidity and mortality', 'Neoplasms' and 'Endocrine, nutritional and metabolic diseases' were the leading causes of deaths among Aboriginal and Torres Strait Islander peoples for the period 1999–2001. Diabetes is more prominent in the Indigenous population both as an underlying cause of death (over 8% of total deaths), and reported more frequently as an additional cause of death. 'External causes of morbidity and mortality' are major contributors to total Indigenous deaths, with violent deaths featuring prominently, especially in the 15–24 and 25–34 years age groups.

Deaths data from South Australia, Western Australia and the Northern Territory, do not permit any definitive statements on the change in ages of death for Indigenous Australians over the period 1991 to 2001. The ABS plans to release a detailed study into, and exploration of, Indigenous mortality trends in an *Information Paper: Issues in Monitoring Trends in Indigenous Mortality, Australia* (cat. no. 4716.0), expected to be released late in 2003.

CHAPTER 10 TORRES STRAIT ISLANDERS

INTRODUCTION

Few health data sets currently identify Torres Strait Islanders separately from Aboriginal people reliably enough to allow useful reporting on the Torres Strait Islander population to occur. Previous editions of this report have drawn upon health data with a specific Torres Strait Islander focus (ABS 1997c; McDermott et al. 1998) to go some way toward illustrating the health status of the Torres Strait Islander population. Through national surveys, the Australian Bureau of Statistics (ABS) continues to work toward providing reliable estimates of the health, welfare and social characteristics of Aboriginal and Torres Strait Islander peoples using extended Indigenous sampling design (Chapter 11). For example, the 2002 Indigenous Social Survey (ISS) included an extended sample to support estimating of both the Torres Strait region as well as for the Torres Strait Islander population. A similar extended sample is proposed for the 2004–05 Indigenous Health Survey.

At present there are limited national health and welfare data on Torres Strait Islander peoples, and issues of Indigenous identification within administrative health data sets are currently being pursued and collection improvements implemented. The information in this Chapter is predominantly based on the 2001 Census of Population and Housing, the ABS vital statistics collection (births and deaths), the Australian Institute of Health and Welfare (AIHW) National Hospital Morbidity Database (NHMD) and the AIHW National Perinatal Statistics data collection. This information can be used to provide some context for the health and welfare status of Torres Strait Islanders, as new ABS survey and improved administrative data become available in the coming years.

Results from the 1994 National Aboriginal and Torres Strait Islander Survey indicate that Torres Strait Islanders living on the mainland had a similar view of their health status to that of the total Australian Indigenous population. However, Torres Strait Islanders living in the Torres Strait area reported a differing prevalence of health conditions and illnesses (ABS 1997c). Where possible, this Chapter presents comparisons between all persons of Torres Strait Islander origin living in the Torres Strait and those living on the Australian mainland. Comparisons are also made with Aboriginal, non-Indigenous and total Australian populations.

The 1996 Census of Population and Housing was the first Census in which people were able to indicate if they were of both Aboriginal and Torres Strait Islander origin. In the 1991 Census and earlier, Indigenous respondents were asked to identify as being of either Aboriginal origin, or of Torres Strait Islander origin. Due to this change, comparisons with previous Censuses should be made with care. People who identified in 1991 as Aboriginal or as Torres Strait Islander may, in 1996 or 2001 Census, have identified as being of both Aboriginal and Torres Strait Islander origin.

INTRODUCTION *continued*

In this Chapter, any person who indicated they were of Torres Strait Islander origin is included within 'all persons of Torres Strait Islander origin' (i.e. this group includes persons who identified as being either of Torres Strait Islander origin or of both Aboriginal and Torres Strait Islander origin).

DEMOGRAPHY

Census counts

In the 2001 Census, 43,574 people identified as being of Torres Strait Islander origin, accounting for 0.2% of the total Australian population. This number includes 17,528 people who identified as being of both Aboriginal and Torres Strait Islander origin (0.1% of the total Australian population). Torres Strait Islanders who additionally identify as being of Aboriginal origin account for 40% of all Torres Strait Islanders. Torres Strait Islanders living in the Torres Strait Area accounted for around one in four (24%) of all Torres Strait Islanders who usually live in Queensland and around 14% of all Torres Strait Islanders living in Australia.

In 2001 the Torres Strait Islander population had a younger age distribution than the total Australian population. Of Torres Strait Islanders, 73% were under 35 years of age compared to 49% of the total Australian population. The age distribution of Torres Strait Islanders was almost identical to that of the Aboriginal population (table 10.1).

10.1 AGE DISTRIBUTION — 2001

		Torres Strait area	*Rest of Australia*	*All Australia*			
	Units	*All Torres Strait Islanders*	*All Torres Strait Islanders*	*All Torres Strait Islanders*	*Aboriginal*	*Non-Indigenous*	*Total(a)*
Age group (years)							
0–14	%	40	40	40	39	20	21
15–34	%	31	33	33	34	28	28
35–54	%	20	19	19	20	29	29
55 and over	%	9	8	8	7	22	22
Total	%	100	100	100	100	100	100
Population	no.	6 000	37 574	43 574	366 429	17 591 489	18 769 249

(a) Includes persons for whom Indigenous status was not stated.

Source: ABS data available on request, 2001 Census of Population and Housing.

Estimated Indigenous resident population

To arrive at an estimate of the size of the Aboriginal and Torres Strait Islander population using the Census count (on a usual residence basis), allowance is made for net undercount, and for instances in which Indigenous status is unknown. In addition, population estimates for dates other than the Census date also take account of births, deaths and migration in the intervening period. The final experimental Indigenous estimated resident population (ERP) for all persons of Torres Strait Islander origin at 30 June 2001 was 48,800, 10.6% of the total Indigenous population. Based on the experimental Indigenous ERP figures, 59% of all Torres Strait Islanders lived in Queensland, with the remainder spread across Australia (table 10.2).

10.2 EXPERIMENTAL INDIGENOUS ERP(a) BY STATE WITH PROPORTION OF ALL PERSONS OF TORRES STRAIT ISLANDER ORIGIN — 2001

	Torres Strait Islander	*Both Torres Strait Islander & Aboriginal*	*All Torres Strait Islanders*	*All Torres Strait Islanders*	*Aboriginal*	*Non-Indigenous*	*Total*
	no.	*no.*	*no.*	*%*	*no.*	*no.*	*no.*
New South Wales	4 770	3 887	7 679	17.7	126 231	6 440 329	6 575 217
Victoria	1 913	1 147	2 780	6.3	24 786	4 776 880	4 804 726
Queensland	18 525	10 105	25 440	58.7	97 280	3 503 036	3 628 946
South Australia	837	575	1 344	2.9	24 132	1 486 184	1 511 728
Western Australia	962	1 492	2 200	5.0	63 477	1 835 228	1 901 159
Tasmania	1 375	986	2 179	4.8	15 023	454 411	471 795
Northern Territory	679	1 239	1 661	3.9	54 957	140 893	197 768
Australian Capital Territory	164	121	277	0.6	3 624	315 408	319 317
Total(b)	**29 239**	**19 552**	**43 574**	**100.0**	**409 729**	**18 954 720**	**19 413 240**

(a) Experimental Indigenous Estimated Resident Population, final rebased figures at 30 June 2001.

(b) Includes Other Territories.

Source: ABS data available on request, 2001 Census of Population and Housing.

Births

As mentioned above, the majority of Torres Strait Islanders live in Queensland. The following information relates to all births registered as Torres Strait Islander (or 'both Aboriginal and Torres Strait Islander') irrespective of the jurisdiction in which these births were registered.

The standard ABS Indigenous status question was included on Queensland birth registration forms from 1996, however meaningful data on Torres Strait Islander births have only been available since 1999. While the coverage of Indigenous births (including Torres Strait Islander births) is considered to be incomplete, it is estimated to range between 90% and 95% for the period 1999–2001 (ABS 2002g). It is important to note that coverage ratios for birth and death data are calculated for the total Indigenous population only and it is assumed they are the same for both Aboriginal and Torres Strait Islanders.

Compounding the coverage issues, a large number of births each year are coded as 'Indigenous' with no distinction between Aboriginal and Torres Strait Islander. Given these issues with coverage, any examination of 2001 births data for Torres Strait Islanders is indicative only and should be regarded with caution.

Births *continued*

Between 1999 and 2001, the number of births registered as Torres Strait Islander (including 'both Aboriginal and Torres Strait Islander') in Australia represented over 10% of the total registered Indigenous births. In Queensland in 2001, births registered as Torres Strait Islander represented 27% of the total Indigenous births and 2% of all registered births (table 10.3).

10.3 REGISTERED BIRTHS — 1999–2001

	Torres Strait Islander births(a)	*Total Indigenous births*	*Torres Strait Islander as a percentage of total Indigenous births*	*Total births*	*Torres Strait Islander as a percentage of total births*
	no.	*no.*	*%*	*no.*	*%*
1999					
Queensland	781	2 974	26.3	46 503	1.7
Australia — remainder	290	7 606	3.8	202 367	0.1
Australia(b)	1 071	10 580	10.1	248 870	0.4
2000					
Queensland	840	3 172	26.5	47 278	1.8
Australia — remainder	285	7 723	3.7	202 358	0.1
Australia(b)	1 125	10 895	10.3	249 636	0.5
2001					
Queensland	909	3 337	27.2	47 678	1.9
Australia — remainder	371	8 068	4.6	198 716	0.2
Australia(b)	1 280	11 405	11.2	246 394	0.5

(a) Includes 'Both Aboriginal and Torres Strait Islander'.

(b) Includes Other Territories.

Source: ABS 2002b, ABS data available on request, Births Registrations Database.

Despite the coverage issues and caution referred to above, 2001 births data still provide information on Torres Strait Islander births in comparison with total Indigenous births and all births. A greater proportion of Torres Strait Islander births were registered as nuptial than total Indigenous births. In addition, a greater proportion of Torres Strait Islander births were to parents who were both Indigenous compared to total Indigenous births.

In 2001, the median age of mothers who identified as being of Torres Strait Islander origin only was 25.3 years, higher than that of total Indigenous mothers whose median age was 24.8 years. The median age of fathers of children born to all Torres Strait Islander mothers was 28.1 years, higher than the 27.8 years median age of fathers of children born to all Indigenous mothers (table 10.4).

10.4 REGISTERED BIRTHS(a) — 2001

	Unit	*Torres Strait Islander births*	*Both Torres Strait Islander and Aboriginal births*	*All Indigenous births*	*Births to Torres Strait Islander mothers*	*Births to mothers who are both Torres Strait Islander and Aboriginal*	*Births to all Indigenous mothers*	*All births*
Total births	no.	702	578	11 405	559	265	8 334	246 394
Nuptial births	%	25.1	20.8	18.8	20.2	19.2	14.3	69.3
Ex-nuptial births	%	74.9	79.2	81.2	79.8	80.8	85.7	30.7
Paternity-acknowledged	%	57.7	72.7	65.0	58.1	66.4	63.5	27.0
Paternity-not-acknowledged	%	17.2	6.6	16.2	21.6	14.3	22.2	3.7
Both parents Indigenous	%	52.7	69.0	30.7	. .	. .	. .	. .
Mother only(b)	%	23.5	15.9	42.3	. .	. .	. .	. .
Father only(c)	%	23.8	15.1	26.9	. .	. .	. .	. .
Age of mother (years)								
19 and under	no.	105	120	2 251	86	57	1 755	11 704
20–24	no.	216	193	3 434	185	82	2 513	37 208
25–29	no.	189	127	3 006	142	58	2 159	73 711
30–34	no.	123	101	1 883	96	47	1 335	79 784
35–39	no.	57	29	695	40	15	483	36 733
40 and over	no.	12	7	129	10	5	83	7 102
Not stated	no.	—	—	7	—	—	6	152
Total confinements	no.	689	569	11 269	547	261	8 231	242 340
Median age of mother	years	25.7	23.9	25.0	25.3	24.4	24.8	30.0
Median age of father	years	28.5	27.3	27.9	28.1	28.1	27.8	32.3

(a) 2001 coverage of Indigenous births in Australia has been estimated at 111% on 1991 Census-based projections and 95% on 1996 Census-based projections. See ABS 2001b, table 10.9.

(b) Includes paternity-not-acknowledged and origin of father not stated.

(c) Includes origin of mother not stated (9%).

Source: ABS 2002b, ABS data available on request, Births Registration Database.

Babies

Low birthweight babies are less common for Torres Strait Islander mothers than for Aboriginal mothers. The latest information available from the AIHW National Perinatal Data Collection on the health of Torres Strait Islander mothers and their babies is for 2000.

There were 583 babies by 575 mothers attributed to Torres Strait Islanders representing 0.2% of all reported births in Australia in 2000. Of these babies, 68 were born low birthweight (less than 2,500 grams at birth), accounting for 11.7% of all 583 babies. The proportion of low birthweight of Torres Strait Islanders is higher than that (6.6%) of non-Indigenous mothers in Australia; but lower than that (13.7%) of Aboriginal mothers. Within these low birthweight babies, about 29.4% (20) were born very low birthweight (less than 1,500 grams at birth). This proportion is higher than that of both non-Indigenous mothers (22.1%) and Aboriginal mothers (23.8%).

Babies *continued*

The perinatal death rate was 13.7 per 1,000 Torres Strait Islander births, lower than that of Aboriginal births (28.7 per 1,000 Aboriginal births) but higher than that of non-Indigenous births (9.6 per 1,000 births) in 2000. Low birthweight was one of the contributing factors for perinatal deaths. In 2000 all of perinatal deaths (8) of babies born to Torres Strait Islander mothers were born low birthweight, and seven of them were born very low birthweight.

Deaths

As for births above, while the majority of Torres Strait Islanders live in Queensland, the following information relates to all deaths registered as Torres Strait Islander (or 'both Aboriginal and Torres Strait Islander') irrespective of the jurisdiction in which these deaths were registered.

While the standard ABS Indigenous status question was included in deaths registration forms for Queensland from 1996, meaningful deaths data on Torres Strait Islanders for Queensland (and therefore nationally) have only become available since 2001. Indigenous deaths (including Torres Strait Islander deaths) are considered to be under-enumerated. Estimated coverage of Indigenous deaths varies across states and territories, however, nationally in 2001, coverage was estimated at 55% based on 1996 Census-based projections and 85% based on 1991 Census-based projections (see ABS 1998a). Given issues with coverage, any examination of 2001 deaths data for Torres Strait Islanders is indicative only and should be regarded with caution.

While calculated from relatively small numbers for only one year, 2001 data suggest that the median ages of death for both Torres Strait Islander males and females were considerably higher than those of total Indigenous males and females. This is particularly true for males (table 10.5).

10.5 TORRES STRAIT ISLANDER MEDIAN AGE AT DEATH — 2001

	Deaths			*Median age at death*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
	no.	*no.*	*no.*	*years*	*years*	*years*
Torres Strait Islanders	77	49	126	59.3	60.2	59.5
Torres Strait Islanders and 'Both Aboriginal and Torres Strait Islanders'	28	12	40	57.5	56.8	57.0
Aboriginal Indigenous	1 113	784	1 897	51.6	57.6	53.8
Total Indigenous	1 213	845	2 063	52.0	57.6	54.2
Total Australian population	**66 835**	**61 709**	**128 544**	**75.5**	**81.8**	**78.5**

Source: ABS 2002c, ABS data available on request, Deaths Registration Database.

Deaths *continued*

Examination of deaths by broad age groups shows that for 2001, the age profile for Torres Strait Islanders deaths was different from that of the total Indigenous population. Torres Strait Islanders recorded a greater proportion of total deaths in the younger (less than 1 year to 14 years) and older (55 years and over) age groups and a smaller proportion of total deaths in the middle age groups (15–34 years and 35–54 years) when compared to the total Indigenous population (table 10.6).

10.6 TORRES STRAIT ISLANDER DEATHS BY AGE GROUP

Age group (years)	*Torres Strait Islander(a)*	*Proportion of total Torres Strait Islander deaths*	*Total Indigenous*	*Proportion of total Indigenous deaths*
	no.	*%*	*no.*	*%*
		MALES		
0–14	13	12.4	102	8.4
15–34	17	16.2	203	16.6
35–54	17	16.2	354	29.1
55 and over	58	55.2	559	45.9
Total	*105*	*100.0*	*1 218*	*100.0*
		FEMALES		
0–14	9	14.8	69	8.2
15–34	5	8.2	90	10.7
35–54	14	22.9	234	27.7
55 and over	33	54.1	452	53.5
Total	*61*	*100.0*	*845*	*100.0*
		PERSONS		
0–14	22	13.2	171	8.3
15–34	22	13.2	293	14.2
35–54	31	18.6	588	28.5
55 and over	91	54.9	1 011	49.0
Total	**166**	**100.0**	**2 063**	**100.0**

(a) Includes ‘Both Aboriginal and Torres Strait Islander’.

Source: ABS 2002c, ABS data available on request, Deaths Registrations Database.

An examination of 2001 deaths by underlying cause (in major ICD-10 groupings) indicate that death patterns by causes for Torres Strait Islanders are very similar to those for the total Indigenous population (table 10.7).

10.7 CAUSES OF DEATH — 2001

	Torres Strait Islanders(a)	*Proportion of total deaths*	*Total Indigenous*	*Proportion of total deaths*
	no.	*%*	*no.*	*%*
Malignant neoplasms (C00–C97)	30	18.1	329	15.9
Endocrine, nutritional and metabolic diseases (E00–E90)	14	8.4	173	8.3
Diseases of the circulatory system (I00–I99)	48	28.9	595	28.8
Diseases of the respiratory system (J00–J99)	15	9.0	194	9.4
Diseases of the digestive system (K00–K93)	5	3.0	96	4.6
External causes of morbidity and mortality (V01–Y98)	24	14.5	343	16.6
Total(b)	**166**	**100.0**	**2 063**	**100.0**

(a) Includes 'Both Aboriginal and Torres Strait Islander'.

(b) Includes all causes of death.

Source: ABS 2002c, ABS data available on request, Deaths Registrations Database.

HOSPITAL SEPARATIONS

Of the 177,054 hospital separations for Indigenous patients during 2000–01, 12,564 or 7.1% were for Torres Strait Islander patients. Over 77% of the separations of Torres Strait Islander patients were from Queensland hospitals. Queensland Health has indicated that the quality of the data identifying Torres Strait Islanders is in need of improvement, similar to the quality of their other Indigenous identification data for hospitals. The quality of data for jurisdictions other than the Northern Territory and South Australia is also in need of improvement. These data should therefore be used with caution. For a more complete discussion of data quality please see Chapter 11.

Table 10.8 presents hospital separations for 2000–01 by age and sex for Torres Strait Islander and total Indigenous patients. There were 4,894 separations for male Torres Strait Islander patients. Of these, most (24.1%) were for patients in the 45–54 years age group. For Indigenous patients generally this age group had the second largest proportion of separations (18.8%). For Torres Strait Islander patients the second largest group was the 35–44 years age group (11.8%) whereas this age group accounted for the largest proportion (18.9%) of all Indigenous separations.

There were 7,670 separations for female Torres Strait Islander patients during 2000–01. Of these, most (17.5%) were for patients in the 35–44 years age group. The next largest proportion of separations was for the 55–64 years age group (15.4%). For Indigenous female patients generally, the 35–44 years age group had the second largest proportion of separations (17.2%). Patients in the 25–34 years age group had the largest proportion of Indigenous female separations (19.4%) whereas for Torres Strait Islander female patients this group accounted for 13.8% of separations.

10.8 INDIGENOUS HOSPITAL SEPARATIONS — 2000–01

	Torres Strait Islander(a)		*Total Indigenous*	
Age group (years)	*no.*	*%*	*no.*	*%*
	MALES			
Less than 1	292	6.0	5 303	7.0
1–4	396	8.1	5 718	7.5
5–14	336	6.9	5 510	7.3
15–24	352	7.2	5 678	7.5
25–34	558	11.4	11 247	14.8
35–44	577	11.8	14 368	18.9
45–54	1 181	24.1	14 268	18.8
55–64	564	11.5	8 087	10.6
65–74	511	10.4	4 333	5.7
75 or more	127	2.6	1 452	1.9
Total(b)	**4 894**	**100.0**	**75 965**	**100.0**
	FEMALES			
Less than 1	247	3.2	4 232	4.2
1–4	315	4.1	4 695	4.6
5–14	323	4.2	4 541	4.5
15–24	1 032	13.5	15 382	15.2
25–34	1 060	13.8	19 587	19.4
35–44	1 342	17.5	17 393	17.2
45–54	1 014	13.2	15 598	15.4
55–64	1 185	15.4	11 290	11.2
65–74	941	12.3	5 809	5.7
75 or more	211	2.8	2 551	2.5
Total	**7 670**	**100.0**	**101 078**	**100.0**
	PERSONS(b)			
Less than 1	539	4.3	9 535	5.4
1–4	711	5.7	10 415	5.9
5–14	659	5.2	10 051	5.7
15–24	1 384	11.0	21 060	11.9
25–34	1 618	12.9	30 836	17.4
35–44	1 919	15.3	31 762	17.9
45–54	2 195	17.5	29 868	16.9
55–64	1 749	13.9	19 381	10.9
65–74	1 452	11.6	10 142	5.7
75 or more	338	2.7	4 003	2.3
Total(b)	**12 564**	**100.0**	**177 054**	**100.0**

(a) Includes patients reported as Torres Strait Islander and both Aboriginal and Torres Strait Islander.

(b) Total figures include separations for which sex and/or age were not reported.

Source: AIHW National Hospital Morbidity Database.

Table 10.9 shows separations for Torres Strait Islander and total Indigenous patients, by principal diagnosis in ICD-10-AM chapter groupings for 2000–01. Principal diagnoses in the group 'Care involving dialysis' (Z49) accounted for the largest proportion (35.0%) of separations for Torres Strait Islander patients. This was similar to the proportion in this category for all Indigenous persons (30.1%).

Hospital separations for Torres Strait Islander peoples *continued*

‘Pregnancy, childbirth and the puerperium’ (O00–O99) was the second most common category of principal diagnoses (10.6%) for separations of Torres Strait Islander patients, followed by ‘Injury, poisoning and certain other consequences of external causes’ (S00–T98, 6.9%) and ‘Diseases of the Respiratory system’ (J00–J99, 6.2%). For all Indigenous patients, ‘Injury, poisoning and certain other consequences of external causes’ (S00–T98) was the second largest group (9.2%), followed by ‘Pregnancy, childbirth and the puerperium’ (O00–O99, 8.9%) and ‘Diseases of the Respiratory system’ (J00–J99, 8.9%).

10.9 INDIGENOUS HOSPITAL SEPARATIONS, BY PRINCIPAL DIAGNOSIS — 2000–01

	Torres Strait Islander(a)		*Total Indigenous*	
ICD-10-AM chapter groupings	*no.*	*%*	*no.*	*%*
Certain infectious and parasitic diseases (A00–B99)	255	2.0	5 290	3.0
Neoplasms (C00–D48)	346	2.8	2 629	1.5
Diseases of the blood and blood-forming organs) and certain disorders involving the immune mechanism (D50–D89)	54	0.4	806	0.5
Endocrine, nutritional and metabolic diseases (E00–E90)	263	2.1	3 549	2.0
Mental and behavioural disorders (F00–F99)	470	3.7	8 314	4.7
Diseases of the nervous system (G00–G99)	137	1.1	2 822	1.6
Diseases of the eye and adnexa (H00–H59)	152	1.2	1 207	0.7
Diseases of the ear and mastoid process (H60–H95)	99	0.8	1 830	1.0
Diseases of the circulatory system (I00–I99)	461	3.7	6 355	3.6
Diseases of the respiratory system (J00–J99)	785	6.2	15 727	8.9
Diseases of the digestive system (K00–K93)	681	5.4	10 347	5.8
Diseases of the skin and subcutaneous tissue (L00–L99)	295	2.3	5 104	2.9
Diseases of the musculoskeletal system and connective tissue (M00–M99)	294	2.3	3 544	2.0
Diseases of the genitourinary system (N00–N99)	380	3.0	5 714	3.2
Pregnancy, childbirth and the puerperium (O00–O99)	1 337	10.6	15 786	8.9
Certain conditions originating in the perinatal period (P00–P96)	172	1.4	2 278	1.3
Congenital malformations, deformations and chromosomal abnormalities (Q00–Q99)	74	0.6	792	0.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00–R99)	462	3.7	8 289	4.7
Injury, poisoning and certain other consequences of external causes (S00–T98)	862	6.9	16 281	9.2
Factors influencing health status and contact with health services (excluding Z49)	587	4.7	7 033	4.0
Care involving dialysis (Z49)	4 398	35.0	53 357	30.1
Total excluding care involving dialysis	8 166	65.0	123 697	69.9
Total	12 564	100.0	177 054	100.0

(a) Includes patients reported as Torres Strait Islander and both Aboriginal and Torres Strait Islander.

Source: AIHW National Hospital Morbidity Database.

SOCIAL AND ECONOMIC CHARACTERISTICS

The 2001 Census results indicate that the social and economic conditions experienced by Torres Strait Islanders were generally closer to those experienced by Aboriginal people than those of the total Australian population. There were some notable differences between Torres Strait Islanders living in the Torres Strait area and those who live elsewhere.

Languages

More than three-quarters (82%) of Torres Strait Islanders living in the Torres Strait area stated that they spoke a language other than English at home. Speaking a language other than English at home, was reported to a far lesser extent by Torres Strait Islanders living in the rest of Australia (13%), closer to the total level for Aboriginal people (14%) and non-Indigenous people (16%). Only about one in five Torres Strait Islanders (18%) living in the Torres Strait area spoke only English at home, compared to more than 84% of Torres Strait Islanders living in the rest of Australia. In the Torres Strait area, 20% of Torres Strait Islanders reported they spoke English not well, or not at all compared to a far smaller proportion of Torres Strait Islanders living in the rest of Australia (2%), again, similar to the levels for Aboriginal people (3%) and non-Indigenous people (3%) (table 10.10).

10.10 PROFICIENCY IN ENGLISH — 2001

	Torres Strait Area	*Rest of Australia*	*All Australia*			
	All persons of Torres Strait Islander origin	*All persons of Torres Strait Islander origin*	*All persons of Torres Strait Islander origin*	*Aboriginal*	*Non-Indigenous*	*Total(a)*
	%	*%*	*%*	*%*	*%*	*%*
Speaks English only	18	84	75	82	83	81
Speaks another language						
and speaks English well or very well	62	11	18	11	13	13
and speaks English not well or not at all	20	2	4	3	3	3
Total	*82*	*13*	*22*	*14*	*16*	*15*
Not stated	1	3	3	4	1	4
Total	100	100	100	100	100	100

(a) Includes not stated.

Source: ABS data available on request, 2001 Census of Population and Housing.

Education

Data from the 2001 Census indicate that Torres Strait Islanders aged 15 years and over were more likely than Aboriginal persons and less likely than non-Indigenous persons to have completed Year 10 or equivalent. Of Torres Strait Islanders aged 15 years and over who were no longer at school, 27% and 26% of those living in the Torres Strait area and other areas respectively, had not completed Year 10 or equivalent. This compares to 34% of Aboriginal persons, and 18% of non-Indigenous persons (table 10.11).

Education *continued*

Torres Strait Islanders were more likely than Aboriginal persons, and less likely than non-Indigenous persons to have completed higher levels of schooling. In addition, of Torres Strait Islanders aged 15 years and over who were no longer at school, those living in the Torres Strait area were more likely to have completed Year 12 (or equivalent) than those living in the rest of Australia (29% to 22% respectively). This compares to 16% of Aboriginal persons, and 41% of non-Indigenous persons (table 10.11).

10.11 HIGHEST LEVEL OF SCHOOLING COMPLETED(a) — 2001

	Torres Strait Area	*Rest of Australia*	*All Australia*			
	All persons of Torres Strait Islander origin	*All persons of Torres Strait Islander origin*	*All persons of Torres Strait Islander origin*	*Aboriginal*	*Non-Indigenous*	*Total*
	%	%	%	%	%	%
Still at school	4	6	6	5	3	3
Year 8 or below	19	13	13	17	9	9
Year 9 or equivalent	6	11	10	14	8	7
Year 10 or equivalent	23	27	26	27	25	24
Year 11 or equivalent	10	10	10	9	10	10
Year 12 or equivalent	29	22	23	16	39	38
Did not go to school	2	2	2	3	1	1
Not stated	7	10	10	8	5	8
Total	100	100	100	100	100	100

(a) Persons aged 15 years and over, excludes not applicable.

Source: ABS data available on request, 2001 Census of Population and Housing.

Among Torres Strait Islanders aged 15 years and over in 2001, 10% reported having a non-school qualification. Fewer Torres Strait Islanders living in the Torres Strait area reported a non-school qualification (7%) than did Torres Strait Islanders living in the rest of Australia (10%). Overall, Torres Strait Islanders were one-third as likely as non-Indigenous persons to have a non-school qualification.

Among Torres Strait Islanders aged 15 years or over in 2001, 2% had a bachelor degree or higher qualification, less than one-fifth the level reported by the non-Indigenous population; and 8% had a diploma or certificate (table 10.12).

10.12 HIGHEST NON-SCHOOL EDUCATIONAL QUALIFICATION COMPLETED — 2001

	Torres Strait Area	*Rest of Australia*	*All Australia*			
	All persons of Torres Strait Islander origin	*All persons of Torres Strait Islander origin*	*All persons of Torres Strait Islander origin*	*Aboriginal*	*Non-Indigenous*	*Total*
	%	%	%	%	%	%
Has qualification(a)						
Degree or higher	0.8	1.7	1.7	1.8	10.8	10.2
Diploma level	1.6	1.7	1.7	1.5	5.0	4.8
Certificate level	4.3	6.9	6.9	5.6	13.1	12.5
Total	*6.8*	*10.4*	*10.4*	*8.9*	*28.9*	*27.5*
No non-school qualification(b)	85.3	80.7	80.7	83.3	64.4	63.5
Inadequately described or not stated	7.9	8.9	8.9	7.9	6.7	9.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

(a) Persons aged 15 years and over.

(b) Includes persons aged under 15 years, persons with no qualifications and persons who have a qualification that is out of scope of this item.

Source: ABS data available on request, 2001 Census of Population and Housing.

Income

The 2001 Census results indicated that median weekly income for Torres Strait Islander persons was greater than for Aboriginal persons, but less than median weekly income for non-Indigenous persons. While this was true for both males and females, the difference between non-Indigenous median weekly income and that reported by Aboriginal and Torres Strait Islander persons was much less for females than males. The median weekly income for non-Indigenous males was $506 per week, compared to $274 for Torres Strait Islander males, and $202 for Aboriginal males. The median weekly income for non-Indigenous females, however, was $293 per week, compared to $264 for Torres Strait Islander females, and $233 for Aboriginal females (table 10.13).

Both male and female Torres Strait Islanders living in the Torres Strait Area reported a lower median weekly income than Torres Strait Islanders living in the rest of Australia. In addition, Torres Strait Islander females living in the Torres Strait area, reported higher median weekly incomes than Torres Strait Islander males (table 10.13).

10.13 PERSONAL INCOME(a) — 2001

	Torres Strait area	*Rest of Australia*	*All Australia*			
	All persons of Torres Strait Islander origin	*All persons of Torres Strait Islander origin*	*All persons of Torres Strait Islander origin*	*Aboriginal*	*Non-Indigenous*	*Total(b)*
Males						
Median weekly income ($)	219	286	274	202	506	498
Proportion with income less than $500 per week (%)	86	71	73	77	49	50
Females						
Median weekly income ($)	252	267	264	233	293	291
Proportion with income less than $500 per week (%)	85	81	82	84	71	72

(a) Persons aged 15 years and over, excludes not stated income.

(b) Includes not stated Indigenous status.

Source: ABS data available on request, 2001 Census of Population and Housing.

Labour force status

At the time of the 2001 Census, 57% of all Torres Strait Islander persons aged 15 years or more, living in the Torres Strait area reported being employed. Nearly half (49%) of employed Torres Strait Islanders were involved in the Community Development Employment Project (CDEP) scheme (table 10.14). Torres Strait Islanders living outside the Torres Strait area were more likely (41%) than those living in the Torres Strait area (29%) to report being employed in non-CDEP scheme jobs. Aboriginal and Torres Strait Islander peoples were less likely than the non-Indigenous population to be employed, even when CDEP scheme employment is taken into consideration. Further discussion on the CDEP scheme is in Chapter 2.

The labour force participation rates for all Torres Strait Islanders (58%) and for Aboriginal people (51%) were lower than the non-Indigenous rate (63%). High CDEP scheme participation by Torres Strait Islanders in the Torres Strait area contributed to higher participation rates (63%) and lower unemployment rates (5%) than for Torres Strait Islanders living elsewhere. The unemployment rates for all Torres Strait Islanders (18%) and for Aboriginal people (20%) were higher than the non-Indigenous rate (7%) (table 10.14).

10.14 LABOUR FORCE STATUS(a) — 2001

		Torres Strait area	Rest of Australia	All Australia			
	Units	All persons of Torres Strait Islander origin	All persons of Torres Strait Islander origin	All persons of Torres Strait Islander origin	Aboriginal	Non-Indigenous	Total
Employed							
CDEP(b)	%	28	2	6	7	—	—
Other	%	29	41	39	32	58	56
Total	%	*57*	*43*	*45*	*40*	*58*	*56*
Unemployed	%	3	11	10	10	4	4
Not in labour force	%	36	41	41	47	36	35
Not stated	%	4	4	4	3	1	4
Total	%	100	100	100	100	100	100
Unemployment(c)	rate	5	20	18	20	7	7
Participation(d)	rate	63	57	58	51	63	63

(a) Persons aged 15 years and over.

(b) Community Development Employment Project scheme.

(c) Unemployed persons as a proportion of all employed and unemployed persons.

(d) Persons in the labour force (employed plus unemployed persons) as a proportion of all persons minus not stated.

Source: ABS data available on request, 2001 Census of Population and Housing.

10.15 IMPROVING DIABETES CARE IN THE PRIMARY HEALTH CARE SETTING

The Torres Strait health region is a remote area with the population concentrated around Thursday Island. It consists of the far northern tip of mainland Queensland and 150 islands in the Torres Strait. Seventeen of the islands are inhabited, and there are mainland settlements at Bamaga, Injinoo, Seisia, New Mapoon, and Umagico, covering a total area of 1,864 square kilometres. The Torres Strait area has a population of 8,531, which includes 6,850 Indigenous people. Some 83.5% of the Torres Strait population is under 45 years of age, in comparison with 64.9% under 45 years in the general Australian population.[1]

Daily plane services from the mainland to Horn Island, bus and barge services to Thursday Island, and charter planes and boats are available. There is a barge service from Cairns, and inter-island transport is mainly by dinghy.

There are two public but no private hospitals in the Torres Strait region. Thursday Island Hospital is the major provider of medical and health services in the region and delivers the following services: accident and emergency care, aged care, general surgical, acute care, obstetrics and gynaecology, oral health services, outpatients, pathology, pharmacy, physiotherapy, radiology and rehabilitation. Additional services include training in allied health and laboratory technologies, a women's health team (a clinical nurse consultant and a health worker) for Torres Sector, and sexual health services, including an HIV/AIDS program. Bamaga Hospital on the mainland provides services that include accident and emergency care, acute care, general non-acute care, long-term and respite care, medical, outpatients, pharmacy and sexual health. Both hospitals have visiting specialist services.

...continued

10.15 IMPROVING DIABETES CARE IN THE PRIMARY HEALTH CARE SETTING *continued*

Torres Strait communities have the highest recorded prevalence of diabetes in Australia (24% of adults over the age of 15) and increasing rates of hospitalisation and deaths from diabetes complications. Improved care of diabetics in the community setting can reduce these complications. A study investigated how this research evidence could be transplanted into improved practice in the remote clinics of the Torres Strait and Northern Peninsula Area Health Service District.

At the beginning of the study, patients receiving diabetes care in all 21 clinics had their health records checked to see how good their care was in terms of routine check-ups and number of hospitalisations in the previous year. A new diabetes outreach service was then started in all communities. Eight of the centres were randomly allocated to set up a locally managed recall and reminder system for routine diabetes care.

After one year, a repeat audit of medical files showed that most measures of good diabetes care had improved everywhere and that, overall, hospital admission rates among diabetics had fallen by 18%. The greatest improvement in both quality of care and reduction in hospitalisations occurred in the centres that had locally managed recall systems, where the proportion of diabetics hospitalised for diabetes-related conditions fell by 41%, mainly due to a reduction in diabetes-related infections.

The study showed that, within one year, a diabetes outreach team working with a high-risk population in a remote health care setting could improve the quality of care and reduce the proportion of people with diabetes admitted to hospital. A well-supported, locally managed recall information system was able to achieve significant added benefits over the control group, including better implementation of evidence-based care plans and a greater reduction in the proportion of diabetics hospitalised. The study was able to show a significant and early reduction in diabetes-related hospital admissions, mainly for infections.

Endnotes

1. ABS 2000, *Population by Age and Sex, Australian States and Territories*, ABS cat. no. 3201.0, Australian Bureau of Statistics, Canberra.

Source: Department of Health and Aged Care ed. (2001), 'Better Health Care: Studies in the Successful Delivery of Primary Health Care Services for Aboriginal and Torres Strait Islander Australians', Commonwealth of Australia, Canberra, pp. 46–47.

CHAPTER 11

RECENT DEVELOPMENTS IN THE COLLECTION OF INDIGENOUS STATISTICS

INTRODUCTION

There is an increasing need for good quality information concerning Australia's Aboriginal and Torres Strait Islander peoples. Good quality data are needed for benchmarking, to assess the effectiveness of programs and interventions, and to evaluate policies that are designed to improve the status of, and service development and delivery to, Aboriginal and Torres Strait Islander peoples. Emphasis on evidence-based approaches to inform policy and program development continues to be of paramount importance. This has resulted in growing demand for high quality, regularly reported Indigenous information and data at a range of geographic levels, for the development of performance indicators on service delivery and for the provision of time series on health status and social conditions.

This Chapter consists of two parts: the first part discusses recent developments in the collection and reporting of statistics relating to Aboriginal and Torres Strait Islander peoples, and the second part provides information on the quality of data collected on Indigenous peoples from the Census, surveys, and administrative records. Further information will be available in the forthcoming ABS publications: *Population Measurement Issues* (ABS cat. no. 4708.0), *Experimental Estimates and Projections of Indigenous Australians, 1991–2016* (ABS cat. no. 3238.0) and an information paper, *Issues in Monitoring Trends in Indigenous Mortality*.

RECENT NATIONAL STRATEGIC INITIATIVES AND FUTURE PLANS

National Indigenous Health Information Plan

In October 1997, the Australian Health Ministers' Advisory Council (AHMAC) adopted the 'National Indigenous Health Information Plan…This time, let's make it happen' (NIHIP) and asked the National Health Information Management Group (NHIMG) — the peak body for information management in health — to oversee its implementation.

National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data

The National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID) was established following a decision taken at the AHMAC meeting in October 2000, in order to provide broad strategic advice to the NHIMG on the improvement of the quality and availability of data and information on Aboriginal and Torres Strait Islander health and health service delivery, and to draw together the range of existing activities already underway, into a coordinated and strategic process.

National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data *continued*

NAGATSIHID superseded the National Indigenous Health Information Plan Implementation Working Group and the former Aboriginal and Torres Strait Islander Health and Welfare Information Unit Advisory Committee, which had previously advised the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW) on their joint work program on Indigenous statistics.

NAGATSIHID is responsible for:

- continuing the implementation of the NIHIP until this process is completed. This includes monitoring and improving Indigenous identification in a range of adminstrative data collections including birth registrations, deaths registrations, hospital separations data, cancer registries, general practice data collections, community mental health services data, and alcohol and other drug treatment services data (see 'Quality and availability of administrative data' below for further details)
- advising relevant agencies on information and data priorities
- providing advice to NHIMG and AHMAC's Steering Committee on Aboriginal and Torres Strait Islander Health (SCATSIH) on the National Performance Indicators for Aboriginal and Torres Strait Islander Health jurisdictional reporting and associated activities.

NAGATSIHID endorsed a work plan to complete the NIHIP process and address emerging data and information needs.

National Community Services Information Agreement

The National Community Services Information Agreement (NCSIA), which has operated since March 1997, is a multilateral agreement between the Commonwealth, state and territory community services authorities, the ABS and the AIHW. The purpose of the Agreement is to develop quality community services data that are nationally compatible between agencies and across jurisdictions and services. A benefit of promoting nationally consistent data is that information can be reliably compared across jurisdictions and between services, and internationally through the adoption of common terminology, definitions, classifications and code sets. The Agreement covers the areas of aged care, disability services, child care, family support services, child welfare, supported accommodation assistance and emergency relief and crisis services.

The NCSIA established the National Community Services Information Management Group as a sub-committee of the Community Services Ministers' Advisory Council to oversee the development and maintenance of national community services information. The work program of the Management Group has included a number of data development projects to support policy development and program delivery for Aboriginal and Torres Strait Islander clients of the community services sector.

National Community Services Information Agreement *continued*

The National Community Services Data Committee (NCSDC), which includes members from non-government organisations, is a standing committee of the Management Group. The NCSDC is responsible for developing and maintaining the National Community Services Data Dictionary and promoting national data consistency.

Indigenous data quality project

The National Community Service Information Management Group, supported by funding from the Community Services Ministers' Advisory Council, is overseeing a project to enhance Indigenous identification in community services statistics. The project is being undertaken at the AIHW.

The project consists of two major components. The first is a series of analyses of national community services data collections held at the AIHW aimed at identifying data quality, trends in data quality, and areas of particular strength and weakness. The outcome of these analyses will be published in a report (*Report on the data quality of Indigenous identification in seven community services data collections*), and will provide jurisdictions and agencies with an evidence base on which to more specifically target efforts to improve the quality of their data collections.

The second component of the project is the development of a web-based resource. This is aimed at facilitating access to available materials and information about current activities which are concerned with improving the quality of Indigenous identification in state, territory and national data collections. It will include actual resources as well as useful links.

National Housing Data Agreement

The National Housing Data Agreement (NHDA), a subsidiary agreement of the 1999 Commonwealth State Housing Agreement (CSHA), established a framework for the development and provision of nationally consistent data for the CSHA and related programs. The Agreement spells out roles and responsibilities and includes three schedules relating to minimum data sets, national performance indicators and national data definitions and standards.

The NHDA has enabled significant progress in improved identification of Indigenous households using mainstream programs. Also, it has undertaken data development for the CSHA Aboriginal Rental Housing Program, including collection of state and territory owned and managed Indigenous housing data for inclusion in the 2002 and 2003 Council of Australian Governments (COAG) Report on Government Services. This was one of the few targeted Indigenous programs across all COAG areas to achieve data of publishable standard for 2003. Access to the national minimum data set for this program is available through the NHDA Data Access Protocols.

National Housing Data Agreement *continued*

Responsibility for managing the NHDA rests with the National Housing Data Agreement Management Group (NHDAMG). The major components of the NHDAMG work program are based on four priority policy areas for national data: public rental housing, private rental market assistance, community housing, and Indigenous housing. Indigenous housing priorities are being progressed jointly with the National Indigenous Housing Information Implementation Committee (NIHIIC) which operates under the Agreement on National Indigenous Housing Information (ANIHI).

The AIHW prepared a report on 'Identifying Indigenous households in mainstream CSHA programs' for the NHDAMG. This report examined the quality and coverage of Indigenous status data in the 2000–01 collections for the mainstream Public Rental Housing Program, CSHA Community Housing Program, the Crisis Accommodation Program, Home Purchase Assistance Program and the Private Rent Assistance Program. Seven out of eight jurisdictions were able to report about the Indigenous status of both existing and new households in the 2000–01 public housing data collection. However, variation exists between jurisdictions in regard to the level at which this information is collected. Indigenous status data is available for community housing and is collected via a provider survey. For 2000–01, two jurisdictions did not conduct the survey, and response rates for the remaining six varied from 16% to 100%. Indigenous status is not available for the Crisis Accommodation Program, and there is only partial coverage of the Home Purchase Assistance and Private Rent Assistance Programs. The NHDAMG will be revising this paper for the 2001–02 collections.

National Indigenous Housing Information Agreement

In May 2001, Housing Ministers endorsed a 10-year statement on directions for Indigenous housing reform to provide better housing for Indigenous Australians, *Building a Better Future: Indigenous Housing to 2010* (HMAC 2001).

Indigenous housing information priorities are being progressed jointly with the HMAC Standing Committee on Indigenous Housing and the NIHIIC. The Standing Committee has responsibility for the implementation of the Housing Ministers' 10-year statement. The development of data is one of the key implementation areas in the Standing Committee's work plan.

National Indigenous Housing Information Agreement *continued*

The NIHIIC operates under the 1999 ANIHI, and provides data support and expertise to the Standing Committee. The Indigenous Housing Information Management Strategy, endorsed by the Standing Committee in November 2001, aims to improve the quality of, and access to, Indigenous housing information at the national level and at the same time maintain and protect the confidentiality of the data for individuals and for the signatories to the agreement. The report contained six strategy areas:

1. National data leadership
2. Developing a supportive national data infrastructure
3. Improving the compatibility of Indigenous housing data across all relevant areas
4. Providing expertise and technical support to policy and program development
5. Development of national minimum data sets
6. Developing and supporting the use of national data standards.

The strategy and action plan represent an important first stage in the process of the Standing Committee and NIHIIC developing national Indigenous housing administrative data.

NIHIIC also manages the work of the National Indigenous Housing Minimum Data Set Sub-committee. NIHIIC conducted a workshop in February 2002 to specify a National Minimum Data Set that could be developed to meet national data requirements to monitor progress and evaluation of the work of the Standing Committee, and to assist in other national data reporting requirements.

A joint Standing Committee-Aboriginal and Torres Strait Islander Commission (ATSIC) workshop was held in May 2002, and was also attended by a number of NIHIIC members. This workshop was held to progress work on the development of a multi-measure approach to measuring Indigenous housing need, including the use of data sources, and to consider the relationship of future ATSIC work to progress this approach. As a result, HMAC have endorsed 8 dimensions of Indigenous housing needs. These are:

1. Affordability
2. Overcrowding
3. Stock condition
4. Services
5. Homelessness
6. Appropriateness
7. Security of tenure
8. Emerging need.

Measures for these are currently being developed by NIHIIC, with a fully operational model to be available by 2005.

PERFORMANCE INFORMATION

Work on performance information related to Aboriginal and Torres Strait Islander health and welfare is currently in progress in a number of areas.

Annual summary of jurisdictional health performance indicators

In May 2003, the Standing Committee on Aboriginal and Torres Strait Islander Health agreed to oversee the development of an Aboriginal and Torres Strait Islander Health Performance Framework to support the implementation of the National Strategic Framework for Aboriginal and Torres Strait Islander Health. There has been a collaborative effort between statistical agencies, health departments and Aboriginal and Torres Strait Islander organisations to design and refine performance indicators, for improving reporting on Aboriginal and Torres Strait Islander health and services. An interim indicator set was endorsed by AHMAC in 1997, and a refined set was endorsed in 2000.

The interim set of national performance indicators for Aboriginal and Torres Strait Islander health has been reported for the 1998, 1999 and 2000 reporting periods. The interim indicators cover performance within a framework of nine aspects of health status, risk factors and service delivery:

- mortality/morbidity
- access to health services
- health services impacts
- workforce developments
- risk factors
- intersectoral issues
- community development
- quality of service provision.

The refined indicator set and a draft framework were developed through a project undertaken by the Co-operative Research Centre for Aboriginal and Tropical Health, in consultation with AIHW, the Office for Aboriginal and Torres Strait Islander Health (OATSIH), SCATSIH, NHIMG and the National Aboriginal Community Controlled Health Organisations (NACCHO).

There are over 50 indicators in the refined set, covering government inputs, determinants of health (including social equity, access to services and risk markers), and outcomes for people. For many jurisdictions, the data required to report on the indicators are either unavailable, of poor quality, or require substantial development in order to be reported. In 2003, the AHMAC requested that a scoping project, overseen by SCATSIH, be carried out to prioritise data development and quality improvement for reporting against the national indicators for Aboriginal and Torres Strait Islander Health. In the interim, states and territories have agreed to ongoing reporting of data on an annual basis, and to endeavour to make the improvements necessary for complete coverage of the indicators in future.

Review of Commonwealth/State Service provision

In 1997, the Prime Minister asked the Steering Committee for the Review of Commonwealth/State Service Provision to give particular attention to the performance of mainstream services in meeting the needs of Indigenous Australians. This was reinforced by the COAG in 2000 where heads of government agreed that ministerial councils will develop action plans, performance reporting strategies and benchmarks to facilitate review of the progress made in this area. Improving reporting on services to Indigenous Australians is a key priority for the Steering Committee across all service areas covered in the Report on Government Services — education, health, justice, emergency management, community services and housing. It is envisaged that the report will be further developed and refined to include relevant health system specific indicators.

Overcoming Indigenous disadvantage: key indicators

In April 2002, COAG commissioned the Steering Committee for the Review of Commonwealth/State Service Provision to produce a regular report against key indicators of Indigenous disadvantage. This report will help to measure the impact of changes to policy settings and service delivery and provide a concrete way to measure the effect of the COAG's commitment to reconciliation through an agreed set of indicators.

The Steering Committee set up a Working Group to progress the development of the framework for the report. The Working Group comprises representatives from the central agencies of all governments, the Ministerial Council for Aboriginal and Torres Strait Islander Affairs (MCATSIA) and ATSIC. The ABS and AIHW participate as advisers on data issues.

The proposed framework has been endorsed by COAG. The first report is due for release by the end of 2003. The framework will elevate the profile of Indigenous data reporting, which will, over time, lead to improvements in data quality.

IDENTIFYING ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES

Complete and consistent Indigenous identification in censuses, surveys and administrative data collections is fundamental to developing high quality information about Aboriginal and Torres Strait Islander peoples. This requires substantial effort on the part of government and non-government organisations to establish the broad acceptance of a standard question on Indigenous origin in all key data collections. The ABS standard question is used in the five-yearly Census of Population and Housing, ABS surveys and many national administrative datasets. Box 11.1 provides the current wording and an explanation of the way it is recorded and reported.

IDENTIFYING ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES

continued

The 'Commonwealth working definition' states that "an Aboriginal or Torres Strait Islander person is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community in which he or she lives" (DAA 1981). Although this definition is commonly cited, it is not always practical to collect information on all three aspects (i.e. descent, self-identification and community acceptance) in statistical collections. In the absence of appropriate methodology to measure community acceptance, the definitions used in statistical collections generally focus on descent and/or self-identification.

In Australian Censuses of Population and Housing, the question currently used to identify Indigenous peoples asks about origin (or descent) only, on the basis of self-identification. The approach used by the ABS in Censuses has been broadly the same since 1981, although there have been some changes to the wording. For example, in 1996, it became possible for people of both Aboriginal and Torres Strait Islander origin to make two responses, that is 'yes' to both 'Aboriginal' and 'Torres Strait Islander' (box 11.1).

Prior to 1967, 'Aboriginal' people were identified in the Census in order to exclude them from official population figures, as required by the Constitution, and identification of a person as 'Aboriginal' was restricted to people of more than 50% Aboriginal descent. Following the results of the 1967 Referendum, the Constitutional requirement that Aboriginal people be excluded from the official population figures was revoked, resulting in the need for a new, broader definition of an Aboriginal person. Numerous changes over the past three decades have led to the development of the 'Commonwealth working definition' discussed above (Ross 1999).

Since 1971, Torres Strait Islanders have been counted in the Census of Population and Housing as a separate group. Prior to this, they were either regarded as Aboriginal, and thus excluded from official population counts until 1967, or classified as Polynesian or Pacific Islanders and counted as such in official counts. The Commonwealth working definition was extended to include Torres Strait Islanders in 1972 (DAA 1981), but, as discussed above, it was not until the 1996 Census that individuals could identify as both Aboriginal and Torres Strait Islander.

11.1 ABS STANDARD QUESTION ON INDIGENOUS STATUS

In 1995, the ABS formally adopted the following question as the standard for identifying persons as members of the Indigenous population:

> Are you of Aboriginal or Torres Strait Islander origin?
> For persons of both Aboriginal and Torres Strait Islander origin, mark both 'Yes' boxes.

☐ No
☐ Yes, Aboriginal
☐ Yes, Torres Strait Islander

The categories expected to be used in collecting Indigenous status data are derived from the answers to the relevant question in the question module, but include the supplementary category 'Not stated/inadequately described', where applicable:

1. No
2. Yes, Aboriginal
3. Yes, Torres Strait Islander
4. Not stated/inadequately described

However, these 'input' categories do not include the category 'Both Aboriginal and Torres Strait Islander Origin' because that category is defined when both the 'Yes' boxes are ticked. When this occurs the results are amalgamated and appear in the standard output.

The 'output' categories are the same as the categories agreed for use in the collection protocol for Indigenous status in the National Health Data Dictionary and the National Community Services Data Dictionary, and create the following output data:

1. Aboriginal but not Torres Strait Islander origin
2. Torres Strait Islander but not Aboriginal origin
3. Both Aboriginal and Torres Strait Islander origin
4. Neither Aboriginal nor Torres Strait Islander origin
5. Not stated/inadequately described

The ABS standard question is based upon the 'Commonwealth working definition' but does not include the third element of the Commonwealth definition, namely that 'an Aboriginal or Torres Strait Islander is a person who is accepted as such by the community in which he or she lives'. Collecting information on the basis of community acceptance is often impractical and can lead to inaccuracies, and for these reasons it is not included in the ABS standard.

IDENTIFYING ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES *continued*

The standard question is used in the Census and in other surveys conducted by the ABS, and has also been adopted by Registrars General throughout Australia. The National Health Data Dictionary (NHDD) and the National Community Services Data Dictionary (NCSDD) recognise the ABS standard. Version 12 of the NHDD, published in mid-2003, no longer includes 'community acceptance' in its definition, recognising that it is often not feasible to collect this information in general purpose statistical and administrative collections. This change will also occur in the NCSDD version 3, due to be published towards the end of 2003. Later sections of this chapter discuss some of the differences that remain from collection to collection with respect to the actual question used and, for data reported by service delivery agencies, whether the question is actually asked of clients. These issues have a potentially substantial impact on the completeness and consistency of reported data.

Despite using largely the same question in the Census since 1981, there have often been substantial intercensal changes in the counts of Indigenous peoples which can not be fully explained by natural increase (Ross 1999). Between 1996 and 2001, the total population increased 6% while the number of people counted as Indigenous in the Census increased by 16%, 12% due to natural increase (i.e. births and deaths) and a further 4% due to other factors, primarily an increasing propensity to identify as Indigenous (ABS 2002g). This was considerably less than between 1991 and 1996, where the number of people counted as Indigenous in the Census increased by 33%, while the corresponding increase for the total population was 5% (ABS 1997e; Ross 1999). Fourteen percent was attributable to natural increase while the remaining 19% resulted from a combination of an increased propensity to identify, changes in Census editing procedures, and changes in the transmission rate (i.e. the rate at which couples in which one partner is Indigenous identify their children as Indigenous on the Census form) (Ross 1999).

Other possible explanations for the increase, all of which are unquantifiable, include the Census undercount, and previous non-response to the question on Indigenous status on the Census form. In addition, improvements to the ABS Indigenous Enumeration Strategy (see 'Census of Population and Housing' section below) may have had an impact on the Census count in some areas, although the effectiveness of the strategy is very difficult to measure (Ross 1999). Data from recent Censuses would tend to indicate changes in personal attitudes to Indigenous self-identification in some people of Aboriginal and/or Torres Strait Islander descent. This has been evident by an increased willingness to indicate Indigenous status on the Census form among people who already personally identify as Indigenous (Ross 1999).

IDENTIFYING ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES *continued*

Uncertainty about interpretation of the standard question and how responses may change over time leads to difficulty in estimating and projecting the Indigenous population. This in turn results in uncertainty about the accuracy of rate and ratio statistics which use Census-based population estimates as their denominators. The way in which people interpret and respond to the Indigenous status question in other collections, such as births, deaths and hospital statistics, means that the numerator in rate and ratio statistics is also affected. This makes the assessment of trends difficult.

ESTIMATING THE ABORIGINAL AND TORRES STRAIT ISLANDER POPULATION

Population estimates and projections for the total Australian population are derived from the most recently available Census counts, using well-established methods. The counts (by sex and single year of age) are first adjusted for the estimated amount of under-enumeration at the time of the Census, and then backcast or projected forward to the date for which the estimate or projection is required. For the total Australian population, this involves adjustments for the numbers of births, deaths and estimated migration into and out of Australia (or a state or territory, for jurisdictional population estimates). Assumptions about future rates of fertility, mortality and migration are used to derive population projections.

Estimating the size and demographic structure of the Indigenous population is problematic and prone to uncertainty (ABS 1998a, 1998b, 2002g). Because satisfactory data about Indigenous births, deaths and migration are often not available, the usual methods cannot be applied. For this reason, the ABS estimates and projections of the Indigenous population are referred to as ‘experimental’.

The best currently available estimates are the final experimental Indigenous estimated resident population figures based on the 2001 Census, presented by age and sex in Appendix 6. Estimates by age and sex for each state and territory, and a new set of estimates and projections derived from the 2001 Census, are scheduled to be released in November 2003.

The projections are not intended as predictions or forecasts, but are illustrations of the changes which would occur in the population, if the assumptions about future demographic trends and changes in the propensity of people to identify as Indigenous were to prevail over the projection period. Care must be taken when comparing the experimental population estimates and projections presented here with those produced at other times, because estimation procedures and assumptions will continue to be refined and modified as new information becomes available. Estimates and projections based on 2001 Census of Population and Housing will provide further assistance in refining future estimates.

Torres Strait Islander estimates

Separate estimated resident population figures for the Torres Strait Islander population have not been available until recently. From the 1996 Census, people were able to identify themselves as of 'Aboriginal origin', 'Torres Strait Islander origin' or 'both Aboriginal and Torres Strait Islander origin'. Prior Censuses asked respondents to choose either Aboriginal or Torres Strait Islander origin, but not both. Following consultations with key stakeholders, estimates for 1996 were produced for the Torres Strait Islander population, comprising those who indicated either 'Torres Strait Islander origin' alone or 'both Aboriginal and Torres Strait Islander origin', in the 1996 Census. For more information on Torres Strait Islander people, refer to Chapter 10 of this publication.

QUALITY AND AVAILABILITY OF DATA FROM CENSUSES AND SURVEYS

Table 11.2 lists previous national Censuses and surveys that have produced information relevant to the health and welfare of Aboriginal and Torres Strait Islander peoples and table 11.3 lists those either currently underway or planned.

11.2 NATIONAL CENSUS AND SURVEY COLLECTIONS RELEVANT TO INDIGENOUS HEALTH AND WELFARE — 1992–2001

Collection (sponsoring agency), year	*Status*	*Approximate sampling fraction(a)*	*Comment*	*Coverage*
Census of Population and Housing (ABS), 1996 & 2001	Results reported	100%	Conducted every 5 years. Content includes population, housing, income, education, employment. Complete coverage of the population is an advantage.	All people; Indigenous data reportable down to Indigenous location (ILOC) level, and CDs except where confidentiality is an issue.
National Aboriginal and Torres Strait Islander Survey (ABS), 1994	Results reported	5%	Wide range of topics in the areas of: family and culture; health; housing; education and training; employment and income; and law and justice.	All Indigenous people; data reportable down to ATSIC regional level.
Housing and Community Infrastructure Needs Survey (ATSIC), 1992	Results reported	100% of selected communities	Housing, environmental and health service infrastructure.	All remote and rural Indigenous communities. Some communities in major urban centres; data reportable down to community level.
Community Housing and Infrastructure Needs Survey (ATSIC and ABS), 1999, 2001	Results reported	100% of selected communities	As above	Discrete Indigenous communities and Indigenous housing organisations; data reportable down to community level.
National Drug Strategy Household Survey(b) (DHSH), 1994	Results reported	6%	Drug use and exposure, knowledge, attitudes and policy preferences, law enforcement indicators, campaign awareness and impact.	Indigenous people 14 years or more in selected urban areas; Indigenous data reportable at national level.
National Drug Strategy Household Survey (DHAC), 1998	Some Indigenous results reported but numbers indicative only	0.08%	Drug use and exposure, attitudes, awareness, knowledge and behaviours.	All persons 14 years or more; Indigenous data reported at national level.
Labour Force Survey (ABS), 1994 and on	Results reported	0.5%	Labour force status. A question on Indigenous status was included in the survey in February 1994 and in the March surveys for 1995–99. Since May 2001, the Indigenous status question has been included monthly.	All people 15 years and over. Data for Indigenous people reportable at the national level.
National Health Survey (Indigenous) (ABS), 1995, 2001	Results reported for non-remote areas 0.8% (2001)	0.7% (1995)	Wide range of information about health conditions, actions, risk factors etc. Included an enhanced sample of Indigenous people. For 2001, sub-set of questions used in non-remote areas.	All people; Indigenous data reportable at national level (restricted to non-sparsely settled areas in 1995).
Australian Housing Survey, 1999	Results reported	0.8%	As above. Included an enhanced sample of Indigenous dwellings.	All dwellings except in sparsely-settled areas; Indigenous data reportable at national level.
BEACH (AIHW & General Practice Statistics and Classification Unit, Sydney Uni.), 1998 and on	Information on service delivery to Indigenous clients reported for 1998–99	0.1% of encounters between GPs and patients	A survey of general practice activity. GP consultations including characteristics of GP, patient, reasons for encounters, treatment, risk factors.	General practitioners in private practice, some state-level Indigenous data on services provided to Indigenous clients.

(a) The sampling fraction refers to the surveys' coverage of Indigenous people (or dwellings/communities) and is calculated as the number of Indigenous people (or dwellings/communities) in the sample divided by the number of Indigenous people (or dwellings/communities) in the population of interest at the time of the survey.

(b) Urban Aboriginal and Torres Strait Islander Peoples' Supplement

11.3 NATIONAL CENSUS AND SURVEY COLLECTIONS RELEVANT TO INDIGENOUS HEALTH AND WELFARE — 2002–2008.

Collection (sponsoring agency), year	*Status*	*Approximate intended sampling fraction(a)*	*Comment*	*Coverage*
Indigenous Social Survey (ABS), 2002, 2008	Fieldwork completed, results at end of 2003	3.4%	Reporting on areas of social concern including health, disability, language, culture, crime and justice, housing, employment, education & income. Conducted 6-yearly.	Indigenous persons aged 15 and over; data reportable down to state/territory level.
Indigenous Health Survey (ABS) 2004/5	Survey to be conducted	2.4%	Wide range of information about health conditions, actions, behaviours. Conducted 6-yearly.	All Indigenous persons; data will be reportable down to state/territory level.

(a) The sampling fraction refers to the surveys' coverage of Indigenous people (or dwellings/communities) and is calculated as the number of Indigenous people (or dwellings/communities) in the sample divided by the number of Indigenous people (or dwellings/communities) in the population of interest at the time of the survey.

The Census of Population and Housing

The Census of Population and Housing is perhaps the most useful statistical collection in Australia, with respect to providing data about Aboriginal and Torres Strait Islander peoples. It provides the basis for the estimation of the size of the Indigenous population, as well as information on a range of topics, such as housing, employment, education, income and language.

The 2001 Census was held on 7 August and results have been released progressively from July 2002, starting with the Basic Community Profile, in which Indigenous status is a variable. As with previous Censuses, an Indigenous Enumeration Strategy (IES) was used to improve the coverage and accuracy of the count of the Indigenous population. The IES consists of special collection procedures and Census awareness activities. Special collection procedures include the use of specially designed forms for use by interviewers in some Indigenous communities, and the employment of Indigenous people to assist with Census enumeration. A variety of awareness activities are used as and when appropriate. These include newspaper articles, posters, presentations in Indigenous languages, radio and television interviews and information brochures. Awareness activities are designed to address cultural barriers that may discourage Indigenous peoples from participating in the Census, and raise understanding of the purpose of the Census and its potential benefits. Extensive and ongoing consultation and liaison with Indigenous organisations and communities are seen as essential elements of the strategy. Census staff are also trained in Indigenous enumeration procedures, and a special recruitment effort ensures that, wherever possible, Aboriginal and Torres Strait Islander peoples are employed to assist with the Census collection. Coordination of Census activities with preparations for the 2001 Community Housing and Infrastructure Needs Survey (CHINS) were an added element to the IES.

The Census of Population and Housing *continued*

In addition to the IES, the ABS implemented a 2001 Census evaluation plan for discrete Indigenous communities which included capturing field information about collection activities, community response, difficulties and barriers experienced in the field; an assessment of the success of the collection; identification of unoccupied dwellings; comparisons of the Census counts of people and dwellings with the counts obtained in the 2001 CHINS; observational studies undertaken during Census 2001 collection; an analysis of a wide range of administrative data sources in order to compare the similarities and differences between these and Census data for particular communities; and a second edition of *Information Paper: Population Issues, Aboriginal and Torres Strait Islander Peoples 2001* (cat. no. 4708.0) which will provide special analyses of the 2001 Census data, including comparisons with 1991 and 1996 counts, to be published in late 2003. The results of the evaluation strategy will be published in both detailed papers and brought together in an overarching publication to guide users on Census Indigenous data quality.

To complement the 2001 Census IES, the ABS arranged for three independent researchers from the Centre for Aboriginal Economic Policy Research (CAEPR) to accompany Census enumerators. These official observers were able to assess the effectiveness of the IES in a representative selection of different types of remote locations designed to cover different remote-area contexts. A full discussion of the findings and recommendations of the research team have been released in *Research Monograph 22—Making Sense of the Census: Observations of the 2001 Enumeration in Remote Aboriginal Australia* (Martin et al. 2002).

ABS Indigenous survey program

In 1999, the ABS conducted a review of its household survey program. In parallel, a strategy for Aboriginal and Torres Strait Islander statistics was also developed. Both initiatives included wide consultation, involving all levels of government and the Aboriginal and Torres Strait Islander community. The survey program outcomes include:

- regular social surveys of Aboriginal and Torres Strait Islander peoples to be conducted
- regular health surveys of Aboriginal and Torres Strait Islander Peoples to be conducted
- regular identification of Aboriginal and Torres Strait Islander peoples to occur in the Labour Force Survey so that broad employment data will be available in the intercensal period.

The results of these surveys will have the capacity to provide broad and complementary information sources to improve understanding about the social environment, and health and wellbeing of the Indigenous population. These surveys (discussed below) include the CHINS, regular and expanded Indigenous Health Survey from 2004–05 (and every six years thereafter), and the Indigenous Social Survey.

ABS Indigenous survey program *continued*

The survey strategies are designed to ensure that data are relevant, that collection methods are sensitive to Aboriginal and Torres Strait Islander peoples, and that broad consultation processes are in place. Achieving long-term credibility for survey results requires a substantial level of acceptance by the Aboriginal and Torres Strait Islander community, and the ABS is engaging a wide range of community stakeholders in consultative processes throughout the conduct of its Indigenous surveys. There is also an identified need for ongoing liaison with communities and respondents, as a routine function in the consultation process.

The first CHINS was conducted in 1999, after the ATSIC engaged the ABS to conduct surveys of all Indigenous Housing Organisations (IHOs) and discrete Indigenous communities in Australia. The 1999 CHINS collected housing and management information from Aboriginal and Torres Strait Islander housing organisations, and a range of community infrastructure information for those locations identified as discrete communities (box 3.1). The 2001 CHINS was conducted in conjunction with Census 2001, and updates the 1999 CHINS by maintaining comparability with that collection. CHINS data include details of the current housing stock, and management practices and financial arrangements of Indigenous housing organisations. Details of housing and related infrastructure, such as water, power and sewerage systems, as well as other facilities, such as education and health services available in discrete Aboriginal and Torres Strait Islander communities, are also collected.

The Commonwealth Department of Health and Ageing entered into a partnership with the ABS to fund a program of triennial national health surveys from 2001. The program also allows for an Indigenous health survey to be collected every six years. Results from the 2001 National Health Survey (Indigenous) (from a sample of about 3,700 Aboriginal and Torres Strait Islander adults and children) (table 11.2) were released in November 2002 and provide national estimates on some indicators of health status, health service use and other actions taken for reasons of health, health-related life-style and risk factors, and summary womens health characteristics. Estimates at the state and territory level will be available from the larger 2004–05 Indigenous Health Survey.

The Indigenous Social Survey was conducted for the first time in 2002, and will be repeated at six-yearly intervals. It will provide broad information across all areas of social concern, including health, disability, housing, work, language, culture, crime and justice, education and income. The results will allow relationships between different areas of social concern to be explored, and provide information on the extent to which some people face multiple social disadvantage. Another objective of the ISS is to provide comparisons with non-Indigenous population data, such as that available from the General Social Survey. Its results will be published in November 2003 and will deliver state and territory estimates.

Western Australian Aboriginal Child Health Survey

Box 11.4 describes a survey recently conducted in Western Australia by the Telethon Institute for Child Health Research. The survey seeks to examine health and its determinants among a large sample of Indigenous children, and will be a valuable source of health data about young Indigenous people.

11.4 WESTERN AUSTRALIAN ABORIGINAL CHILD HEALTH SURVEY

The first fully representative community survey of Aboriginal child health and wellbeing has been underway throughout Western Australia since April 2000. The project is being conducted under the auspices of the Kulunga Research and Training Network by researchers from the Telethon Institute for Child Health Research. Funding for the project has come from a mixture of Commonwealth and state government and private organisations. The ABS has been a major partner providing consultancy services as well as outposted staff and support for survey development and field work.

By the end of 2001, over 130 screeners and interviewers (60% of whom were Aboriginal Australians) enumerated a selection of 786 census districts from across Western Australia, listing 166,287 dwellings and randomly sampling 2,386 families with Aboriginal children under the age of 18 years. A total of 1,999 (83.8%) of these families consented to participate. Intensive interviews gathered information on 5,289 children with separate interviews on 1,073 young people aged 12–17, and additional interviews with 3,153 carers of these children. School data was also collected for a high proportion of the children.

During 2002, intensive data screening, cleaning, editing and validation took place. In addition, record linkage work was undertaken to further enhance the scope of the data; 92% of carers gave consent for their survey data to be administratively linked to hospital records, and 96% of carers gave consent for the data on their children to be linked to both hospital and birth records. Where consent was given, 96% of children and 93% of carers were successfully linked to the administrative health records maintained on the WA Health Services Research Linked Database.

Survey results will be communicated to participating Aboriginal communities in a culturally appropriate form with the assistance of the project's Aboriginal Steering Committee and the Kulunga Research and Training Network. Starting in late 2003 and continuing through 2004, the findings will be published in several formats. A monograph will provide an epidemiological framework not previously available as a planning resource to define the burden and impact of common child disorders at the population and regional levels. This information will assist policy makers, service planners and purchasers in health, education, family and children's services and justice in estimating service needs and the potential advantages of alternative policies and programs. Additionally, a major community-based dissemination strategy is planned to communicate survey findings to Aboriginal communities throughout Western Australia. This aims to provide information relevant to community level decision making needs.

Reference: Telethon Institute for Child Health Research.

QUALITY AND AVAILABILITY OF ADMINISTRATIVE DATA

AIHW and ABS have initiated, and continue to drive, programs in partnership with state and territory authorities, to improve the completeness with which Aboriginal and Torres Strait Islander peoples are recorded in a wide range of administrative data sets. Work on birth and death registrations continues to be undertaken by ABS, in collaboration with state and territory registrars, and has uncovered a number of ways in which the quality of Indigenous vitals (i.e. births and deaths) data can be improved. The AIHW continues to work with state and territory authorities to document and improve the quality of data in such areas as hospital separations, cancer registrations, general practice, community mental health services, alcohol and other drug treatment services, juvenile justice, children services, and disability services.

Births

Information regarding Indigenous births is obtained by ABS from birth registration forms and by AIHW from the perinatal collections from each jurisdiction. Birth registrations provide information on the Indigenous status of both parents. Perinatal collections, apart from Victoria, include information only about the mother. With minor variations, the questions used in each jurisdiction to identify Indigenous status on birth registration forms are based on the ABS standard question which allows for five potential responses (see box 11.1 for the standard ABS question). Five of the jurisdictions use the standard ABS question on the perinatal form. South Australia and Tasmania ask a question on the mother's race, while the Northern Territory question on the mother's Indigenous status has a Yes/No option only (see Appendix 8 for full listing of perinatal questions).

In 2001, there were 11,405 births registered in Australia in which at least one of the parents was of Indigenous origin (ABS 2002b). This is likely to be an under-estimate of the actual number of births to Indigenous parents because not all parents of Indigenous origin would have been identified as such.

One way of assessing the completeness of the data on Indigenous births is to compare the number registered (in which at least one parent was Indigenous) with the number expected which is derived using low series experimental Indigenous population estimates/projections and a constant set of age-specific fertility and paternity rates (see ABS 1998b). Table 11.5 shows the number of births registered in calendar years 1999–2001 as a proportion of expected births.

11.5 RATIO OF REGISTERED TO EXPECTED BIRTHS — 1999–2001

	1996 based projections		
	1999	*2000*	*2001*
New South Wales	0.88	0.86	0.88
Victoria	0.77	0.67	0.77
Queensland	0.89	0.93	0.97
South Australia	0.99	0.97	0.93
Western Australia	0.97	1.06	0.98
Tasmania	0.74	0.72	0.99
Northern Territory	0.98	1.06	1.17
Australian Capital Territory	0.77	0.57	0.65
Australia	**0.90**	**0.92**	**0.95**

Source: ABS 2002b.

On the basis of the improvement in the ratio of registered births to expected births from 1996 to 1999, as well as other available information about collection processes, detailed data on births registered as Indigenous were published by ABS from 1999 for all states and territories, except the Australian Capital Territory. Detailed Indigenous birth registration data for New South Wales and Victoria were published for the first time in 1998, followed by the addition of Tasmanian data in 1999. The coverage ratios indicate that for the period 1999–2001 overall, coverage of Indigenous births has improved. It should be noted that there are some limitations in the methodology used to calculate the coverage ratios of Indigenous births and deaths (see below), and therefore these ratios should be considered indicative only.

Another way of assessing the completeness of birth registration data is to compare registrations with data collected by midwives, and others, for perinatal statistics collections held at AIHW. As indicated in table 11.6, the perinatal collections only include information about the Indigenous status of the mother, while most birth registration forms ask about both the mother and the father. Table 11.6 presents data for 2000 for birth registrations, perinatal collections and 1996 Census-based low series projections of the Indigenous population for 2000. The table presents 2000 rather than 2001 data, as information from the perinatal collections is not yet available for 2001.

Discrepancies between data sources vary between states and territories. Some jurisdictions have established data linkage projects between the perinatal data collection and the relevant Registry of Births, Deaths and Marriages to highlight and resolve these discrepancies.

11.6 INDIGENOUS BIRTHS

				2000 birth registrations			
	2000 projected Indigenous births(a)(b)	*2000 projected births to Indigenous mothers(a)*	*2000 Perinatal collection(c)*	*Mother and father both Indigenous*	*Mother Indigenous(d)*	*Father Indigenous(e)*	*Total Indigenous*
	no.	*no.*	*no.*	*no.*	*no.*	*no.*	*no.*
New South Wales	3 498	2 350	2 122	664	1 330	997	2 991
Victoria	679	447	380	69	204	179	452
Queensland	3 401	2 544	2 840	1 069	1 271	831	3 171
South Australia	650	494	451	222	241	169	632
Western Australia	1 618	1 325	1 515	904	484	334	1 722
Tasmania	466	270	58	39	158	139	336
Northern Territory	1 444	1 354	1 360	582	848	100	1 530
Australian Capital Territory	100	60	54	6	23	28	57
Australia(a)	**11 860**	**8 997**	**8 780**	**3 557**	**4 561**	**2 777**	**10 895**

(a) Based on 1996 census-based projected population for 2000, low series, and a constant set of age-specific fertility and paternity rates.

(b) Includes children of Indigenous mothers and/or Indigenous fathers.

(c) Refers to babies of Indigenous mothers.

(d) Father non-Indigenous or father's Indigenous status not stated or paternity not acknowledged.

(e) Mother non-Indigenous, or mother's Indigenous status not stated.

Source: AIHW National Perinatal Statistics Collection, 2001; ABS 2002b, ABS data available on request, Births Registration Database.

The information in table 11.7 can be used to highlight discrepancies among the various data sources. For example, in Victoria there were 452 birth registrations in 2000, for which at least one parent was Indigenous. This is lower than the 679 births projected for Victoria for that year. Similarly, the number of births to Indigenous mothers in Victoria, recorded through birth registrations (273, or 69+204) is lower than the number recorded in the perinatal collection (380) and projected births to Indigenous mothers (447).

Deaths

All jurisdictions have adopted the ABS standard question on Indigenous status on death registration and medical cause of death forms (Appendix 9). The ABS continues to work with state and territory registrars to improve the recording of Indigenous status on registration forms.

In 2001 there were 2,063 deaths registered as being of an Aboriginal or Torres Strait Islander person (ABS 2002c). While most Indigenous deaths in Australia are registered, Indigenous status is not always recorded on death notification forms. The extent to which identification of Indigenous peoples occurs in data collections is referred to as 'coverage', or 'completeness of coverage'. Coverage in death registrations can be estimated by comparing the number of deaths registered with an expected number of deaths, derived using a life table. A life table is a statistical model that can be used to show the levels of mortality of a population at different ages. Life tables produced for the Indigenous population are considered 'experimental' because of deficiencies in births, deaths and population data.

Deaths *continued*

Table 11.7 shows the estimated coverage of Indigenous deaths for 1999–2001, that is the actual number of deaths registered as Indigenous in 1999–2001, as a proportion of the Indigenous deaths expected to occur in those years. These coverage ratios have been carefully monitored over time. When coverage ratios have been deemed to be at acceptable levels on a consistent basis, data from the respective jurisdictions are combined to provide a representative picture of Indigenous mortality. Currently the jurisdictions of Queensland, South Australia, Western Australia and the Northern Territory meet these consistent coverage criteria. Other states and territories should be added upon reaching the consistent coverage criteria.

It should be noted that the calculation of 'expected' Indigenous deaths discussed in this section is different from the concept of 'expected' deaths in relation to indirect standardisation, as used in Chapter 9. The former is related to the assessment of the completeness of registration of Indigenous deaths, and 'expected' numbers are based on assumed underlying Indigenous mortality rates. The latter, on the other hand, is related to differences in age structures for two populations, with expected deaths based on a standard set of rates (such as those of the total Australian population) (Cunningham & Paradies 2000) (see box 9.1 for details of 'expected' deaths in this context).

11.7 RATIO OF REGISTERED TO EXPECTED DEATHS — 1999–2001

	Registered deaths			*Registered to expected deaths, 1996 Census based projections*		
	1999	*2000*	*2001*	*1999*	*2000*	*2001*
	no.	*no.*	*no.*	*ratio*	*ratio*	*ratio*
New South Wales	435	473	481	0.43	0.46	0.45
Victoria	130	108	93	0.59	0.48	0.41
Queensland	529	535	565	0.55	0.54	0.56
South Australia	116	144	125	0.57	0.69	0.59
Western Australia	350	407	336	0.68	0.77	0.62
Tasmania	11	8	32	0.08	0.06	0.22
Northern Territory	399	450	429	0.83	0.92	0.85
Australian Capital Territory	6	n.p.	n.p.	0.27	n.p.	n.p.
Australia(a)	**1 976**	**2 127**	**2 063**	**0.56**	**0.59**	**0.55**

(a) Includes Other Territories.

Source: ABS 2002c.

The coverage ratios are derived from the 1991–96 experimental life tables (one for males and one for females), based on data from the 1991 and 1996 Censuses. A detailed explanation of how the ABS estimates coverage of Indigenous deaths in registration data, including a discussion of the limitations of the method and a discussion of the issues concerning the quality of mortality statistics about the Aboriginal and Torres Strait Islander population, has been published in an ABS *Occasional Paper: Mortality of Aboriginal and Torres Strait Islander Australians* (cat. no. 3315.0) (Cunningham & Paradies 2000).

Deaths *continued*

Coverage ratios, and decisions based thereon, should be interpreted with caution. They are based on current knowledge, current demographic methods and the available data. Until adequate information on Indigenous births, deaths and overseas migration becomes available, it will be necessary to continue to use experimental methods to construct life tables for the Indigenous population. As Cunningham and Paradies (2000) note, 'it is important to understand — and accept — the limitations of the methods, including the sensitivity of the results to the assumptions used and the many uncertainties inherent in the process'.

In order to try to simplify the issues associated with measuring Indigenous mortality and explain coverage issues, ABS will produce an *Information Paper: Issues in Monitoring Trends in Indigenous Mortality, Australia* (cat. no. 4716.0) in late 2003.

Hospital separations data

Hospital separations data in the National Hospital Morbidity Database (NHMD) are based on the NHDD definitions for the National Minimum Data Set for Admitted Patient Care.

For 2000–01, the quality of the data provided for Aboriginal and Torres Strait Islander status for this database was better than for previous years as, for the first time, all jurisdictions used the categories in the NHDD definition. However, the extent to which Indigenous patients were identified as such in the data varied. It was considered acceptable for South Australia and the Northern Territory and in need of improvement in all other jurisdictions. Indigenous status was not reported for about 3.1% of separations overall, 0.9% for public hospitals and 6.9% for private hospitals. For 2001–02, the quality of the Indigenous status data was also considered to be acceptable in Western Australia.

There are no national estimates of the level of completeness with which Indigenous patients are identified in hospital separations records. In 1998, a pilot study was conducted in 11 hospitals as part of a project to develop procedures for assessment of the completeness of Indigenous identification data in hospitals (ATSIHWIU 1999). This study found that the accuracy with which a person's Indigenous status was recorded varied greatly from hospital to hospital, ranging from 55% to 100% of those interviewed. Western Australia conducted a representative assessment of their hospital data in 2000, based on the pilot study methods and involving 10,000 patients in 26 hospitals. Results from this assessment indicated that Indigenous status was recorded correctly in 86% of separation records (Young 2001). The Northern Territory conducted an assessment for all its public hospitals in 1997 which showed 94% agreement on Indigenous status information between the separation records and patient reports (Condon et al. 1998).

States and territories are engaged in a range of initiatives aimed at improving the quality of Aboriginal and Torres Strait Islander origin information in hospital separations data. These include the production and dissemination of publications and circulars, and training programs for data collection staff.

Cancer registries

Improvement of Indigenous identification in cancer incidence data in state and territory cancer registries is a standing item on the agenda of the Australasian Association of Cancer Registries and the registries continue to work on its development. Until recently Western Australia and the Northern Territory were the only jurisdictions which were able to report reliable Indigenous cancer incidence data. Now the Queensland registry has also developed its Indigenous identification to the point where it can also report reliable cancer incidence data for Indigenous peoples.

Primary Health Care Services

The Department of Health and Ageing has been working with the Health Insurance Commission and stakeholders to implement a voluntary Indigenous identifier to better assess access to mainstream Medicare services and the Pharmaceutical Benefits Scheme (PBS). From November 2002 Aboriginal and Torres Strait Islander peoples can identify on the Medicare database. Indigenous data available for statistical purposes from these administrative data bases would provide essential and timely information on some aspects of service utilisation and expenditure.

There is some information available on services provided to Indigenous patients attending general practitioners (GPs) from the Bettering the Evaluation and Care of Health survey, a collaborative work program between the AIHW and the University of Sydney. The survey questionnaire includes an Indigenous identifier, although it is unknown whether GPs filling out the survey forms are always asking the question of their patients and recording the information consistently. The reliability of the results is currently being tested in a sub-study of about 9,000 patients encountered during the survey. As shown in Chapter 4, the representation of Aboriginal and Torres Strait Islander patients in the survey is below their representation in the population. However, this may be due to lower attendance in general practice where other services (such as Aboriginal Community Controlled Health Services) exist or the geographic distribution of GPs does not reflect that of the Indigenous population. Other reasons may also include Aboriginal and Torres Strait Islander peoples not accessing care when they need it and using hospital emergency departments, or other advice (e.g. pharmacists').

Box 11.8 describes an innovative diabetes related study being conducted in Darwin

11.8 DIABETES AND RELATED CONDITIONS IN URBAN INDIGENOUS PEOPLES IN THE DARWIN (YILLI RREUNG) ATSIC REGION (DRUID STUDY)

The DRUID Study is a groundbreaking partnership between researchers, health service providers and members of the Darwin Indigenous community to: examine the health of Indigenous adults aged 15 years and over; refer people with diseases to appropriate health care and related services; follow people over time to collect information on the state of their health and their use of health services; and test the effectiveness of an intervention program to prevent diabetes among those at highest risk.

The DRUID Study will provide the first ever data on the burden of diabetes and related conditions in an urban Indigenous population and can be directly compared with the recently collected national data from the AusDiab Study. DRUID will provide an important vehicle for training of Indigenous researchers, and the central involvement of Indigenous peoples in the study will promote improved local awareness and understanding of diabetes among Indigenous peoples and increase the capacity of Indigenous peoples and service providers to manage diabetes and related conditions.

Source: Menzies School of Health Research, personal communication.

Community mental health services data

The National Community Mental Health Care Database, which contains records of service contacts in public community mental health services throughout Australia, was collated for the first time for 2000–01. This data collection is based on the NHDD definitions for the National Minimum Data Set for Community Mental Health Care, which includes the data element for Aboriginal and Torres Strait Islander status, based on the standard ABS question on Indigenous status. Data on the Indigenous status of clients for service contacts are included in the database (AIHW 2003d). About 2.4% of the 3.7 million service contacts in 2000–01 were reported to be with Indigenous patients.

For 2000–01, data collection was not considered to be complete or of sufficient quality for inclusion in this report, but the quality of the data have been reviewed (AIHW 2003d). The NHDD Indigenous status categories were used by all states and territories. The only exception was South Australian adult services which only reported ‘Indigenous’ and ‘non-Indigenous’ categories.

The extent to which Indigenous patients were identified as such in the data varied among the jurisdictions. Indigenous status was not reported for about 8.6% of the 3.7 million service contacts reported overall, including for about 39% of service contacts in New South Wales, 22% in the Australian Capital Territory, 13% in Tasmania and 11% in South Australia. The quality of Indigenous identification was considered acceptable only in the Northern Territory. In all other jurisdictions, it was considered to be in need of improvement, or the quality of the data was unknown.

Community mental health services data *continued*

States and territories are using a range of strategies aimed at improving the quality of Indigenous status information in these data. These include surveying service providers to determine the approaches currently used; dissemination of pamphlets, posters, and information sheets, and feedback of data to data collectors and users; and removal of default values in computer systems, clarifying the meaning of the NHDD categories, and developing approaches to recording Indigenous status and other demographic information relating to crisis care situations.

Alcohol and other drug treatment services

The Alcohol and other drug treatment services National Minimum Data Set (AODTS NMDS) is a subset of alcohol and other drug treatment services information that is routinely collected by states and territories to monitor treatment services within their jurisdiction. The information collected by the AODTS NMDS is a nationally agreed set of common data items collected by service providers for clients registered for treatment.

The 2000–01 AODTS NMDS collection reported a national 'not stated' response relating to Indigenous status of 8.5%. This varied by jurisdictions from 0.5% to 9.2% for all jurisdictions except South Australia, which had a 'not stated' response of 31%.

Jurisdictions have said they have emphasised to their service providers the importance of asking the Indigenous status question. South Australian staff, for example, are taking steps to improve the quality of this data item such as training agency staff on the necessity of asking the question and suggesting more sensitive ways of doing it. Service providers have also been told that they are not to use the 'not stated' option unless the client has refused to answer the question or is unable to do so (when they are there for someone else's drug use).

However, it is still the case that, because this question is sometimes perceived as sensitive, service providers may not ask the client their Indigenous status and may put down the response that they think is correct. Or, if they are unable to form an opinion about the client's Indigenous status visually, the service provider may leave the response blank. In some cases the question may be asked and the client may refuse to answer. Clearer wording in the Indigenous status data element within the NHDD v.12 may help to improve responses to this question.

Juvenile justice

As outlined in Chapter 5, juvenile justice is a complex system, involving numerous organisations with different roles and responsibilities. Currently there is little integration of information across these organisations even at the state and territory level, and very limited nationally comparable information is available. The quality of information on Indigenous status varies among organisations and jurisdictions.

The only national juvenile justice data available is a quarterly collection on people in juvenile detention centres (AIC 2002). While somewhat limited in scope, this collection includes information on the Indigenous status of people held in juvenile justice detention centres. The tables provided in Chapter 5 are based on this data.

Juvenile justice *continued*

The AIHW has been funded by all states and territories to develop and test a more comprehensive National Minimum Data Set for juvenile justice (JJ NMDS) which will include community supervision as well as detention centres. This is currently being pilot tested in all jurisdictions with a final report due in 2003. The quality of the information collected on the Indigenous status of juvenile justice clients will be tested as part of the pilot.

In conjunction with the development of a JJ NMDS, all states and territories and the AIHW are also developing National Indicators for Juvenile Justice. The level of Indigenous representation has been identified as a key Juvenile Justice System Indicator.

Children's services

The pilot test of the first stage of the Children's Services NMDS was conducted in August 2002. Indigenous status of children using child care and preschool services was collected from 47 services involved in the pilot test (including four Indigenous specific services), using the ABS standard question. At the pilot test briefings, service providers were requested to provide the information from their existing records. The pilot test found that Indigenous status is collected on most, but not all, service enrolment forms, but that it is collected in very different ways. For example, in many cases no distinction is made between Aboriginal and Torres Strait Islander origin and children are recorded as being 'Aboriginal and Torres Strait Islander'; in some cases, Indigenous status is recorded as part of an 'other' or 'special consideration' category.

The quality of the information recorded also varied. Parents filled in the enrolment forms themselves, but some of them did not answer the Indigenous status question. In some cases where the answer was not recorded, service providers recorded the child's Indigenous status based on their own knowledge and assumptions.

Commonwealth–State Disability Agreement (CSDA)

The CSDA minimum data set collection, in operation since 1994, has recently been subject to a major redevelopment by the National Disability Administrators (NDA) and the AIHW. The NDA were committed to ensuring that all relevant data items should conform to the National Community Services Data Dictionary (NCSDD) standards. The Indigenous identifier codes had for some years conformed to the national standards, but the NCSDD standard question posed problems in field testing, as respondents preferred mutually exclusive categories. As a result of a series of discussions National Community Services Information Management Group (NCSIMG) requested the NCSDC to examine this issue in its work program for the next revision of the NCSDD.

In the training in all jurisdictions for implementation of the new collection, the importance of correct Indigenous identification and the reasons for the data item were emphasised, and the training included discussion of issues that may arise. All jurisdictions were provided with pamphlets to distribute to participating disability service agencies, to support them in collecting information about Indigenous status.

APPENDIX 1 USING INDIGENOUS CENSUS DATA

INTRODUCTION

This appendix presents a set of guidelines concerning the use of Census data about Indigenous Australians. The guidelines were prepared and widely circulated following a workshop held on this topic in early 1998, and published by the ABS in February 1999 in *Occasional Paper: Population Issues, Indigenous Australians, 1996* (cat. no. 4708.0). They should be attributed to the 1998 Working Group to Establish Guidelines for Interpreting Indigenous Census Data.

GUIDELINES FOR INTERPRETING INDIGENOUS CENSUS DATA

Guiding principles

It is not possible to construct a set of tight and specific guidelines which, if followed by users, would indicate how to make valid comparisons between Censuses with respect to Indigenous statistics. There is no prescription which will provide guaranteed protection against making inappropriate interpretations. However, a few guiding principles may be of assistance to users.

User beware

Any Indigenous statistical comparisons made between two Censuses must be made with caution and should not be accepted at face value until the user has explored, to his/her satisfaction, the possibility that the differences might be solely or largely a consequence of non-demographic increase in Census counts. Users might otherwise draw incorrect conclusions about whether changes in social conditions have occurred.

Use percentages

Users should present their statistical estimates as percentages where both numerator and denominator data are from the same Census. Analyses of intercensal statistical differences should be made by comparing percentages from two Censuses, rather than directly comparing counts or numbers. In most instances appropriate percentages will be less biased than the numerator and denominator counts. In particular, percentages are estimated without bias, if the bias in the counts is the same in percentage terms for the numerator and denominator.

Use specific geography

Any analysis conducted on data pertaining to all Indigenous peoples in Australia and undertaken to detect changes between Censuses may be subject to biases if the variable of interest displays significantly different patterns for urban and remote areas. The bias results from changing patterns across geography or the propensity to be identified as Indigenous in the Census. Biases may be reduced considerably for analyses which are restricted to remote geographical regions where the changes in Indigenous population counts between Censuses can be largely explained in standard demographic terms.

Consider household size and composition

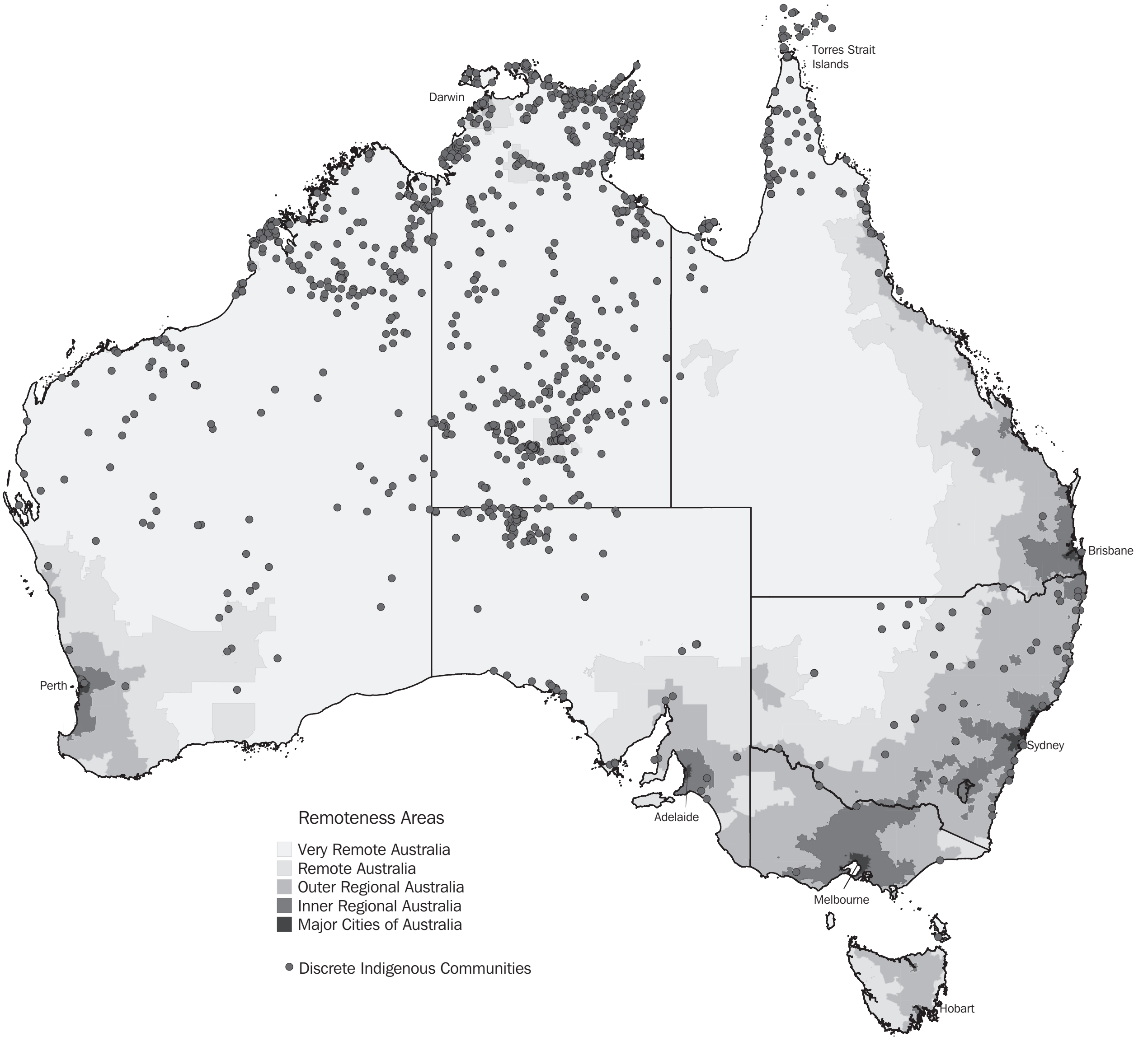
Factors which might be associated with household size and composition (i.e. the proportion of Indigenous and non-Indigenous peoples in the household) should be treated with the same caution as geographical variations.

Consider your population

When using Indigenous population figures, users should ensure they have the most appropriate set of numbers for their purposes.

APPENDIX 2 DISCRETE INDIGENOUS COMMUNITIES, BY REMOTENESS STRUCTURE

AUSTRALIAN STANDARD GEOGRAPHICAL CLASSIFICATION REMOTENESS STRUCTURE — 2001



APPENDIX 3 UNDERGRADUATE COMMENCEMENTS, ENROLMENTS AND COMPLETIONS(a)

	1999 completions		*2000 commencements*		*2000 enrolments*	
	no.	*Indigenous as % of total*	*no.*	*Indigenous as % of total*	*no.*	*Indigenous as % of total*
Health						
Health, general(b)	—	—	3	0.9	5	0.7
Dentistry(c)	1	0.4	2	0.7	5	0.4
Health support activities(d)	56	8.0	156	9.3	300	8.1
Health sciences and technologies(e)						
Nursing (basic or post-basic)	30	0.5	85	1.1	241	1.1
Other	10	0.6	27	0.8	67	0.7
Total	*40*	*0.5*	*112*	*1.0*	*308*	*1.0*
Medical science, medicine						
Medical science	1	0.2	3	0.3	4	0.2
Medicine	8	0.7	13	1.6	57	1.2
Total medical science, medicine	*9*	*0.6*	*16*	*0.9*	*61*	*0.9*
Allied health(f)	7	0.4	10	0.4	50	0.6
Total	113	1.0	299	1.7	729	1.4
Welfare						
Counselling(g)	1	5.0	—	—	—	—
Social work	20	1.8	30	1.6	95	1.8
Welfare studies	6	1.8	64	9.9	91	5.6
Early childhood education(h)	13	1.0	76	3.1	181	2.6
Special education(i)	—	0.0	2	0.8	4	0.6
Total	40	1.3	172	3.3	371	2.6

(a) For students identified as Indigenous.

(b) Courses that prepare, or develop further the abilities of, individuals to assist in and support the operations of health care facilities.

(c) Includes dentistry and dental therapy.

(d) Includes health support activities (general), health administration, health counselling, health surveying and environmental health, and health support activities (other).

(e) Includes health sciences and technologies (general), nursing (basic), nursing (post-basic), medical radiography, medical technology, nutrition and dietetics, optometry, pharmacy, podiatry, and health sciences and technologies (other).

(f) Includes rehabilitation services, occupational therapy, physiotherapy, and speech pathology/audiology.

(g) Includes educational counselling and other counselling (excluding health or educational).

(h) Includes early childhood education and post-initial early childhood education.

(i) Includes initial special teacher education and post-initial special teacher education.

Source: Department of Education, Training and Youth Affairs.

APPENDIX 4

ICD-10-AM CODES USED IN THIS PUBLICATION

DIAGNOSIS CODES

Categories/Subcategories	*ICD-10-AM codes*
Certain infectious and parasitic diseases	**A00–B99**
Intestinal infectious diseases	A00–A09
Tuberculosis	A15–A19
Other bacterial diseases	A30–A49
Septicaemia	A40–A41
Pneumococcal septicaemia	A40.3
Infectious sexual transmission	A50–A64
Viral infections	A80–B19
Viral hepatitis	B15–B19
Other and unspecified infectious and parasitic diseases	A20–A28, A65–A69, A70–A74, A75–A79, B20–B24, B25–B34, B35–B99
Neoplasms	**C00–D48**
Malignant neoplasms	C00–C96
In Situ, benign and neoplasms of uncertain or unknown behaviour	D00–D48
Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism	**D50–D89**
Endocrine, nutritional and metabolic disease	**E00–E90**
Type 1 diabetes	E10
Type 2 diabetes	E11
Mental and behavioural disorders	**F00–F99**
Organic mental disorders	F00–F09
Mental disorders due to psychoactive substance abuse	F10–F19
Schizophrenia, schizotypal & delusional disorders	F20–F29
Mood and neurotic disorders	F30–F48
Other mental disorders	F50–F99
Diseases of the nervous system	**G00–G99**
Meningitis	G00–G03
Diseases of the eye and adnexa	**H00–H59**
Diseases of the ear and mastoid process	**H60–H95**
Otitis media	H65–H67
Diseases of the circulatory system	**I00–I99**
Rheumatic heart disease	I00–I02, I05–I09
Hypertensive disease	I10–I15
Ischaemic heart disease	I20–I25
Other heart disease	I26–I28, I30–I52
Cerebrovascular disease	I60–I69
Diseases of the respiratory system	**J00–J99**
Influenza	J10–J11
Pneumonia	J12–J18
Pneumococcal pneumonia	J13
COPD	J41–J44
Asthma	J45–J46

...continued

DIAGNOSIS CODES — *continued*

Categories/Subcategories	*ICD-10-AM codes*
Diseases of the digestive system	**K00–K93**
Diseases of the skin and subcutaneous tissue	**L00–L99**
Diseases of the musculoskeletal system and connective system	**M00–M99**
Diseases of the genitourinary system	**N00–N99**
Chronic kidney disease	N01–N07, N11–N15, N18–N20, N25–N28
Kidney Infections	N10–N12, N13.6, N15.1
Pregnancy, childbirth and puerperium	**O00–O99**
Certain conditions originating in the perinatal period	**P00–P96**
Congenital malformations, deformations and chromosomal abnormalities	**Q00–Q99**
Symptoms, signs and abnormal clinical and laboratory findings, n.e.c.	**R00–R99**
Injury, poisoning and certain other consequences of external causes	**S00–T98**
Injuries	S00–T19
Burns and frostbite	T20–T35
Poisoning	T36–T50
Toxic effects	T51–T65
Other effects of external causes, early complications of trauma	T66–T79, T89
Complications of surgical and medical care, n.e.c.	T80–T88
Sequelae of injuries, poisoning, external causes	T90–T98
External causes of morbidity and mortality	**V01–Y98**
Transport accidents	V01–V99
Accidental falls	W00–W19
Exposure to inanimate mechanical forces	W20–W49
Exposure to animate mechanical forces	W50–W64
Exposure to electric current/ smoke/fire/venomous animals/nature	W85–Y09
Accidental poisoning	X40–X49
Other accidental exposures	X50–X59
Intentional self-harm	X60–X84
Assault	X85–Y09
Complications of medical and surgical care	Y40–Y84
Other external causes	W65–84, Y10–Y36, Y85–Y98
Factors influencing health status and contact with health services	**Z00–Z99**
Care involving dialysis	Z49

Source: AIHW

PROCEDURE CODES

Chapter/Subcategories	*ICD-10-AM blocks*
Procedures on nervous system	1–86
Procedures on endocrine system	110–129
Procedures on eye and adnexa	160–256
Procedures on ear and mastoid process	300–333
Procedures on nose, mouth and pharynx	370–422
Dental services	450–490
Procedures on respiratory system	520–569
Procedures on cardiovascular system	600–767
Procedures on blood and blood-forming organs	800–817
Procedures on digestive system	850–1011
Procedures on urinary system	1040–1128
Haemodialysis	1059
Procedures on male genital organs	1160–1203
Gynaecological procedures	1230–1299
Obstetric procedures	1330–1347
Procedures on musculoskeletal system	1360–1579
Dermatological and plastic procedures	1600–1718
Procedures on breast	1740–1759
Chemotherapeutic and radiation oncology procedures	1780–1799
Non-invasive, cognitive and interventions, ne.c.	1820–1916
Imaging services	1940–2016

Source: AIHW

APPENDIX 5

ESTIMATES AND PROJECTIONS OF THE INDIGENOUS POPULATION — 1991–2006

Year	*New South Wales*	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*	*Northern Territory*	*Australian Capital Territory*	***Australia(a)***
EXPERIMENTAL ESTIMATED RESIDENT POPULATION(b)									
1991	97 784	20 259	93 191	19 809	50 891	13 783	46 874	2 614	**345 381**
1992	100 027	20 678	95 341	20 204	51 859	14 058	47 850	2 699	**352 897**
1993	102 375	21 127	97 590	20 633	52 873	14 351	48 817	2 785	**360 736**
1994	104 799	21 586	99 884	21 083	53 910	14 654	49 788	2 872	**368 765**
1995	107 284	22 073	102 257	21 557	55 031	14 975	50 811	2 964	**377 146**
1996	*109 925*	*22 598*	*104 817*	*22 051*	*56 205*	*15 322*	*51 876*	*3 058*	***386 049***
2001	*134 888*	*27 846*	*125 910*	*25 544*	*65 931*	*17 384*	*56 875*	*3 909*	***458 520***
PROJECTED POPULATION — LOW SERIES(c)									
1996	*109 925*	*22 598*	*104 817*	*22 051*	*56 205*	*15 322*	*51 876*	*3 058*	***386 049***
1997	112 167	23 002	107 558	22 503	57 263	15 581	52 782	3 161	**394 214**
1998	114 411	23 403	110 324	22 953	58 321	15 841	53 687	3 266	**402 404**
1999	116 652	23 801	113 111	23 405	59 382	16 106	54 587	3 372	**410 615**
2000	118 895	24 195	115 919	23 857	60 441	16 373	55 480	3 480	**418 841**
2001	121 142	24 586	118 749	24 313	61 505	16 644	56 364	3 589	**427 094**
2002	123 405	24 974	121 601	24 770	62 577	16 917	57 236	3 699	**435 381**
2003	125 692	25 363	124 473	25 229	63 658	17 193	58 096	3 809	**443 715**
2004	128 006	25 753	127 375	25 692	64 752	17 470	58 944	3 921	**452 114**
2005	130 348	26 145	130 311	26 161	65 857	17 747	59 780	4 034	**460 583**
2006	132 716	26 541	133 288	26 633	66 976	18 023	60 610	4 149	**469 135**
PROJECTED POPULATION — HIGH SERIES(b)									
1996	*109 925*	*22 598*	*104 817*	*22 051*	*56 205*	*15 322*	*51 876*	*3 058*	***386 049***
1997	117 912	23 541	111 004	22 969	58 342	16 727	53 147	3 377	**407 216**
1998	126 402	24 507	117 454	23 907	60 522	18 257	54 416	3 723	**429 386**
1999	135 421	25 496	124 174	24 866	62 744	19 923	55 680	4 099	**452 602**
2000	144 994	26 507	131 169	25 848	65 005	21 739	56 928	4 508	**476 899**
2001	155 159	27 540	138 446	26 852	67 313	23 715	58 162	4 950	**502 339**
2002	165 958	28 595	146 010	27 878	69 669	25 863	59 377	5 428	**528 981**
2003	177 433	29 677	153 865	28 927	72 076	28 196	60 570	5 944	**556 891**
2004	189 629	30 784	162 029	29 999	74 534	30 731	61 738	6 504	**586 151**
2005	202 579	31 918	170 515	31 098	77 042	33 480	62 885	7 110	**616 830**
2006	216 323	33 079	179 338	32 220	79 600	36 465	64 015	7 766	**649 009**

(a) Includes Jervis Bay Territory.

(b) Final at 30 June 2001, backcasting for 1997–2000 not available at time of publication.

(c) See text for details about 'low series' and 'high series' estimates and projections.

Source: ABS 1998c, ABS 1998d, ABS 2003a, ABS data available on request.

APPENDIX 6 EXPERIMENTAL INDIGENOUS ESTIMATED RESIDENT POPULATION(a) — 30 JUNE 2001

Age group (years)	*Aboriginal(b)*	*Torres Strait Islander(b)*	*Aboriginal and Torres Strait Islander*	***Total Indigenous***
		MALES		
0–4	27 063	1 890	1 598	**30 551**
5–9	28 580	1 934	1 551	**32 065**
10–14	26 111	1 782	1 259	**29 152**
15–19	21 049	1 494	983	**23 526**
20–24	16 557	1 295	748	**18 600**
25–29	16 190	1 184	695	**18 069**
30–34	14 936	1 032	598	**16 566**
35–39	13 181	887	544	**14 612**
40–44	11 140	797	534	**12 471**
45–49	8 854	706	373	**9 933**
50–54	6 731	562	318	**7 611**
55–59	4 500	365	224	**5 089**
60–64	3 191	292	140	**3 623**
65–69	2 143	248	98	**2 489**
70–74	1 277	142	54	**1 473**
75 and over	1 436	188	72	**1 696**
Total	*202 939*	*14 798*	*9 789*	***227 526***
		FEMALES		
0–4	26 359	1 752	1 542	**29 653**
5–9	26 789	1 796	1 382	**29 967**
10–14	24 448	1 593	1 263	**27 304**
15–19	20 671	1 399	983	**23 053**
20–24	16 826	1 241	742	**18 809**
25–29	17 409	1 207	733	**19 349**
30–34	16 572	1 032	692	**18 296**
35–39	14 561	883	621	**16 065**
40–44	11 885	773	456	**13 114**
45–49	9 307	737	381	**10 425**
50–54	7 128	574	316	**8 018**
55–59	4 799	353	211	**5 363**
60–64	3 685	344	156	**4 185**
65–69	2 498	248	113	**2 859**
70–74	1 692	223	66	**1 981**
75 and over	2 161	286	106	**2 553**
Total	*206 790*	*14 441*	*9 763*	***230 994***

(a) Final rebased experimental Indigenous estimated resident population as at 30 June 2001.

(b) Excludes those people who identified as both Aboriginal and Torres Strait Islander origin.

Source: ABS data available on request.

APPENDIX 7 INDIGENOUS IDENTIFIER, SELECTED COMMUNITY SERVICES COLLECTIONS

	Question wording	*Possible responses*
Child care		
Census of Child Care Services (Children's Services Program)	*Additional needs/cultural background*	'Aboriginal or Torres Strait Islander background' is one of several options.
Child welfare and protection		
New South Wales	*There is no strict format for asking the question-possible questions include:* *'What is the cultural background of the family?'* *'Are there any specific cultural issues?'* *'Is the child of Aboriginal or Torres Strait Islander background?'* *'Is the child of Aboriginal descent?/Do you know if the child is Aboriginal?'*	No, not Aboriginal or Torres Strait Islander Person declined to provide the information No, person does not know this information No, information not requested from this person Yes, Aboriginal clan unknown Yes, Torres Strait Islander clan unknown Yes, Aboriginal (clan specified)
Victoria	*Is the client Aboriginal or Torres Strait Islander?(a)*	Yes No
Queensland	*Are you of Aboriginal or Torres Strait Islander origin?(b)*	No Yes, Aboriginal Yes, Torres Strait Islander
South Australia	*Does the child or family identify as Aboriginal or Torres Strait Islander?*	Aboriginal Torres Strait Islander Both Other clan groups Unknown
Western Australia	*Is the client Aboriginal or Torres Strait Islander?*	Yes No Unknown
Tasmania	*Aboriginality*	Yes No Unknown
Northern Territory	*Ethnicity*	Aboriginal Torres Strait Islander Both Neither Not stated
Australian Capital Territory	*Aboriginal/TSI?*	Aboriginal Torres Strait Islander Aboriginal and Torres Strait Islander Neither Aboriginal or Torres Strait Islander Unknown/not stated
Housing assistance		
Supported Accommodation Assistance Program (SAAP) National Data Collection Agency Client Collection	*Does the client identify as being of Aboriginal or Torres Strait Islander origin?*	No Yes, Aboriginal person yes, Torres Strait Islander person yes, both
Disability support services		
Commonwealth-State–Territory Disability Agreement(c)	*Is the service user of Aboriginal or Torres Strait Islander origin?*	Aboriginal but not Torres Strait Islander origin Torres Strait Islander but not Aboriginal origin Both Aboriginal and Torres Strait Islander origin Neither Aboriginal nor Torres Strait Islander

For footnotes see end of table.

...continued

INDIGENOUS IDENTIFIER, SELECTED COMMUNITY SERVICES COLLECTIONS — *continued*

	Question wording	*Possible responses*
Aged care services		
Home and Community Care (HACC) Service Users Characteristics(d)	*Is the client of Aboriginal or Torres Strait Islander origin*	No Yes, Aboriginal Yes, Torres Strait Islander
Aged Care Assessment Program Minimum Data Set (residential aged care)	*Are you of Aboriginal or Torres Strait Islander origin?*	No Yes, Aboriginal Yes, Torres Strait Islander

(a) If abuse is substantiated, or upon closure, the Aboriginal or Torres Strait Islander status of the client must be entered. Select 'yes' if the client is Aboriginal or Torres Strait Islander or 'no' if they are not.

(b) For persons of both Aboriginal and Torres Strait Islander origin, tick both 'yes' boxes.

(c) National Data Set Collection Service User Form 2002.

(d) A HACC Minimum Data Set, which includes the ABS standard question on Indigenous status, was implemented in 2001.

Source: AIHW and information provided by state and territory community service agencies.

APPENDIX 8 INDIGENOUS IDENTIFIER, BIRTH AND PERINATAL COLLECTIONS

Collection and national holding agency by state	*Question wording*	*Possible responses*	*Question asked about* *Mother*	*Father*	*Child*
Birth registration form					
New South Wales	*Is the mother/father of Aboriginal or Torres Strait Islander origin? (For persons of mixed origin, tick both 'Yes' boxes).*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	Y	N
Victoria	*Is mother/father of Aboriginal or Torres Strait Islander Origin? (For persons of mixed origin, tick both 'Yes' boxes).*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	Y	N
Queensland	*Is the mother/father of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes' boxes)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	Y	N
South Australia	*Is the mother/father of Aboriginal or Torres Strait Islander origin? (For persons of mixed origin, tick both 'Yes' boxes).*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	Y	N
Western Australia	*Is the mother/father of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes' boxes)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	Y	N
Tasmania	*Is the mother/father of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	Y	N
Northern Territory	*Is the child/mother/father of Australian Aboriginal or Torres Strait Islander Origin?*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	Y	Y
Australian Capital Territory	*Is the mother/father of Aboriginal or Torres Strait Islander origin? (For persons of mixed origin, tick both 'Yes' boxes).*	No Yes Aboriginal origin Yes Torres Strait Islander origin	Y	Y	N
Perinatal collection					
New South Wales	*Is the mother/child of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes' boxes.)*	Aboriginal Torres Strait Islander Aboriginal and Torres Strait Islander None of the above	Y	N	Y
Victoria	*Is the father/mother of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes' boxes.)*	No Aboriginal origin Torres Strait Islander origin	Y	Y	N
Queensland	*Is the mother/child of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	N	Y
South Australia	*Mother's Race:*	Caucasian Aboriginal/Torres Strait Islander Asian Other	Y	N	N
Western Australia	*Was the deceased of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	N	N	Y
Tasmania	*Racial origin:*	Aboriginal or Torres Strait Islander Other	Y	N	N
Northern Territory	*Is the mother considered to be of Australian Aboriginal or Torres Strait islander origin?*	Yes No	Y	N	N
Australian Capital Territory	*Is the mother/child of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	N	Y

Source: Information provided by state and territory Health Departments and Registrars-General.

APPENDIX 9

INDIGENOUS IDENTIFIER, DEATH REGISTRATION AND MEDICAL CAUSE OF DEATH FORMS

	Question wording	*Possible responses*
Death notification form		
New South Wales	*Was the deceased of Aboriginal or Torres Strait Islander origin? (For persons of mixed origin, tick both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin
Victoria	*Was the deceased of Aboriginal or Torres Strait Islander origin?*	No Yes, Aboriginal origin Yes Torres Strait Islander origin Both
Queensland	*Was the deceased of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin
South Australia	*Was the deceased of Aboriginal or Torres Strait Islander origin?*	No Yes, Australian Aboriginal origin Yes, Torres Strait Islander origin
Western Australia	*Was the deceased of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, cross both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin
Tasmania	*Was the deceased of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Islander origin, tick both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin
Northern Territory	*Was the deceased of Aboriginal or Torres Strait Islander Origin?*	No Yes, Australian Aboriginal origin Yes, Torres Strait Islander origin
Australian Capital Territory	*Was the deceased of Aboriginal or Torres Strait Islander origin? (If both tick both 'Yes' boxes.)*	No Yes Aboriginal origin Yes Torres Strait Islander
Medical certificate cause of death form		
New South Wales	*Was the deceased of Aboriginal or Torres Strait Islander origin? (For persons of both Aboriginal and Torres Strait Islander origin, mark both 'Yes' boxes.)*	No Yes, Aboriginal origins, Torres Strait Islander origin
Victoria	*Was the deceased of Aboriginal or Torres Strait Islander origin? (For persons of both Aboriginal and Torres Strait Islander origin, mark both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin
Queensland	*Was the deceased of Aboriginal or Torres Strait Islander origin? (For persons of both Aboriginal and Torres Strait Islander origin, mark both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin
South Australia	*Of Aboriginal or Torres Strait Islander origin*	No Yes – Aboriginal TSI
Western Australia	*Aboriginal*	Yes No
Tasmania	*Was the deceased of Aboriginal or Torres Strait Islander origin? (If of both Aboriginal and Torres Strait Islander origin, tick both 'Yes' boxes.)*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin
Northern Territory	*Was the deceased of Aboriginal or Torres Strait Islander origin?*	No Yes, Aboriginal origin Yes, Torres Strait Islander origin
Australian Capital Territory	*Was the deceased of Aboriginal or Torres Strait Islander origin? (If both, tick both 'Yes' boxes.)*	No Yes Aboriginal origin Yes Torres Strait Islander origin

Source: Information provided by state and territory Health Departments and Registrars-General.

EXPLANATORY NOTES

INTRODUCTION

1 Information in this publication is drawn from many sources, including the Census of Population and Housing, a number of surveys conducted by the Australian Bureau of Statistics (ABS) and other organisations, and from a variety of administrative data sources. A brief description of the most relevant surveys conducted by the ABS and some of the other data sources is provided in the following paragraphs. Terms and concepts used in this publication, including the definitions of households containing Indigenous person(s) and other households, are explained in the Glossary. Additional sources referenced within the publication are listed in the reference list.

2 The Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems, and its use in hospital separations data and in deaths registrations is described below.

CENSUS OF POPULATION AND HOUSING

3 The main objective of the Census of Population and Housing is to measure the number of people in Australia and their key characteristics, at a given point in time. The Census is a count of the whole population, and provides a reliable basis for making future estimates of the population of each state, territory and local government area. These population estimates are used for the distribution of government funds, and to determine the number of seats per state and territory in the Commonwealth Parliament. In addition, the knowledge of the characteristics of the population gained through the Census is used to support the planning, administration and policy development activities of governments, businesses and other users.

4 The Census is the largest statistical collection undertaken by the ABS and is conducted every five years. Results from the 2001 Census of Population and Housing are presented in this publication, although previous Census are provided in some instances for comparative purposes.

5 In the 2001 Census many of the Torres Strait Islander population in north Queensland appear to have reported ‘creole’ as their main language. This response was coded as ‘Oceanian Pidgin and Creoles n.f.d.’, however, probably should have been classified as Torres Strait Creole (Broken). In this case a further 4,854 speakers could be added to the number of Creole speakers for a total of 7,790 speakers.

COMMUNITY HOUSING AND INFRASTRUCTURE NEEDS SURVEY (CHINS)

6 The 2001 Community Housing and Infrastructure Needs Survey (CHINS) was the second in a series of surveys conducted by the ABS on behalf of, and with full funding from, the Aboriginal and Torres Strait Islander Commission (ATSIC). In common with the first CHINS conducted in 1999, the 2001 survey sought to collect data about Aboriginal and Torres Strait Islander housing organisations and discrete Aboriginal and Torres Strait Islander communities in Australia.

COMMUNITY HOUSING AND INFRASTRUCTURE NEEDS SURVEY (CHINS) *continued*

7 While the 1999 and 2001 CHINS are comparable at a broad level, there are issues to be taken into consideration when using these data. See Chapter 2 for further details of the CHINS, or contact the ABS National Centre for Aboriginal and Torres Strait Islander Statistics in Darwin, which manages the data on behalf of the ATSIC.

8 In 1992, ATSIC commissioned the Housing and Community Infrastructure Needs Survey (HCINS) which collected housing and infrastructure information from Aboriginal and Torres Strait Islander people across Australia. However, the data collection methods employed by the HCINS varied between jurisdictions, affecting attempts to aggregate the data at a national level.

9 There are also differences between the methodologies and definitions used in the 1992 HCINS and the CHINS, which prevent comparisons between the results of the two surveys being made.

INDIGENOUS SOCIAL SURVEY (ISS)

10 Information will be released later this year from the ABS Indigenous Social Survey (ISS), conducted from August to December 2002. The survey was developed after wide consultation with Indigenous people and organisations on direction for the survey, and detailed development guided by a reference group including Indigenous people and organisations. The ABS surveyed Aboriginal and Torres Strait Islander Australians in both urban and remote areas across Australia to collect information about a number of areas of social concern. The ISS will provide information on the social and general wellbeing of Indigenous peoples that has not been available since the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS). Data will be available at the national and state–territory level, as well as for separately aggregated communities and for Torres Strait Islanders

11 The ISS collected information from a range of areas of social concern such as health, disability, living standards and social participation, making it possible to better understand the links between various aspects of the lives of Indigenous peoples. The data items in the survey cover about 50% of the content of the 1994 NATSIS, and new items of priority such as disability status, life stressors, substance use, financial stress, and access to transport.

NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER SURVEY (NATSIS)

12 The NATSIS was the first national survey of Australia's Indigenous people and was part of the government response to a recommendation by the Royal Commission into Aboriginal Deaths in Custody. It was primarily designed to provide information at the national level on the social, demographic, economic and health status of Indigenous people and was conducted by the ABS in 1994.

13 Prior to, and during the development stages of the survey, there was widespread consultation with Indigenous people and organisations to ensure that the information collected was relevant to Indigenous people and was collected in a culturally appropriate manner.

NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER SURVEY (NATSIS) *continued*

14 The survey was based on personal interviews with a sample of Indigenous people selected according to a methodologically sound random sampling design. Indigenous people were recruited and trained to interview the 15,700 Indigenous people selected in the sample.

15 The questionnaire covered the areas of family and culture, health, housing, education and training, employment and income, and law and justice.

16 More information on the survey is available in ABS 1995.

NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY (NDSHS)

17 The 2001 NDSHS represented the seventh in the National Drug Strategy series since the program's inception in 1985. It was managed by the Australian Institute of Health and Welfare (AIHW) on behalf of the Commonwealth Department of Health and Ageing, and gathered information from households on individual's drug use patterns, attitudes and behaviours.

18 Of the 27,000 persons aged 14 years and over participating in the 2001 survey, 415 persons identified as either Aboriginal, Torres Strait Islander, or both. The relatively small Indigenous sample limits the confidence with which analysis can take place.

19 More information on the survey is available in AIHW 2002h.

NATIONAL HEALTH SURVEY (NHS)

20 The 2001 NHS was conducted by the ABS from February to November 2001. This was the fifth in the series of health surveys conducted by the ABS; previous surveys were conducted in 1977–78, 1983, 1989–90 and 1995. The survey series was designed to obtain national benchmarks on a wide range of health issues, and to enable changes in health to be monitored over time.

21 Data from the 1995 NHS are presented in this publication for comparative purposes. While the 2001 NHS is similar to the 1995 survey in many ways, there are important differences in sample design and coverage, survey methodology and content, definitions, classifications, etc. which affect the degree to which data are directly comparable between the surveys. For more information on the 1995 NHS, see ABS 1999.

22 In the 2001 NHS, households were selected at random, using a stratified multi-stage area sample, which ensured that persons within each state and territory had a known and, in the main, equal chance of selection in the survey. For the first time, 2001 NHS results are presented for Indigenous Australians living in remote areas. The NHS sample covered usual residents of private dwellings only. Usual residents of 'special' dwellings such as hotels, motels, hostels and hospitals were not included in the survey.

NATIONAL HEALTH SURVEY (NHS) *continued*

23 Approximately 26,900 people from all states and territories and across all age groups were included in the 2001 survey, including 483 Indigenous persons. To enhance the reliability of estimates for the Indigenous population a supplementary sample of 3,198 Indigenous respondents was obtained for the survey. This was conducted throughout Australia from June to November 2001. The Indigenous results included in this publication are based on the total sample (known as the NHS(I)) of 3,681 Indigenous Australians comprising 1,853 adults and 1,828 children.

24 As outlined in Chapter 2, the Indigenous population is considerably younger than the non-Indigenous population. Because of the close relationship between health and age, comparisons between Indigenous and non-Indigenous Australians in using information in the NHS are presented by age group or by using age standardised rates.

25 Sampling error is the difference between the published estimates, derived from a sample of persons, and the value that would have been produced if all persons in scope of the survey had been included. Due to the relatively small size of the Indigenous samples in the 1995 and 2001 NHS, the Indigenous results have larger sampling errors than results for the non-Indigenous population. For this reason, differences in results between the Indigenous and non-Indigenous populations, between Indigenous results for 1995 and 2001, and between remote and non-remote Indigenous estimates may or may not be statistically significant. Non-sampling error, such as non-response, errors in reporting by respondents or recording of answers by interviewers, and errors in coding and processing data, may also occur in any data collection.

26 For more information of the 2001 NHS, see ABS 2002e. In addition, the *National Health Survey: User's Guide* (cat. no. 4363.0.55.001) is available free of charge from the ABS website <http://www.abs.gov.au>. The User's Guide has been compiled to assist clients in analysing the 2001 NHS. It contains a complete listing of the data items collected in the survey, definitional material and sample copies of the questionnaires used for the Indigenous supplement.

NATIONAL HOSPITAL MORBIDITY DATABASE (NHMD)

27 The National Hospital Morbidity Database (NHMD) is a national collection of de-identified hospital separation records (discharges, transfers, deaths or changes in type of episode of care) maintained by the AIHW. Information on the characteristics, diagnoses and care of admitted patients in public and private hospitals is provided to the AIHW by state and territory health departments. Further detail regarding the NHMD is available from the AIHW 2002b.

NATIONAL NUTRITION SURVEY

28 The National Nutrition Survey was conducted by the ABS between February 1995 and March 1996. The survey was a joint project of the ABS and the Commonwealth Department of Health and Family Services, and involved a sub-sample of respondents in the 1995 NHS. Information about food and nutrition consumption habits was collected from approximately 13,800 people aged two years and over. There were too few Aboriginal and Torres Strait Islander participants to allow for separate Indigenous estimates.

29 More information on the survey is available in ABS 1997d.

TENTH REVISION OF INTERNATIONAL CLASSIFICATION OF DISEASES (ICD-10)

30 The tenth revision of the International Classification of Diseases (ICD-10) was adopted for Australian use for deaths registered from 1 January 1999, and has been used in this publication. The introduction of ICD-10 has broken the 'underlying cause of death' series, particularly at the more detailed level of classification.

31 For more information on the differences between ICD-9 and ICD-10, in relation to death registration data, see ABS 1997b.

32 All 'multiple cause of death' data in this publication are coded to ICD-10. For deaths where the underlying cause was identified as an external cause (accidental and violent deaths), multiple causes include circumstances of injury, the nature of injury as well as any other conditions reported on the death certificate. These deaths are classified according to the external cause, that is, to the circumstances of the accident or violence which produced the fatal injury, rather than to the nature of the injury.

33 The Australian modification of ICD-10 (ICD-10-AM) has been used in this publication to code hospital separation and procedure data. For more information on ICD-10-AM, in relation to hospital data, see AIHW 2002b.

LIST OF SYMBOLS AND ABBREVIATIONS

SYMBOLS

&	and
$	dollars
©	copyright
*	estimate has a relative standard error of between 25% and 50% and should be used with caution
**	estimate has a relative standard error greater than 50% and is considered too unreliable for general use
>	greater than
<	less than
. .	not applicable
—	nil or rounded to zero (including null cells)
%	per cent
+	plus
'000	thousands

ABBREVIATIONS

AACR	Australasian Association of Cancer Registries
ABS	Australian Bureau of Statistics
ACCHS	Aboriginal Community Controlled Health Services
ACCMIS	Aged and Community Care Management Information System
ACT	Australian Capital Territory
ADC	Aboriginal Dental Clinic
ADL	Activities of daily living
AHMAC	Australian Health Minister's Advisory Council
AHS	Australian Housing Survey
AIDS	Acquired Immune Deficiency Syndrome
AIGC	Australian Indigenous Geographical Classification
AIHW	Australian Institute of Health and Welfare
AIL	Activities of independent living
AMS	Aboriginal Medical Service
ANIHI	Agreement on National Indigenous Housing Information
ANZDATA	Australia and New Zealand Dialysis and Transplant Registry
AODTS	Alcohol and Other Drug Treatment Services
ARIA	Accessibility/Remoteness Area Index
ARHP	Aboriginal Rental Housing Program
ASCO	Australian Standard Classification of Occupations
ASGC	Australian Standard Geographical Classification
ATSIC	Aboriginal and Torres Strait Islander Commission
ATSIHWIU	Aboriginal and Torres Strait Islander Health and Welfare Information Unit
Aust.	Australia
AWEC	Activities of work, education and community living
BEACH	Bettering the Evaluation and Care of Health
BMI	body mass index
CAD	National Coordination and Development Committee
CAEPR	Centre for Aboriginal Economic Policy Research
CAP	Crisis Accommodation Program
CD	Collection District

CDEP	Community Development Employment Project scheme
CDHAC	Commonwealth Department of Health and Aged Care
CGC	Commonwealth Grants Commission
CHINS	Community Housing and Infrastructure Needs Survey
COAG	Council of Australian Governments
COPD	Chronic obstructive pulmonary disease
CPI	Community Periodontal Index
CRA	Commonwealth Rent Assistance
CSDA	Commonwealth/State Disability Agreement
CSHA	Commonwealth/State Housing Agreement
DAA	Data Analysis Australia
DEST	Department of Education, Science and Training (Commonwealth)
DHAC	Commonwealth Department of Health and Aged Care
dmft	decayed, missing and filled (child) teeth
DMFT	decayed, missing and filled (adult) teeth
DSRU	Dental Statistics and Research Unit
dt	decayed teeth (deciduous teeth)
DT	decayed teeth (permanent teeth)
e.g.	for example
ENT	ear, nose and throat
ERP	estimated resident population
ESRD	end-stage renal disease
FaCS	Department of Family and Community Services (Commonwealth)
FIM	Family Income Management
ft	filled teeth (deciduous teeth)
FT	filled teeth (permanent teeth)
g	grams
GIS	Geographic Information Systems
GP	general medical practitioner
HACC	Home and Community Care
HCINS	Housing and Community Infrastructure Needs Survey
Hib	Haemophilus Influenza Type B
HIV	Human Immunodeficiency Virus
HMAC	Housing Minister's Advisory Council
HPA	Home Purchase Assistance
HREOC	Human Rights and Equal Opportunity Commission
ICD	International Classification of Diseases
ICD-9	International Classification of Diseases, ninth revision
ICD-10	International Classification of Diseases, tenth revision
ICD-10-AM	International Classification of Diseases, tenth revision, Australian modification
i.e.	that is
IES	Indigenous Enumeration Strategy
IESIP	Indigenous Education Strategic Initiatives Program
IHO	Indigenous Housing Organisation
IHS	Indigenous Health Survey
IPD	Invasive pneumococcal disease
ISDR	indirect standardised death rate
ISS	Indigenous Social Survey
JJ	juvenile justice
MACS	Multifunctional Aboriginal Children's Services

MCATSIA	Ministerial Council for Aboriginal and Torres Strait Islander Affairs
MDS	minimum data set
mm	millimetres
mt	missing teeth (deciduous teeth)
MT	missing teeth (permanent teeth)
n.a.	not available
NACCHO	National Aboriginal Community Controlled Health Organisations
NAGATSIHID	National Advisory Group – Aboriginal and Torres Strait Islander Health Information and Data
NATSIS	National Aboriginal and Torres Strait Islander Survey
NCCH	National Centre for Classification in Health
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NCSDC	National Community Services Data Committee
NCSDD	National Community Services Data Dictionary
NCSIA	National Community Services Information Agreement
NCSIG	National Community Services Information Group
NDA	National Disability Administrators
NDSHS	National Drug Strategy Household Survey
n.e.c.	not elsewhere classified
n.f.d.	not further defined
n.f.p.	not for publication
NHDAMG	National Housing Data Agreement Management Group
NHDD	National Health Data Dictionary
NHIMG	National Health Information Management Group
NHMD	National Hospital Morbidity Database
NHMRC	National Health and Medical Research Council
NHS	National Health Survey
NIHIIC	National Indigenous Housing Information Implementation Committee
NIHIP IWG	National Indigenous Health Information Plan Implementation Working Group
NMDS	National Minimum Data Set
NNDSS	National Notifiable Diseases Surveillance System
NNS	National Nutrition Survey
no.	number
n.p.	not available for publication but included in totals where applicable, unless otherwise stated
NPSU	National Perinatal Statistics Unit
NSW	New South Wales
NT	Northern Territory
OATSIH	Office for Aboriginal and Torres Strait Islander Health (part of CDHAC)
PBS	Pharmaceutical Benefits Scheme
PDS	Public Dental Service
PRA	Private Rent Assistance
Qld	Queensland
RA	Remoteness Area
RAATSICC	Remote Area Aboriginal and Torres Strait Islander Child Care Program
SA	South Australia
SAAP	Supported Accommodation Assistance Program
SADS	South Australian Dental Service
SCATSIH	Steering Committee on Aboriginal and Torres Strait Islander Health
SCRCSSP	Steering Committee for the Review of Commonwealth–state Service Provision

SIGNAL	Strategic Inter-Governmental Nutrition Alliance
SMR	standardised mortality ratio
SMS	substance use service
STI	sexually transmitted infection
Tas.	Tasmania
TB	tuberculosis
THS	Territory Health Services
TSI	Torres Strait Islander
Uni.	University
Vic.	Victoria
WA	Western Australia
WHO	World Health Organisation

EFFECTS OF ROUNDING

Where figures have been rounded, discrepancies may occur between sums of the component items and totals. Published percentages are calculated prior to rounding of the figures and therefore some discrepancy may exist between these percentages and those that could be calculated from the rounded figures.

GLOSSARY

Aboriginal person	A person who identifies himself or herself to be of Aboriginal origin. See also Indigenous.
Aboriginal and Torres Strait Islander Commission (ATSIC) Region	ATSIC Regions are legally prescribed areas for the purposes of administration by the Commission and for the election of members to that Commission. At the time of the 2001 Census, there were 36 ATSIC Regions, which together covered all of Australia.
Administrative data	Data that are routinely collected in the course of general administration. Includes data from the Registrars of Births, Deaths and Marriages and hospital morbidity data.
Age standardisation	To allow for the comparison of populations with different age structures, where required, estimates in this publication are age standardised to the age composition of the total estimated resident population of Australia as at 30 June 1991 for administrative data, and at 30 June 2001 for ABS survey data. The age standardised rate is that which would have prevailed if the studied population had the standard age composition.
Alcohol risk level	Measures related to alcohol consumption vary from survey to survey.

In the 2001 National Health Survey (NHS), risk level was derived from the average daily consumption of alcohol by adults aged 18 years and over, in the seven days prior to interview and are grouped into relative risk levels as defined by the National Health and Medical Research Council (NHMRC) as follows:

CONSUMPTION PER DAY

	Males	Females
Relative risk	*mls*	*mls*
Low	Less than 50	Less than 25
Moderate	50–75	25–50
High	Greater than 75	Greater than 50

It should be noted that risk level as defined by the NHMRC is based on regular consumption levels of alcohol, whereas indicators derived in the NHS do not take into account whether consumption in the reference week was more, less or the same as usual, or whether consumption was regular.

In the 2001 National Drug Strategy Household Survey, risk level was derived form the average weekly consumption of alcohol by persons aged 14 years and over, in the 12 months prior to interview. See AIHW 2003j for further details.

Before/after school care Provides care for school-aged children before and/or after school during the school term.

Body mass index (BMI)	Calculated from reported height and weight by dividing weight (kg) by the square of the height (m). This publication presents BMI in groups which are consistent with recommendations of the National Health and Medical Research Council (NHMRC) (1985) and those of the World Health Organisation (WHO) (1995).

BODY MASS INDEX (NHMRC)

Relative risk	
Underweight	Less than 20
Acceptable	20 to less than 25
Overweight	25 to less than 30
Obese	30 and greater

BODY MASS INDEX (WHO)

Relative risk	
Underweight	Less than 18.5
Acceptable	18.5 to less than 25
Overweight	25 to less than 30
Obese	30 and greater

Bounded Locality See Section of state.

Canadian National Occupancy Standard There is currently no universally accepted definition of overcrowding. This publication refers to the Canadian National Occupancy Standard, used in recent 2001 Census of Population and Housing results, and the 1999 Australian Housing Survey (ABS 2001a).

The criteria are:

- there should be no more than two persons per bedroom
- children less than five years of age of different sexes may reasonably share a bedroom
- children five years of age or older of opposite sex should have separate bedrooms
- children less than 18 years of age and of the same sex may reasonably share a bedroom
- single household members 18 years or over should have a separate bedroom, as should parents or couples.

Canadian National Occupancy Standard *continued*

This differs from the 'proxy occupancy standard' presented in the National Housing Assistance Data Dictionary (AIHW 2001c), which considers households requiring two or more bedrooms to meet the standard to be overcrowded. Standard bedroom requirements for specified households are as follows:

- single adult — 2 bedrooms
- single adult (group) — 1 bedroom per adult
- couple with no children — 2 bedrooms
- sole parent or couple with 1 child — 2 bedrooms
- sole parent or couple with 2 or 3 children — 3 bedrooms
- sole parent or couple with 4+ children — 4 bedrooms.

It is envisaged that the appropriateness of this concept in an Indigenous context will be reviewed by the National Indigenous Housing Information Implementation Committee, in consultation with the National Housing Data Agreement Management Group.

Capital city

All state and territory capital city Statistical Divisions.

Care and protection orders

Children subject to a care and protection order are those 'for whom the community services department has a responsibility as a result of some formal legal order or an administrative/voluntary arrangement. Only orders issued for protective reasons are included' (AIHW 2003b).

Census

A census is a count of a whole population. The Census of Population and Housing measures the number of people in Australia and their key characteristics, at a given point in time. The Australian Bureau of Statistics (ABS) conducts the Census every five years, the last was in August 2001. In this publication the word 'Census' indicates an ABS Census of Population and Housing.

Collection District (CD)

The CD is the smallest geographical area defined in the Australian Standard Geographical Classification (ASGC). It has been designed for use in the Census of Population and Housing as the smallest unit for collection, processing and output of data (except Work Destination Zones). CDs also serve as the basic building block in the ASGC and are used for the aggregation of statistics to larger ASGC areas, and some census-specific areas, such as Commonwealth and State electoral divisions and D-derived Postal Areas (ABS 2001f).

Community Development Employment Projects (CDEP)	The CDEP scheme enables participants (usually members of Aboriginal and Torres Strait Islander communities) to exchange unemployment benefits for opportunities to undertake work and training in activities which are managed by a local Aboriginal or Torres Strait Islander community organisation. The CDEP scheme is funded and supported through the Aboriginal and Torres Strait Islander Commission, which provides grants to participating community organisations to employ community members.
Community health centre	A facility that provides a range of medical and health related services to the community. The centre may also provide advice to people on issues such as sexually transmitted diseases, immunisation and family planning. In remote areas not all of these services may be available, but the centre would usually have nurses, health workers and/or doctors in regular attendance.
Dialysis (haemodialysis, peritoneal dialysis)	A treatment for end-stage renal disease, where the work of the kidneys is performed artificially. In haemodialysis, the patient's blood is passed through a semi-permeable tube where it is cleansed and pumped back into the body. Haemodialysis needs to be performed a few times a week for several hours at a time, either at a hospital/clinic, or at home. In peritoneal dialysis, the patient's abdomen is used instead of the tube. Fluid is passed into the abdomen via a semi-permanent catheter. As the patient's blood is cleansed, the fluid is drained and refilled, using gravity. This takes place 4–5 times daily. Continuous ambulatory peritoneal dialysis, where the patient is able to move around, is the most common form of peritoneal dialysis. It can be performed either at home or in a hospital/clinic.
Discrete Indigenous community	A geographical location with a physical or legal boundary that is inhabited or intended to be inhabited predominantly (more than 50%) by Indigenous people, with housing and infrastructure that is either owned or managed on a community basis.
dmft (infant teeth)	Used to measure the number of decayed, missing or filled deciduous (infant) teeth. It is derived by adding the number of teeth which are decayed, missing or have been filled due to caries (i.e. tooth decay).
DMFT (adult teeth)	Used to measure the number of decayed, missing or filled permanent (adult) teeth. It is derived by adding the number of teeth which are decayed, missing or have been filled due to caries (i.e. tooth decay).

Equivalised income

Equivalence scales are used to adjust the actual incomes of households in a way that enables the analysis of the relative economic wellbeing of people living in households of different size and composition. For example, it would be expected that a household comprising two people would normally need more income than a lone person household if all of the people in the two households are to enjoy the same material standard of living. Adopting a per capita analysis would address one aspect of household size difference, but would address neither compositional difference (i.e. the numbers of adults compared with the numbers of children) nor the economies derived from living together.

When household income is adjusted according to an equivalence scale, the equivalised income can be viewed as an indicator of the economic resources available to a standardised household. For a lone person household, it is equal to income received. For a household comprising more than one person, equivalised income is an indicator of the household income that would be required by a lone person household in order to enjoy the same level of economic wellbeing as the household in question.

In this publication, a 'modified OECD' equivalence scale has been used, the scale widely accepted among Australian analysts of income distribution. This scale allocates 1.0 point for the first adult (aged 15 years and over) in a household; 0.5 for each additional adult; and 0.3 for each child. Equivalised household income is derived by dividing total household income by the sum of the equivalence points allocated to household members. For example, if a household received combined gross income of $2,100 per week and comprised two adults and two children (combined household equivalence points of 2.1), the equivalised gross household income for each household member would be calculated as $1,000 per week. For more information on the use of equivalence scales, see *Income Distribution, Australia, 2000–01*, (cat. no. 6523.0).

Equivalised gross household income

Gross household income adjusted using an equivalence scale. For a lone person household it is equal to income received. For a household comprising more than one person, it is an indicator of the disposable household income that would be required by a lone person household in order to enjoy the same level of economic wellbeing as the household in question. For further information on the calculation of equivalised gross household income, refer to *Income Distribution, Australia, 2000–01* (cat. no. 6523.0).

Income quintiles

Groupings that result from ranking all households or people in the population in ascending order according to their household income and then dividing the population into five equal groups, each comprising 20% of the estimated population.

Dwelling In general terms, a dwelling is a structure which is intended to house people. The exact definition of ‘dwelling’, however, varies slightly between data sources. Within this publication, dwellings are referred to as ‘private dwellings’, as reported in the Census, and ‘permanent dwellings’, as reported in the Community Housing and Infrastructure Needs Survey. The term ‘occupied private dwelling’ is used interchangeably with the term ‘private dwelling’.

- ‘*Private dwellings*’ refer to private dwellings occupied by one or more people. A private dwelling is normally a house, flat or even a room. It can also be a caravan, houseboat, tent, or a house attached to an office, or rooms above a shop. Houses under construction, derelict houses and vacant tents are not counted, nor are hotels, guest houses, prisons, hospitals or other communal dwellings (ABS 2001f).
- ‘*Permanent dwellings*’ refer to buildings designed for people to live in, with fixed walls, roof and doors. They usually have kitchen and bathroom facilities, although this is not necessary provided that these facilities could be built into the dwelling. These dwellings are made from regular building materials and are intended for long term residential use. Dwellings were not considered as permanent unless they had internal walls dividing the living space into separate rooms (ABS 2002d).

Employed In the Census, employed people are those aged 15 years or more who, during the week prior to Census night:

- worked for payment or profit or
- had a job from which they were on leave or otherwise temporarily absent or
- were on strike or stood down temporarily or
- worked as unpaid helpers in a family business.

Estimated resident population (ERP) The official Australian Bureau of Statistics estimate of the Australian population. The ERP is based on results of the Census of Population and Housing and is compiled as at 30 June of each census year, and is updated quarterly between censuses. These intercensal estimates of the resident population are revised each time a population census is taken. Rates are calculated per 1,000 or 100,000 mid year (30 June) ERP.

The Indigenous ERP is considered to be experimental because satisfactory data on births, deaths and migration are not generally available, and because of the volatility of counts of the Indigenous population between censuses. See Chapter 2 for more details.

Ex-nuptial births Births to parents who are not married.

Family	A family is defined by the Australian Bureau of Statistics as two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, and who are usually resident in the same household. Some households contain more than one family. Non-related persons living in the same household are not counted as family members (unless under 15 years of age).
Family day care	A network of caregivers who provide care for children aged 0–12 years in the carer's own home.
Fertility rate	Represents the number of children a woman would bear during her lifetime if she experienced current age-specific fertility rates throughout her reproductive life.
Fetal death rate	The number of fetal deaths in a year per 1,000 total births in the same year.
Fetal death (stillbirth)	Death prior to the complete expulsion or extraction from its mother of a product of conception of 20 or more completed weeks of gestation or of 400 grams or more of birthweight (criteria used for the state and territory perinatal collections).
First aid clinic	A facility where an individual can receive life-saving or pain-relieving primary aid.
Health Care Card	These cards provide for medical and/or related services free of charge or at reduced rates to recipients of Commonwealth government pensions or benefits.
High level residential aged care	Residential aged care services delivered to residents with high levels of dependency. These are approximately equivalent to the services delivered by nursing homes in the past.
High volume form	Most Supported Accommodation Assistance Program (SAAP) agencies use the general client form to collect data for the SAAP Client collection. This form has 29 questions. 'High volume' agencies have a large number of clients and a high client throughput. These agencies use a 'high volume' client form with a subset of questions from the general client form. Generally, high volume agencies include those providing accommodation to more than 50 people per night, telephone referral agencies, day centres and information and referral centres.
Hospital separation	Refers to the process by which an admitted patient completes an episode of care in hospital, by being discharged, transferring to another hospital or care facility, or dying. A hospital separation record refers to a patient's administrative record on discharge from hospital. The record gives demographic details such as age, sex and Indigenous status, as well as reasons for hospitalisation, and treatments or procedures performed.

Household A household is defined as a group of two or more related or unrelated people who usually reside in the same dwelling, who regard themselves as a household, and who make common provision for food or other essentials for living; or a person living in a dwelling who makes provision for his/her own food and other essentials for living, without combining with any other person (i.e. a lone-person household).

For the purpose of this, and other Australian Bureau of Statistics 2001 Census of Population and Housing related publications, households are separated into those containing at least one Indigenous person(s), and Other households:

- '*Households with Indigenous person(s)*' include households in occupied private dwellings with at least one resident who has been identified as Indigenous, and who was enumerated at home on Census night. The other residents of the household may have been identified as Indigenous, non-Indigenous, or have Indigenous status unknown.
- '*Other households*' include households in occupied private dwellings not identified as 'households with Indigenous person(s)' as discussed above, because no residents were identified as Indigenous on Census night. These households may include non-Indigenous residents and residents whose Indigenous status was unknown.

This differs from the scope of households used in previous editions of this publication (ABS and AIHW 2001). Previously, an Indigenous household was a family household where any family in the household was defined as an Indigenous family. An Indigenous family was one in which either the reference person or his/her spouse was of Aboriginal, Torres Strait Islander or both Aboriginal and Torres Strait Islander origin. In the Australian Housing Survey 1999, an Indigenous household was defined as any household containing at least one person of Aboriginal and/or Torres Strait Islander origin aged 15 years and over.

Household income Household income is the sum of the personal incomes of each resident aged 15 years or more present in the household. In the Census, persons who were temporarily absent on Census night, had nil or negative income, or did not state their income, are not included in the census tally of household income.

Households with Indigenous person(s) See Household.

Illicit drugs Refers to a variety of substances that are either illegal to possess, or legally available, but used inappropriately. In the 2001 National Drug Strategy Household Survey, the term 'illicit drugs' included marijuana/cannabis, pain-killers/analgesics, tranquillisers/sleeping pills, steroids, barbiturates, inhalents, heroin, methadone, other opiates, amphetamines, cocaine, hallucinogens, ecstasy/designer drugs, and injected drugs.

Incidence	The number of new cases of a particular illness commencing during a given period in a specified population (see also Prevalence).
Income	Refers to regular gross weekly income, which is the income before tax, superannuation, health insurance, or other deductions are made. Gross income includes family allowance, family allowance supplement, pensions, unemployment benefits, student allowances, maintenance (child support), superannuation, wages, overtime, dividends, rents received, interest received, business or farm income (less operation expenses) and workers compensation received.
Income unit — Commonwealth Rent Assistance (CRA)	A CRA income unit is defined as either a single person or a couple with or without dependants. Children over 16 years of age are not regarded as dependent unless they are full-time secondary students aged under 18 years and do not receive social security payments. An Indigenous income unit is defined as an income unit where either the customer or partner has identified as being an Aboriginal or Torres Strait Islander.
Independent housing	Refers to housing which is categorised as owner-occupied, a rooming house, hostel, hotel or private board, public or community housing, private rental, living rent-free or in a car, tent, park, street or squat.
Indigenous person	A person who identifies himself or herself to be of Aboriginal, Torres Strait Islander or both Aboriginal and Torres Strait Islander origin. See also Aboriginal, or Torres Strait Islander.
Indigenous household	An Indigenous household is one that contains one or more Indigenous people. See also Household.
Indigenous Housing Organisation	Any Aboriginal or Torres Strait Islander organisation which is responsible for managing housing for Indigenous people. This includes community organisations, such as Resources Agencies and Land Councils, that have a range of functions, provided that they manage housing for Indigenous people.
Indigenous income unit	An income unit in which the client of a community services program, or their partner, has identified as being of Aboriginal or Torres Strait Islander descent. See Income unit.
Infant mortality	Deaths of children under one year of age.
Inner Regional Australia	See Remoteness Area. This term has been abbreviated to 'Inner Regional' in graphs presented within this publication.
Jurisdiction	As used in this publication, refers to the states and territories of Australia.
Koori	The preferred term used to describe Indigenous people in some parts of south-eastern Australia.
Labour force status	Identifies whether a person aged 15 years or over is employed, unemployed, or not in the labour force. See also Employed, Unemployed, Not in the labour force.

Landlord type	For rented dwellings, this variable provides information on the person or organisation from whom the dwelling is rented. The landlord is classified as: Private Landlord; Real Estate Agent; state–territory Housing Authority; Community or Co-operative Housing Group; Employer-Government; Employer-Other; or Other.
Life tables	A life table is a statistical model used to show the life expectancy and hence levels of mortality at different ages. It depicts the mortality experience of a hypothetical group of newborn babies throughout their lifetimes. Life tables may be complete or abridged, depending on the age interval used in their compilation. Complete life tables such as those for the Australian population contain data by single years of age, while abridged life tables, such as those for the Indigenous population, contain data for five-year age groups. Life tables are presented separately for each sex.
Long-day care centre	A day care centre that is open for at least eight hours a day and at least 48 weeks a year. Caters mostly for under school-age children whose parents are in the paid workforce, are looking for work, or are in education or training.
Long-term health condition	Refers to medical conditions (illness, injury or disability) which have lasted at least six months, or which the respondent expects to last for six months.
Low birthweight	Birthweight of less than 2,500 grams.
Major Cities of Australia	See Remoteness Area. This term has been abbreviated to 'Major Cities' in graphs presented within this publication.
Median	Median is a midpoint of a distribution. Half the values occur above this point and half below.
Median income	Median income is the midpoint of the distribution of income.
Morbidity	Any departure, subjective or objective, from a state of physiological or psychological wellbeing.
Multiple causes of death	All morbid conditions, diseases and injuries entered on the death certificate. These include those involved in the morbid train of events leading to death which were classified as either the underlying cause, the immediate cause, or any intervening causes and those conditions which contributed to death, but were not related to the disease or condition causing death. For deaths where the underlying cause was identified as an external cause (injury or poisoning) multiple causes include circumstances of injury, the nature of injury as well as any other conditions reported on the death certificate.
Neonatal death	Death of a liveborn infant within 28 days of birth.
Neonatal mortality rate	The number of neonatal deaths in a year per 1,000 live births in the same year.

Non-remote	See Remote.
Non-school educational qualification	This variable describes the level of the highest non-school educational qualification gained (e.g. bachelor degree, diploma, etc.). Level of attainment is coded as defined by the Australian Bureau of Statistics Classification of Qualifications.
Not in the labour force	Includes people aged 15 years or more who were neither employed nor unemployed. This category includes people who were retired, pensioners and people engaged in home duties. See also Employed, Unemployed, Labour force status.
Nuptial births	Births to parents who are married.
Obese	See Body mass index.
Occasional care	Provides care mainly for under school-age children. These services cater mainly for families who require short-term care for their children.
Occupation	In the Census, this variable describes the main job held by employed people (aged 15 years and over) during the week prior to Census night.
Other households	See Household.
Other Territories	Comprises Christmas Island, Cocos (Keeling) Islands, and Jervis Bay Territory.
Outer Regional Australia	See Remoteness Area. This term has been abbreviated to 'Outer Regional' in graphs presented within this publication.
Own account workers	An own account worker is a person who operates his/her own unincorporated economic enterprises or engages independently in a profession or trade and hires no employees. This category was called 'Self-employed' in the 1991 Census.
Participation rate	Number of persons in the labour force (i.e., employed plus unemployed) expressed as a percentage of the population aged 15 years and over. The participation rate is calculated excluding those who did not state their labour force status. See also Labour force status, Employed, Unemployed, Not in the labour force.
Perinatal death/mortality	A fetal or neonatal death.
Perinatal mortality rate	The number of perinatal deaths per 1,000 total births in the same year.
Permanent dwelling	See Dwelling.
Place of enumeration	The place where a person was located when counted on Census night.
Prevalence	The number of instances of a specific disease present in a given population at a designated point in time (see also Incidence).
Principal diagnosis	The diagnosis established to be chiefly responsible for a patient's hospitalisation.

Private dwelling See Dwelling.

Procedure (hospital) Procedures encompass surgical procedures and also non-surgical investigative and therapeutic procedures such as x-rays and chemotherapy. Because a procedure is not undertaken every time a patient visits hospital, the number of hospital separations always exceeds procedures recorded.

Reference person The reference person in the Census is the person who is used as the basis for determining the familial and non-familial relationships within a household. It is usually the person identified as Person 1 on the Census Household form.

Remote The term ‘Remote’ is used in this publication to indicate those respondents living in areas that lie within either the ‘Very Remote Australia’ or ‘Remote Australia’ categories of the Australian Standard Geographical Classification Remoteness structure (see Remoteness Area). Non-remote areas are those that lie within the ‘Major Cities of Australia’, the ‘Inner Regional Australia’ and the ‘Outer Regional Australia’ categories.

The term may also refer to the Remoteness Area classification ‘Remote Australia’ when presented in the context of other Remoteness classifications (see Remoteness Area).

Remote Australia See Remoteness Area. This term has been abbreviated to ‘Remote’ in graphs presented within this publication.

Remoteness Area Within a state or territory, each Remoteness Area represents an aggregation of non-contiguous geographical areas which share common characteristics of remoteness, determined in the context of Australia as a whole.

The delimitation criteria for Remoteness Areas are based on the Accessibility/Remoteness Index of Australia (ARIA) developed by the Commonwealth Department of Health and Aged Care and the National Key Centre for Social Applications of GIS. ARIA measures the remoteness of a point based on the physical road distances to the nearest Urban Centre in each of the five size classes. Therefore, not all Remoteness Areas are represented in each state or territory.

There are six Remoteness Areas in this structure:

- Major Cities of Australia: Collection Districts (CDs) with an average ARIA index value of 0 to 0.2
- Inner Regional Australia: CDs with an average ARIA index value greater than 0.2 and less than or equal to 2.4
- Outer Regional Australia: CDs with an average ARIA index value greater than 2.4 and less than or equal to 5.92
- Remote Australia: CDs with an average ARIA index value greater than 5.92 and less than or equal to 10.53

Remoteness Area *continued*

- Very Remote Australia: CDs with an average ARIA index value greater than 10.53
- Migratory: composed of off-shore, shipping and migratory CDs. These data have not been presented separately in this publication.

For more information on how ARIA is defined see ABS 2001f and ABS 2001g.

Risk factor An aspect of lifestyle or behaviour, a health condition, an environmental exposure, or an inborn or inherited characteristic, known to be associated with health-related conditions considered important to prevent.

Rural Rural localities and towns with a total population of under 1,000 people. Most remote Aboriginal and Torres Strait Islander communities are included in this category. See also Section of state.

'Rural' also forms part of the Rural, Remote and Metropolitan Areas Classification (RRMA). RRMA has been used to classify the geographic location of medical practitioners, as reported in Chapter 4. In the classification, 'rural' zone includes small rural centres (urban centre population between 10,000 and 24,999), large rural centres (urban centre population between 25,000 and 99,000), and other rural centres (urban centre population less than 10,000), with each having an index of remoteness less than 10.5. More information on RRMA is available elsewhere (Department of Primary Industries and Energy and Department of Human Services and Health 1994).

Section of state Within a state or territory, each Section of state represents an aggregation of non-contiguous geographic areas of a particular urban/rural type.

The Sections of state within each state and territory are:

- Major Urban — all urban centres with a population of 100,000 and over
- Other Urban — all urban centres with a population of 1,000 to 99,999
- Bounded Locality — all population clusters of 200 to 999 people
- Rural Balance–-the rural remainder of the state or territory.

An additional category (offshore, shipping and migratory Collector Districts) includes people who were enumerated on off-shore oil rigs, drilling platforms and the like, aboard ship in Australian waters, or on an overnight journey by train or bus. There is one such category for each state and the Northern Territory. This category is not used in this publication.

Self-assessed health status Refers to respondents' perception of own general health status. In the National Health Survey and the National Aboriginal and Torres Strait Islander Survey, respondents were asked to rate their health as excellent, very good, good, fair, or poor.

Smoker status The definitions of smoking vary slightly from survey to survey.

In the 2001 National Health Survey, smoking status was collected from adults aged 18 years and over, and referred to regular smoking (at the time of the interview) of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excluded chewing tobacco and smoking of non-tobacco products. Categorised as:

- current regular (daily) smoker
- current smoker not regular
- ex-regular smoker
- never smoked regularly.

'Regular smoking' was defined as one or more cigarettes (or pipes or cigars) per day on average as reported by the respondent.

In the 2001 National Drug Strategy Household Survey, smoking status was collected from all persons aged 14 years and over, and categorised as:

- daily smoker
- occasional smoker
- ex-smoker
- never smoked.

Definitions of daily or occasional smoker were not limited to specific amounts per day. The remaining categories were for those respondents reporting no longer smoking, or having never smoked at least 100 cigarettes (manufactured and/or roll-your-own) or the equivalent amount of tobacco in their life.

Torres Strait Islander A person who identifies himself or herself to be of Torres Strait Islander origin. See also Indigenous.

Underlying cause of death The disease or injury which initiated the morbid train of events leading directly to death. Accidental and violent deaths are classified to the external cause, that is, to the circumstance of the accident or violence which produced the fatal injury rather than to the nature of the injury.

Unemployed In the Census, unemployed people are those who, during the week prior to Census night, did not have a job but were actively looking for work (either full-time or part-time) and were available to start work.

Unemployment rate The unemployment rate is the number of unemployed people expressed as a percentage of the labour force (i.e. employed plus unemployed persons).

Urban See Section of state.

Usual daily serves of fruit	Refers to the number of serves of fruit (excluding drinks and beverages) usually consumed each day, as reported by the respondent. A serve is approximately 150 grams of fresh fruit or 50 grams of dried fruit. Low usual daily fruit intake is defined as eating one serve or less per day, which includes not eating fruit at all.
Usual daily serves of vegetables	Refers to the number of serves of vegetables (excluding drinks and beverages) usually consumed each day, as reported by the respondent. A serve is approximately half a cup of cooked vegetables or one cup of salad vegetables — equivalent to approximately 75 grams. Low usual daily vegetable intake is defined as eating one serve or less per day, which includes not eating vegetables at all.
Usual residence	Refers to the place where the person has lived or intends to live for a total of six months or more, as indicated during Census collection.
Very Remote Australia	See Remoteness Area. This term has been abbreviated to ‘Very Remote’ in tables and graphs presented within this publication.

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