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

1999

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ABORIGINAL AND TORRES STRAIT ISLANDER HEALTH AND WELFARE INFORMATION:
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INQUIRIES

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PREFACE

This publication is the second edition of *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples,* a two-yearly series which provides a comprehensive statistical overview, largely at the national level, of Indigenous health and welfare. It is designed to play a companion role to the Australian Institute of Health and Welfare's flagship publications dealing with the whole Australian population, *Australia's Health* and *Australia's Welfare*, which are published two-yearly in alternate years.

The publication covers a range of topics, including aspects of the demographic, social and economic context of health and wellbeing, the use of welfare and community services, risk factors for poor health, health service issues, and the morbidity and mortality of Indigenous Australians. Most of the information in this publication refers to the Indigenous population as a whole, but some limited information about the health and wellbeing of Torres Strait Islanders is also provided.

It is not possible in this publication to give a complete account of all the issues that are relevant to the health and wellbeing of Indigenous Australians. Some underlying social and economic conditions are beyond the scope of this publication and some important areas of health and wellbeing are inadequately covered because the necessary statistics and information are either not collected or are unreliable. The publication highlights recent developments with respect to information, data quality issues and future directions relating to health and welfare statistics about Aboriginal and Torres Strait Islander Australians.

The publication has been prepared by the Aboriginal and Torres Strait Islander Health and Welfare Information Unit of the Australian Bureau of Statistics' National Centre for Aboriginal and Torres Strait Islander Statistics in Darwin. Joan Cunningham was the principal author. The Unit is a joint program of the Australian Bureau of Statistics and the Australian Institute of Health and Welfare and is supported by the Office for Aboriginal and Torres Strait Islander Health within the Commonwealth Department of Health and Aged Care.

We are grateful to the large number of people and organisations who supplied information and statistics and granted permission for their use in this publication. We also wish to thank the members of the Aboriginal and Torres Strait Islander Health and Welfare Information Unit's Advisory Committee and their representatives, staff at the Australian Institute of Health and Welfare, the Commonwealth Department of Health and Aged Care and the Australian Bureau of Statistics, and a number of individual experts, especially Ms. Trish Angus, Dr. John Condon, Dr. Beverly Sibthorpe and Dr. Neil Thomson, for reviewing the manuscript prior to publication. Their comments and suggestions have been most helpful and have strengthened this publication.

As this publication is a joint project, both the Australian Bureau of Statistics and the Australian Institute of Health and Welfare have catalogued it. The Australian Bureau of Statistics catalogue number is 4704.0; the Australian Institute of Health and Welfare catalogue number is IHW3.

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SUMMARY

SCOPE

This publication presents information about the health and welfare of Aboriginal and Torres Strait Islander peoples in Australia. The information comes mainly from national surveys and censuses and from administrative collections of various Commonwealth, State and Territory agencies. (The sources for the figures cited in this summary can be found in the main body of the text.) The intent is primarily to present a broad picture at the national level and to supplement this, where possible and useful, with information on variation by region and by State or Territory. Most of the information in this report is about the Indigenous population as a whole, but a separate chapter is included which provides information about Torres Strait Islanders as distinct from Aboriginal people.

AVAILABLE DATA AND RECENT DEVELOPMENTS

The available data are limited by the quality of identification of Indigenous people in administrative data collections, by uncertainties in the estimation of the size and composition of the Indigenous population, and by issues related to the collection of individual and household survey data about Indigenous people. Thus precise estimates of the differences between the Indigenous and non-Indigenous populations are not always available. In addition, changes over time in the availability and quality of data make the assessment of trends extremely difficult and potentially misleading.

A number of important initiatives have taken place recently which have the potential to lead directly or indirectly to improvements in the quality and availability of information about the health and wellbeing of Indigenous people. These initiatives include the development and implementation of a National Aboriginal and Torres Strait Islander Health Information Plan; performance indicators and strategic framework agreements for Indigenous health in each jurisdiction; the endorsement of the National Community Services Information Development Plan, which gives priority to information about the Indigenous population; the development of a draft National Indigenous Housing Information Agreement; collaborative work to improve the quality of identification in administrative collections; and the Australian Bureau of Statistics review of its household survey program together with the development of a strategy for Indigenous statistics.

THE DEMOGRAPHIC, SOCIAL AND ECONOMIC CONTEXT

In 1996, Indigenous people comprised about 2.1% of the Australian population. The increase between 1991 and 1996 in the number of people who were identified as Indigenous on census forms was greater than can readily be explained by normal demographic factors such as births, deaths and migration.

THE DEMOGRAPHIC, SOCIAL AND ECONOMIC CONTEXT *continued*

The Indigenous population is younger than the Australian population as a whole (median age 20.1 years versus 34.0 years, respectively in 1996), and Indigenous people are more likely than other Australians to live outside of urban areas (about one in four versus about one in seven in 1996). Although Indigenous people represent a higher proportion of the local population in the northern and central parts of the country, the majority of Indigenous people live in the south-eastern part of Australia.

As a group, Indigenous people are disadvantaged relative to other Australians with respect to a number of socioeconomic factors, and these disadvantages place them at greater risk of ill health and reduced wellbeing. For example, in 1996, Indigenous adults were less likely than non-Indigenous adults to have a post-school educational qualification (11% versus 31%). The unemployment rate at the time of the 1996 Census was higher for Indigenous adults (23%) than for non-Indigenous adults (9%), and the median weekly income was lower for Indigenous males ($189) and females ($190) than for their non-Indigenous counterparts ($415 for males and $224 for females). Indigenous people were also much less likely than other Australians to own their home. Only 31% of Indigenous households lived in homes that were owned or being purchased by their occupants, compared with 71% of other Australian households.

WELFARE SERVICES AND CORRECTIONAL SERVICES

Although there are differences by State and Territory, Indigenous children are more likely than non-Indigenous children to be the subjects of substantiated cases of abuse and neglect (with rates about 2–8 times higher in most jurisdictions in 1997–98), under care and protection orders (about 4 times higher in 1998) and on out-of-home placements (almost 6 times higher in 1998). Indigenous children are also over-represented in the juvenile justice system, with about 40% of children in ‘corrective institutions for children’ identified as Indigenous in the 1996 Census. Indigenous adults are more likely than non-Indigenous adults to have contact with legal and correctional services, with almost 19% of the adult prison population in 1997 being identified as Indigenous. The imprisonment rate for Indigenous adults was over 14 times that for non-Indigenous adults.

Indigenous people are also over-represented among clients of the Supported Accommodation Assistance Program (SAAP), which provides services for people who are homeless or at risk of being homeless. Indigenous people represented about 12% of adult clients of the SAAP in 1996–97, despite comprising less than 2% of the total adult population.

WELFARE SERVICES AND CORRECTIONAL SERVICES *continued*

Little is known about the level of disability in the Indigenous population, but the available information suggests that Indigenous people use disability support services at least as much, in proportional terms, as non-Indigenous people. The data are limited by incomplete identification of Indigenous people. Information about the use of aged care services by Indigenous people is also limited by poor identification of Indigenous people in the data collected from nursing homes, hostels and other facilities. The poor health and lower life expectancy experienced by many Indigenous people makes them more likely to need access to aged care at younger ages than is the case for non-Indigenous people.

HEALTH RISK FACTORS

Some of the differences between the health of Indigenous and non-Indigenous Australians can be attributed to the health risks to which Indigenous people are more likely to be exposed, such as poor living conditions, poor nutrition, smoking, consumption of alcohol at hazardous levels, the use of illicit drugs and other harmful substances, and exposure to violence.

Indigenous people are more likely than other Australians to live in improvised and/or over-crowded dwellings. Almost a third of all households living in improvised dwellings in Australia in 1996 were Indigenous households, and nearly half of all dwellings with 10 or more people living in them were occupied by Indigenous households. Almost 7% of Indigenous people in Australia lived in dwellings with 10 or more residents in 1996, which is more than 50 times greater than the proportion of other Australians living in such conditions.

Indigenous adults are more likely to smoke and more likely to be categorised as obese than other Australian adults, but less likely to report drinking alcohol. Those who do drink are more likely than their non-Indigenous counterparts to do so at hazardous levels, however.

Indigenous people are more likely than non-Indigenous people to be victims of violence and to suffer intentional injuries (those inflicted on purpose by another person) resulting in hospitalisation. Almost half (46%) of all hospital separations among females for intentional injuries in 1996–97 were of women identified as Indigenous. Indigenous people are also over-represented in intimate partner homicides, with 20% of victims and 22% of offenders in 1989–96 identified as Indigenous.

HEALTH SERVICES: PROVISION, ACCESS AND USE

Based on available data, it is estimated that about 2.2% of total health expenditure in Australia in 1995–96 was spent on health services to Indigenous people. The estimated expenditure per person was $2,320 for Indigenous people and $2,163 for non-Indigenous people. The differential in expenditure is smaller than the differential in various measures of health status, such as those described in the next section. There were differences in the pattern of service use between the Indigenous and non-Indigenous populations, with the Indigenous population having a greater reliance on public hospitals and community health services, and less on private hospitals, Medicare, the Pharmaceutical Benefits Scheme (PBS) and nursing homes, than the non-Indigenous population. Medicare and the PBS accounted for over a third (36%) of government expenditure on non-Indigenous people, but just 5% of expenditure on Indigenous people. The per person expenditure on Medicare and PBS was only about one-fifth as much for Indigenous people as for non-Indigenous people.

Indigenous people face a number of potential barriers to accessing services, such as distance, availability of transport, access to GPs and pharmaceuticals, the proximity of culturally appropriate services, proficiency in English, the extent of involvement of Indigenous people in the delivery of services, private health insurance cover, and economic disadvantage.

Indigenous people report that Indigenous involvement in the provision of health services is important to them, but the proportion of Indigenous people working in health-related occupations in 1996 was only about half that for the non-Indigenous population. Indigenous people were more likely than other Australians to be employed in community service-related occupations, however. These same patterns are reflected in higher education enrolments for health and welfare-related courses.

MEASURES OF HEALTH STATUS

Despite limitations in the data which are likely to result in under-estimation of the rates of illness, hospitalisation and death, there is strong evidence that Indigenous people continue to suffer a much greater burden of ill health than do other Australians.

In 1991–96, life expectancy at birth was estimated to be 56.9 years for Indigenous males and 61.7 years for Indigenous females, compared with all-Australian estimates of 75.2 years for males and 81.1 years for females.

Indigenous Australians die at younger ages than do non-Indigenous Australians, and this is true for almost every type of disease or condition for which information is available. In 1995–97, in Western Australia, South Australia and the Northern Territory combined, over half of the deaths among Indigenous males and about four in ten deaths of Indigenous females occurred before age 50. (The quality of identification of Indigenous deaths in other jurisdictions was not considered adequate to allow for reporting.) Among non-Indigenous people in the same jurisdictions, however, most deaths (73% of male deaths and 84% of

MEASURES OF HEALTH STATUS *continued*

female deaths) occurred among people aged 65 or over. The age-specific death rates for Indigenous males and females exceeded those of their non-Indigenous counterparts in every age group, but the differences were greatest in relative terms among those aged 35–54 years. The death rates in this age group were 6–8 times higher for Indigenous males and females than for their non-Indigenous counterparts.

For all causes of death combined in Western Australia, South Australia and the Northern Territory in 1995–97, there were about three times more deaths than would be expected among Indigenous males and females if Australian death rates applied. Circulatory diseases, respiratory disease, injury, endocrine diseases and cancer were responsible for about three out of every four deaths among Indigenous people in these jurisdictions.

The health disadvantage of Indigenous Australians begins early in life and continues throughout the life cycle. On average, Indigenous mothers give birth at a younger age than non-Indigenous mothers. In most States and Territories, their babies are about twice as likely to be of low birth weight and more than twice as likely to die at birth than are babies born to non-Indigenous mothers.

Indigenous people were more likely to be hospitalised than other Australians in 1996–97, but the exact amount of the excess is impossible to determine due to under-identification of Indigenous people in hospital records. Respiratory disease and injury were among the most common causes of hospitalisation for both Indigenous males and Indigenous females, but dialysis accounted for a greater proportion of hospital admissions among people identified as Indigenous (22% for dialysis versus 8–13% for respiratory disease and injury). Almost 40% of all procedures performed in hospital among patients identified as Indigenous in 1996–97 were haemodialysis procedures, compared with less than 10% of procedures among non-Indigenous patients.

Although there are difficulties in determining the exact extent of the problems, Indigenous people are more likely to be hospitalised for and/or die from conditions which are indicators of mental illness, such as self-harm, substance misuse, and suicidal behaviour. They are more likely to be at risk of reduced mental and emotional wellbeing due to such factors as violence, removal from family, poverty, and racism.

The quality of identification of Indigenous people in cancer registrations and communicable disease notifications is often unsatisfactory, but the available evidence suggests higher rates of death from cancer and a higher burden of a range of communicable diseases for Indigenous people.

There is only limited information about illnesses and conditions which do not result in hospitalisation or death, but which may result in reduced quality of life. Among people living in non-remote areas who were interviewed in the 1995 National Health Survey, Indigenous people

MEASURES OF HEALTH STATUS *continued*

were more likely than non-Indigenous people to report a variety of long-term health conditions, such as asthma and diabetes. Many illnesses and conditions may be treated at health clinics or doctors' surgeries, but data from such sources are not yet available on a national, State or regional level (although progress is being made in this area).

The information 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 people. 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.

CHAPTER 1 INTRODUCTION

AIM OF THIS PUBLICATION

This publication is the second in a series of reports on the health and welfare of Australia's Indigenous peoples. It draws on a number of different data sources to provide a comprehensive statistical overview in a single volume. The underlying aim of the series is to provide statistics and information which, with the publication of future editions, will allow the monitoring of changes in Indigenous health and welfare over time. This will inform the public and professionals alike about our progress as a nation in tackling this important social issue. For reasons discussed further on in this chapter (under Data Quality), however, the monitoring of trends in the health and welfare of Indigenous Australians is not a straightforward task at present.

DEFINING HEALTH AND WELFARE

The World Health Organization (1946) defines health as 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'. While this definition has an implicit focus on the individual, the health and wellbeing of the whole community is also very important for Indigenous peoples. The National Aboriginal Health Strategy Working Party (1989, p. x) defined health in the following way: 'Not just the physical well-being of the individual but the social, emotional and cultural well-being of the whole community'.

Welfare can mean anything from the wellbeing of an individual or society to the system of welfare services and assistance (AIHW 1995a). Welfare services as set out in the *Australian Institute of Health and Welfare Act 1987* (C'wlth) include aged care services, child care services, services for people with disabilities, houing assistance, child welfare services and other community services (AIHW 1995a). This publication includes information on welfare services as well as on measures of social and economic wellbeing, such as education, employment, income and living conditions.

SCOPE

This publication begins by examining the demographic, social and economic context of health and wellbeing for Indigenous people (chapter 2), as well as the social and welfare services that are intended to reduce disadvantage and/or the consequences of disadvantage and ensure a minimum standard of living for all (chapter 3).

This is followed by an investigation of a number of behavioural and other factors which may affect health and wellbeing in a negative or positive way, such as living conditions, nutrition, cigarette smoking, hazardous consumption of alcohol, the use of illicit drugs and other substances, and interpersonal violence (chapter 4). These factors generally represent the actions of individuals or small groups, but decisions to take (or avoid) such actions do not occur within a vacuum. That is, the ability to make healthy decisions is affected by the social and economic circumstances in which people find themselves, as well as their health-related knowledge and understanding.

The publication then turns to a discussion of Indigenous peoples' access to and use of services (chapter 5). Physical, economic and cultural barriers are examined, as is the provision of services to Indigenous people.

Information on a range of health indicators is presented in the chapters on mothers and babies (chapter 6), ill health (chapter 7) and mortality (chapter 9). A special chapter on kidney disease (chapter 8) is also included in this edition. Kidney disease is more common in the Indigenous population than among other Australians. It can cause reduced quality of life among patients and their carers, it is expensive to treat, and it appears to be increasing in at least some communities. Perhaps more important than kidney disease itself, however, is the hypothesised relationship between it and a range of diseases and conditions more commonly encountered among Indigenous people, such as diabetes, hypertension, obesity, infectious diseases and low birthweight.

Separate information about people of Torres Strait Islander origin is often difficult to obtain, so a chapter is included which presents some of the available information about this 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 with respect to information, 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 the scope of this publication. 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 people. 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.

The problems and health risks faced by Indigenous people are not uniform and affect people of different age groups and living in different areas in different ways. This publication tries to capture some of the wide variety of experiences and situations within the Indigenous population. Comparisons are also made between Indigenous and non-Indigenous Australians wherever the completeness and availability of the data allow (see chapter 11).

DATA QUALITY

This publication draws attention to a number of deficiencies in the data available and highlights where more effort is needed to improve the quality and completeness of information. Among the most important issues of data quality are: the identification of Aboriginal and Torres Strait Islander people, and how this is implemented in practice; estimation of the size and composition of the Indigenous population; and issues related to the collection of individual and household survey data about Indigenous people. All of these issues are being actively investigated by the Aboriginal and Torres Strait Islander Health and Welfare Information Unit and other groups within the Australian Bureau of Statistics, the Australian Institute of Health and Welfare, and other organisations (for more information, see chapter 11).

Although one of the underlying aims of this series of publications is to monitor changes in health and welfare over time, this cannot be done satisfactorily at present, except in a few areas. This is because the assessment of trends requires comparability over time in the quality and availability of the data. With respect to data about Indigenous Australians, this means a requirement for highly accurate and stable identification of Indigenous people in administrative data collections; stable population estimates; and repeated surveys providing accurate data for all sections of the Indigenous population.

High and stable accuracy of Indigenous identification in administrative collections has not yet been achieved. Many collections and/or jurisdictions do not have adequate identification to allow for national reporting. For example, the Australian Bureau of Statistics currently publishes detailed death statistics for Indigenous people only for Western Australia, South Australia and the Northern Territory. More information about this issue is presented in chapter 11.

The stability of Indigenous population estimates is also uncertain. The Australian Bureau of Statistics refers to its Indigenous population estimates and projections as ‘experimental’ because adequate data on births, deaths and migration are not available. (This is related to the quality of identification in administrative collections discussed above.) In addition, there is ‘significant intercensal volatility in census counts’ of Indigenous people (ABS 1998a, p. 3). As discussed in chapters 2 and 11, the number of people counted in the 1996 Census who identified themselves as Indigenous was much greater than the number counted in the 1991 Census, but only about half of this difference could be explained by natural increase (Ross 1999). As a result, there are large differences in some areas (especially in the south-eastern States) between what had previously been projected for 1996 (based on 1991 Census figures) and what was actually observed.

Two sets of experimental Indigenous population projections for 1997–2006 (based on 1996 Census results) have now been calculated using the alternative assumptions of: no change in the propensity of people to identify as Indigenous on their census form; and a change of the same magnitude as that which was observed between 1991 and 1996 (ABS 1998b). It will not be known until after the 2001 Census which of these assumptions is closer to the truth. In the meantime, analysts trying to calculate rates of health events will have to decide which population figure to use as the denominator. The interpretation of any such rate may change depending on the decision made about the denominator. (Choosing a denominator is less of a problem for census years because the estimate based on the same year's census results should be used.) The differences between the two sets of population projections becomes greater as we move away from the 1996 Census, and the problem is compounded when trends, rather than rates for a single time period, are estimated (Cunningham 1998).

Finally, most survey-based information about Indigenous people (such as that presented in chapter 4) has only been collected on one occasion. For example, the 1995 National Health Survey was the first to allow publishable estimates for the Indigenous population (albeit only for non-remote areas). Data from this and other surveys (such as the 1994 National Aboriginal and Torres Strait Islander Survey) provide information about a single time period or point in time, and no assessment of trends is possible until such surveys are repeated.

Serious as these limitations are, however, they should not be a reason for postponing regular reporting on Indigenous health and wellbeing or for not attempting to assess trends over time where possible. Work to improve the accuracy and availability of data is ongoing, and progress is being made in some areas (see chapter 11). Reporting on trends will be incorporated into the publications in this series as the quality and availability of the data allow.

CHAPTER 2

THE DEMOGRAPHIC, SOCIAL AND ECONOMIC CONTEXT

INTRODUCTION

This chapter provides information from the 1996 Census about the demographic, social and economic characteristics of Australia's Indigenous people in order to provide a context for the health and welfare information which follows.

DEMOGRAPHY

Australia's Aboriginal and Torres Strait Islander population was estimated to be 386,049 at 30 June 1996, a figure which represented 2.1% of the total Australian population. The number of Indigenous people counted in the Census increased by 40,668 between 1991 and 1996. More information about the estimation of the Indigenous population is presented in inset 2.1.

About half of the increase in Indigenous population counts from 1991 to 1996 can be readily explained by births, deaths, coding changes or migration. Factors which may help to explain the remaining increase include changes in the rate at which children with only one Indigenous parent are identified as Indigenous; changes in the propensity of Indigenous people to record themselves as such on the census form; improvements to census enumeration procedures; and changes in the rates of non-response to the question on Indigenous origin (Ross 1999). The impact on census counts of people first discovering their Indigenous origin in recent years (for example, among those who were taken away from their families as children; see inset 7.15) is unknown. Further information about the increase in the Indigenous population and the implications this has for health and welfare statistics is included in chapter 11.

About 11% of the Indigenous people counted in the Census indicated that they were of Torres Strait Islander origin (ABS 1998c). More information about Torres Strait Islanders is presented in chapter 10.

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 available only every five years, but estimates and projections are generally available for each year:

- Place of enumeration counts are based on where people were actually located on census night.
- Place of usual residence counts are based on where people usually lived at the time of the Census.
- Estimated resident population (ERP) is the official estimate of the resident population at a given time.

For the Australian population as a whole, ERP is calculated by adjusting usual residence counts for the estimated number of people who were missed in the Census as well as those who were counted more than once (these two together represent the net census undercount). Further adjustments are made for Australian residents temporarily overseas and for births, deaths and migration between the date of the Census and the date for which ERP is calculated (usually 30 June for a given year).

The process for estimating the Indigenous population is similar, but some additional adjustments are made. The ERP for the Indigenous population is considered ‘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.

Estimates of the Indigenous population for 1996 and earlier years were derived following the 1996 Census using the census place of usual residence counts and adjusting the figures taking into account the following factors:

- net census undercount (including an adjustment based on registered births);
- birthplace of parents;
- non-response to the census question on Aboriginal and Torres Strait Islander origin; and
- registered births and deaths between the time of the Census and the date for which the estimate was calculated.

Experimental projections for the Indigenous population were derived for 1997 and subsequent years using the 1996-based experimental estimates and adjusting for:

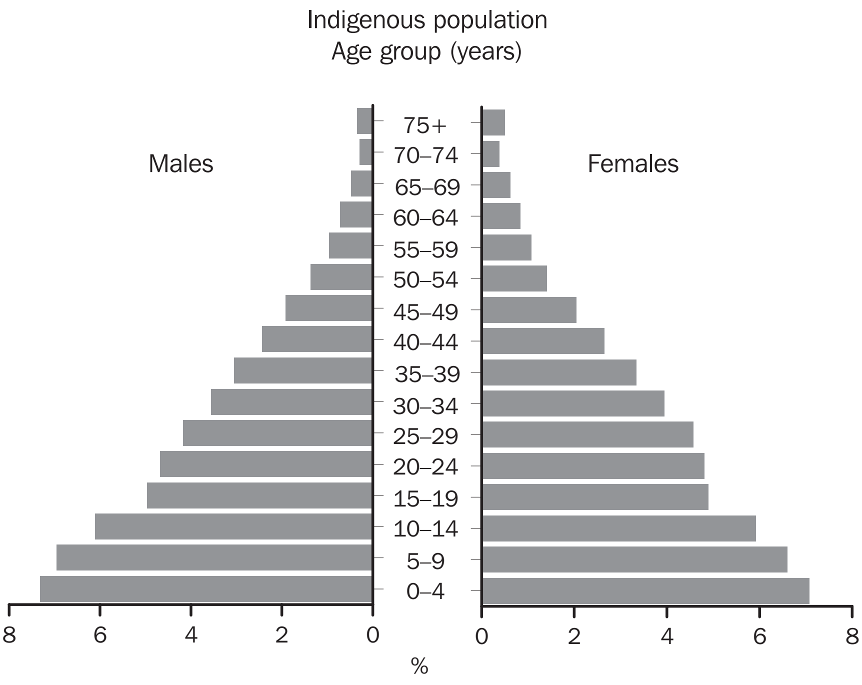
- estimates of births and deaths;
- estimates of interstate migration; and
- assumptions about changes in the propensity of people to identify as Indigenous.

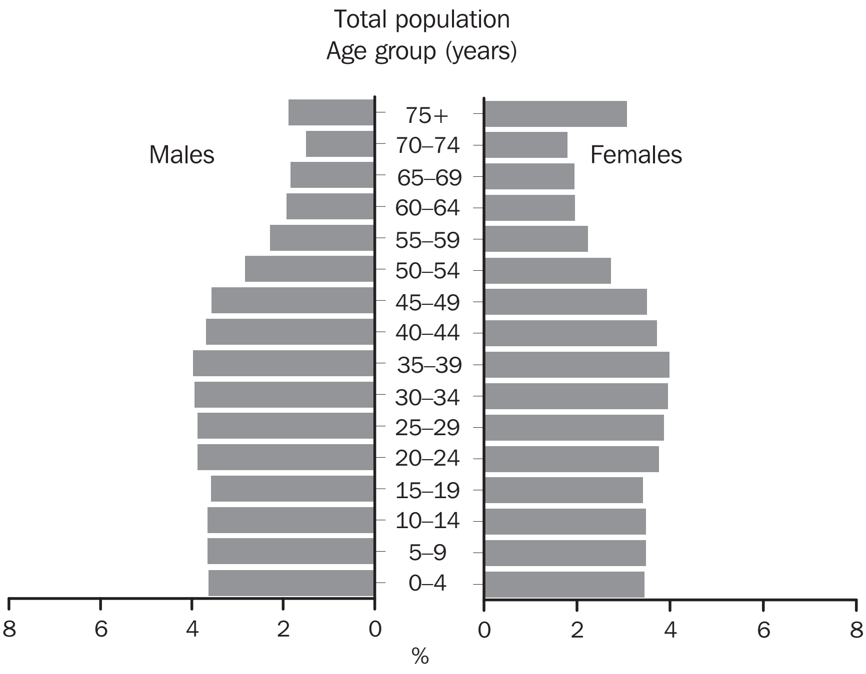
More information about these concepts is available elsewhere (see, for example, ABS 1997a, 1998a, 1998b, 1998c; Ross 1999).

Age

The Indigenous population is considerably younger than the non-Indigenous population. Graph 2.2 shows the proportion of the population in each five-year age group for the Indigenous and total Australian populations. The younger age structure of the Indigenous population is also illustrated by the median ages of the two populations. In 1996, half of the Indigenous population was aged 20.1 years or less, while for the total population, the corresponding figure was 34.0 years (ABS 1998c). Because age is an important factor in health, it has been taken into account in this publication either by presenting separate results for different age groups or by using age standardisation (see inset 9.1).

2.2 INDIGENOUS AND TOTAL AUSTRALIAN AGE PYRAMIDS—1996





Source: ABS 1998e.

Population distribution

In 1996, more Indigenous people were estimated to live in New South Wales and Queensland than in other States or Territories, while the Northern Territory had the most Indigenous people as a proportion of its population (table 2.3).

2.3 ESTIMATED RESIDENT POPULATION—30 JUNE 1996

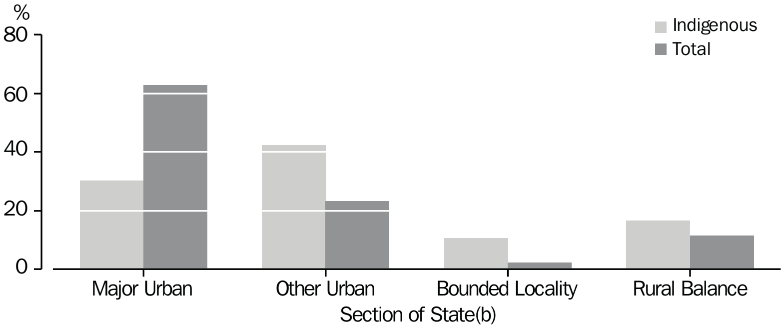
	Indigenous population	*Proportion of the total Australian Indigenous population*	*Proportion of the total State or Territory population*
State and Territory	*no.*	*%*	*%*
New South Wales	109 925	28.5	1.8
Victoria	22 598	5.9	0.5
Queensland	104 817	27.2	3.1
South Australia	22 051	5.7	1.5
Western Australia	56 205	14.6	3.2
Tasmania	15 322	4.0	3.2
Northern Territory	51 876	13.4	28.5
Australian Capital Territory	3 058	0.8	1.0
Australia(a)	**386 049**	**100.0**	**2.1**

(a) Includes Jervis Bay Territory.

Source: ABS 1998e.

On census night in 1996, Indigenous people were less likely than the total Australian population to be in Major Urban areas and more likely to be in non-urban areas (graph 2.4). Approximately one in four Indigenous people were counted in non-urban areas compared with only about one in seven in the total population (ABS 1998c).

2.4 CENSUS COUNTS(a), BY SECTION OF STATE—1996



(a) Place of enumeration. Excludes overseas visitors.
(b) See Glossary for definitions relating to Section of State.
Source: ABS 1998c.

Population distribution *continued*

Table 2.5 presents the estimated Indigenous population for each Aboriginal and Torres Strait Islander Commission (ATSIC) Region. A reference map of ATSIC Regions is provided in map 2.6. While Indigenous people comprise a large proportion of the population of northern and central Australia, the majority of Indigenous people live in the southern and eastern pats of Australia. For example, over two-thirds of the population was Indigenous in the Torres Strait Area (86%), Aputula (80%), Jabiru (75%) and Derby (67%) ATSIC Regions, but these Regions together accounted for only about 7% of the Indigenous population of Australia. By contrast, although only about 1% of the people living in the Sydney and Brisbane ATSIC Regions were Indigenous, these two Regions alone accounted for about 18% of Australia's Indigenous population.

2.5 INDIGENOUS POPULATION, BY ATSIC REGION—30 JUNE 1996

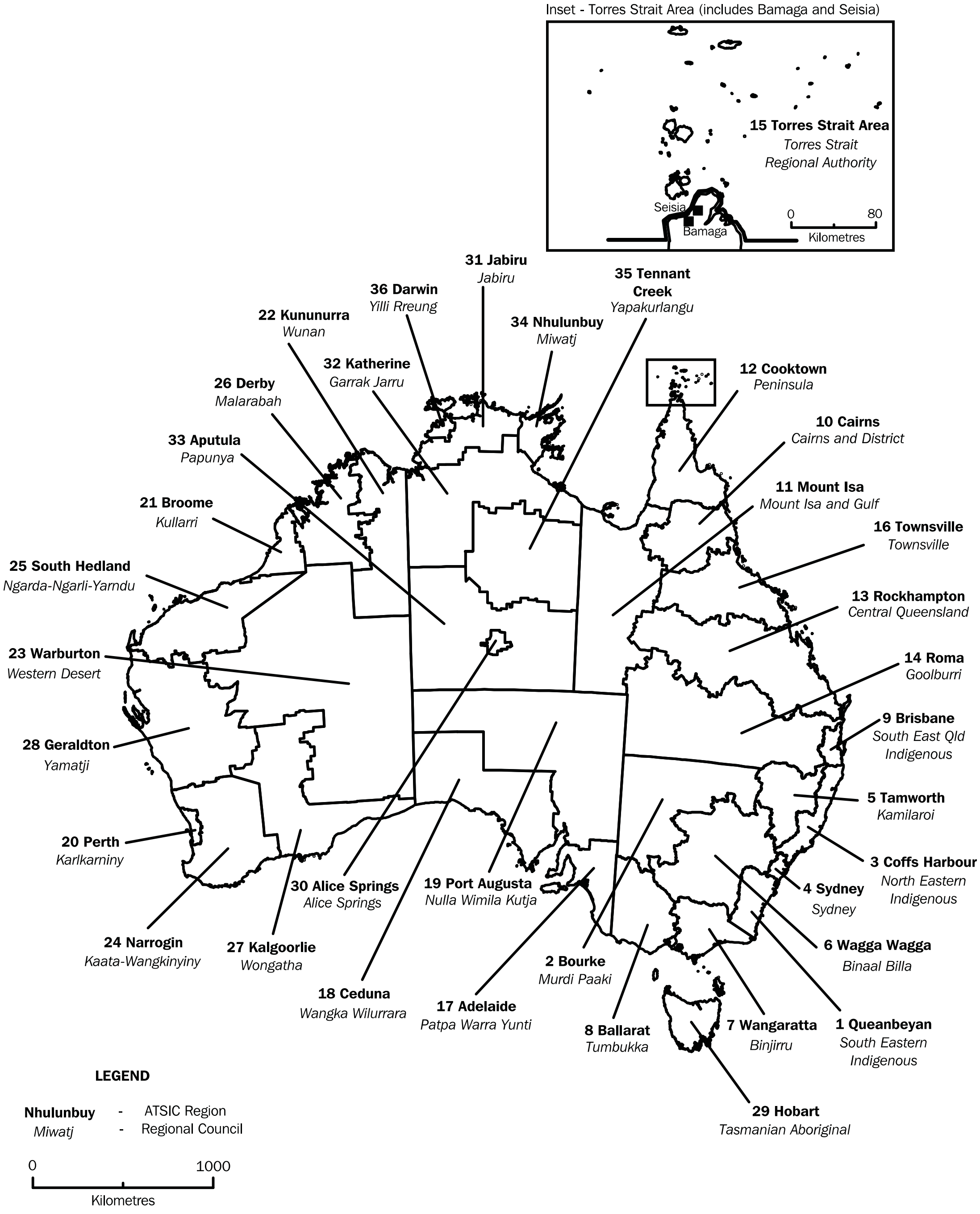
ATSIC Region	*Indigenous population(a)* *no.*	*Proportion of total Australian Indigenous population* *%*	*Proportion of regional population(b)* *%*
New South Wales			
Queanbeyan	9 855	2.6	1.7
Bourke	7 951	2.1	14.0
Coffs Harbour	27 127	7.0	2.2
Sydney	37 117	9.6	1.0
Tamworth	11 595	3.0	5.6
Wagga Wagga	19 535	5.1	3.7
Victoria			
Wangaratta	10 938	2.8	0.4
Ballarat	11 660	3.0	0.6
Queensland			
Brisbane	30 325	7.9	1.4
Cairns	16 144	4.2	8.8
Mount Isa	7 306	1.9	22.9
Cooktown	6 184	1.6	49.9
Rockhampton	12 436	3.2	3.4
Roma	9 661	2.5	3.4
Townsville	16 107	4.2	5.3
Torres Strait Area	6 654	1.7	86.0
South Australia			
Adelaide	13 686	3.5	1.0
Ceduna	2 014	0.5	5.3
Port Augusta	6 351	1.6	7.9
Western Australia			
Perth	19 765	5.1	1.5
Broome	3 760	1.0	38.5
Kununurra	4 887	1.3	52.0
Warburton	2 952	0.8	30.0
Narrogin	6 814	1.8	2.8
South Hedland	4 721	1.2	13.7
Derby	4 347	1.1	66.8
Kalgoorlie	3 462	0.9	6.6
Geraldton	5 497	1.4	9.8
Tasmania			
Hobart	15 322	4.0	3.2
Northern Territory			
Alice Springs	4 986	1.3	19.4
Jabiru	8 685	2.2	75.4
Katherine	7 986	2.1	46.7
Aputula	8 427	2.2	79.5
Nhulunbuy	7 848	2.0	61.7
Tennant Creek	3 866	1.0	59.0
Darwin	10 078	2.6	10.3
Australia	**386 049**	**100.0**	**2.1**

(a) 1996 Indigenous ERP.

(b) 1996 Indigenous and non-Indigenous ERP.

Source: ABS 1998e; unpublished data, 1996 Census.

2.6 ATSIC REGIONS—1996



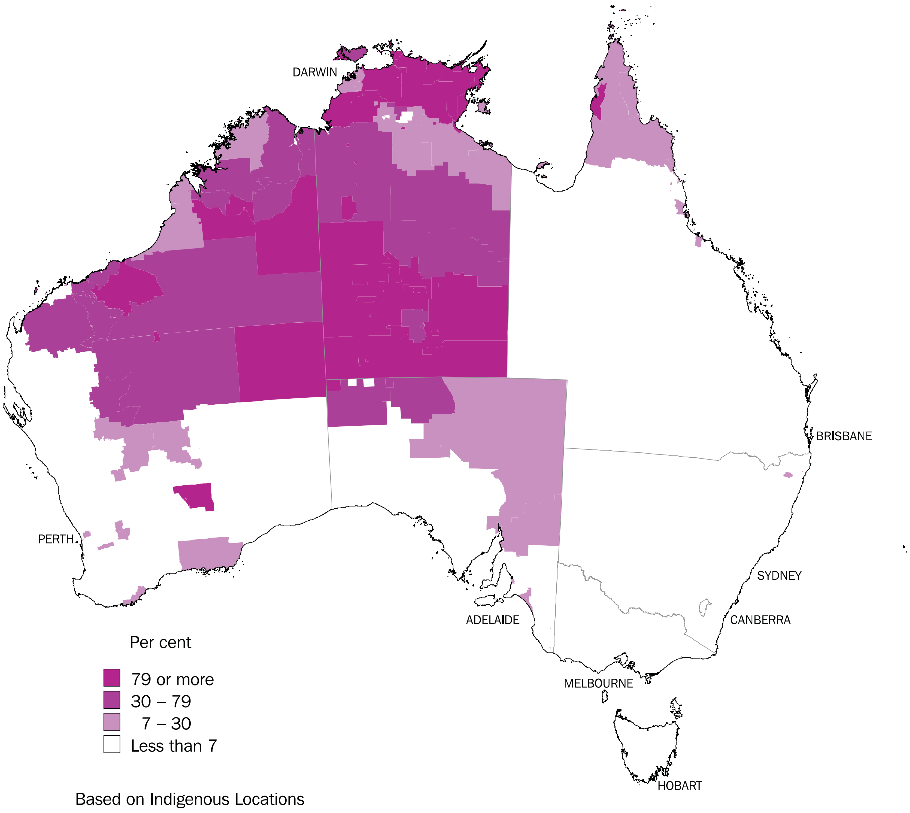
Source: Aboriginal and Torres Strait Islander Commission.

Language

Overall, about 13% of Indigenous people reported that they spoke an Indigenous language at home in 1996 (ABS 1998c). This was reported for 11% of Indigenous children aged 14 years and under, and for 17% of adults aged 45 years and over. The proportion of Indigenous people who said they spoke an Indigenous language at home varied from 2% of those in Major Urban areas to 39% in Bounded Localities and 32% in the Rural Balance (see Glossary for definitions). Indigenous people were most likely to speak an Indigenous language at home in the Northern Territory and northern Western Australia (map 2.7). By contrast, a very low proportion of Indigenous people in eastern and southern States said they spoke an Indigenous language at home.

While the use of Indigenous languages is an expression of the maintenance of Indigenous culture, it can also be a marker for reduced access to services and employment. The relationship between language and access is discussed further in chapter 5.

2.7 PERSONS WHO SPOKE AN INDIGENOUS LANGUAGE AT HOME—1996



Source: ABS 1999b.

Education

Among Indigenous people aged 15 years or more in 1996, about 40% said they had left school before age 16 years, compared with 34% of non-Indigenous people (table 2.8). Conversely, 41% of non-Indigenous adults said they had left school aged 17 years or more or were still attending school compared with 27% of Indigenous adults.

2.8 AGE LEFT SCHOOL(a)—1996

	Indigenous	*Non-Indigenous*
	%	%
14 and under	15.7	13.9
15	24.2	20.2
16	20.7	19.4
17	12.5	20.0
18	5.7	12.6
19	2.6	3.9
Still at school	6.0	4.8
Never attended school	2.8	0.7
Not stated	9.7	4.6
Total	**100.0**	**100.0**

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

Source: ABS 1998c; unpublished data, 1996 Census.

Only 2% of Indigenous adults aged 15 years and over in 1996 had completed a Bachelor degree or higher, compared with 11% of the non-Indigenous population (table 2.9). About three out of four Indigenous adults said they had no post-school educational qualifications.

2.9 HIGHEST POST-SCHOOL EDUCATIONAL QUALIFICATION(a)—1996

	Indigenous	*Non-Indigenous*
	%	%
Degree or higher	2.0	10.9
Diploma level	2.2	6.3
Skilled vocation	4.5	11.0
Basic vocation	1.9	3.0
No post-school qualifications(b)	76.3	59.1
Not stated/inadequately described	13.0	9.7
Total	**100.0**	**100.0**

(a) Persons aged 15 years or more. Excludes persons for whom Indigenous status was not stated.
(b) Includes persons with a qualification outside the scope of the Australian Bureau of Statistics Classification of Qualifications.

Source: ABS 1998c; unpublished data, 1996 Census.

Employment

At the time of the 1996 Census, about 41% of Indigenous people aged 15–64 years said they were employed (including employment in Community Development Employment Projects (CDEP) scheme jobs), 12% said they were not employed but were looking for work and 47% were not in the labour force (neither working nor looking for work). Since the unemployment rate is calculated as a percentage of those in the labour force, this means that the unemployment rate at the time of the Census was 23% for Indigenous people while that for non-Indigenous people was 9% (ABS 1998c).

Employment *continued*

As graphs 2.10 and 2.11 show, Indigenous males and females were less likely to be employed than their non-Indigenous counterparts.

2.10 LABOUR FORCE STATUS, MALES(a)—1996

(a) Aged 15 years and over. Excludes those for whom Indigenous status and/or labour force status was not stated.
(b) Includes CDEP.
Source: ABS 1998c; unpublished data, 1996 Census.

2.11 LABOUR FORCE STATUS, FEMALES(a)—1996

(a) Aged 15 years and over. Excludes those for whom Indigenous status and/or labour force status was not stated.
(b) Includes CDEP.
Source: ABS 1998c; unpublished data, 1996 Census.

The industries which employed the most Indigenous people in 1996 were health and community services (19.6% of employed Indigenous people), government administration and defence (15.4%) and education (8.0%). For non-Indigenous people the top three employment industries were retail trade (13.6%), manufacturing (12.7%) and property and business services (9.9%). Health and community services, and government administration and defence ranked fourth and eighth, respectively, for non-Indigenous people (ABS 1998c; unpublished data, 1996 Census). More information about employment in health and community services is presented in chapter 5.

Among those employed in 1996, Indigenous people were most likely to be working as labourers and related workers (24.3% of employed Indigenous people), while non-Indigenous people, by contrast, were most likely to be working as professionals (17.3%). For both Indigenous and non-Indigenous people, the next most common occupations were intermediate clerical, sales and service workers; and tradespersons and related workers (table 2.12).

2.12 OCCUPATION(a)—1996

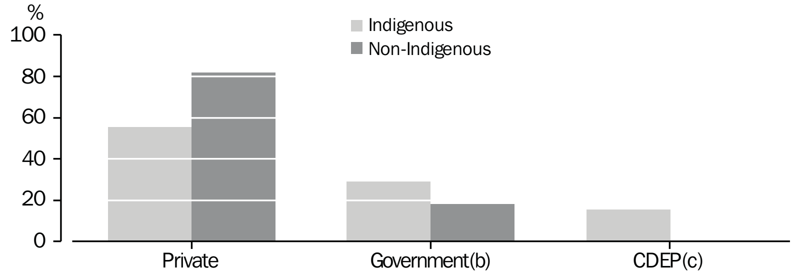
	Indigenous	*Non-Indigenous*
	%	%
Managers and administrators	3.7	9.4
Professionals	10.2	17.3
Associate professionals	8.1	11.3
Tradespersons and related workers	11.1	13.1
Advanced clerical and service workers	2.2	4.3
Intermediate clerical, sales and service workers	17.0	16.0
Intermediate production and transport workers	9.7	8.6
Elementary clerical, sales and service workers	7.6	8.9
Labourers and related workers	24.3	8.6
Inadequately described	2.5	0.9
Not stated	3.5	1.6
Total	**100.0**	**100.0**

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

Source: ABS 1998c; unpublished data, 1996 Census.

Among those employed, about half (56%) of Indigenous people were employed by the private sector. By contrast, about 82% of employed non-Indigenous people worked in the private sector (graph 2.13). Among employed Indigenous people, 29% said they were working for the Commonwealth Government, or State, Territory or local governments, and 16% said they worked in a CDEP scheme job. It should be noted that CDEP data were collected for the first time in the 1996 Census, and the quality of the data varied by region (Working Group to Establish Guidelines for Interpreting Indigenous Census Data 1998). Therefore, the data on CDEP scheme employment should be interpreted with caution. More information on the CDEP scheme is presented in chapter 3.

2.13 EMPLOYMENT SECTOR(a)



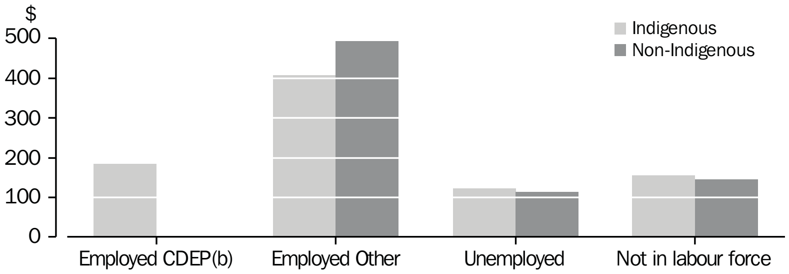
(a) Employed persons aged 15 years and over. Excludes those for whom Indigenous status was not stated.
(b) Includes Commonwealth, State/Territory and local government.
(c) Not applicable for non-Indigenous persons.

Source: ABS 1998c; unpublished data, 1996 Census.

Income The median weekly individual income for Indigenous males aged 15 years and over was $189, compared with $415 for non-Indigenous males. The disparity among females was not as pronounced, with median weekly incomes of $190 for Indigenous females and $224 for non-Indigenous females.

The median weekly income was higher for employed people than for those who were not working, and this explains some of the difference between the two populations. Even among those employed, however, the median income was lower for Indigenous people than non-Indigenous people (graph 2.14). This difference is not explained by the differences in occupations held (as shown in table 2.12) or in the level of qualifications (as shown in table 2.8). Indigenous people had a lower median income than non-Indigenous people in every occupation group except 'elementary clerical, sales and service workers' (for which median incomes were similar). Indigenous people also had a lower median weekly income than non-Indigenous people for every level of qualification (ABS 1998c; unpublished data, 1996 Census). These differences are not explained by differences in age.

2.14 MEDIAN WEEKLY INDIVIDUAL INCOME, BY LABOUR FORCE STATUS—1996(a)



(a) Persons aged 15 years and over. Excludes persons for whom Indigenous status and/or income was not stated.
(b) Not applicable for non-Indigenous persons.
Source: ABS, unpublished data, 1996 Census.

CHARACTERISTICS OF INDIGENOUS HOUSEHOLDS

Household size In the 1996 Census, Indigenous households were larger on average (3.7 people) than other households (2.7 people), and were more likely to be crowded (ABS 1998c). Among households which provided information on the number of bedrooms in their dwelling, 7.5% of Indigenous households recorded having more than two persons per bedroom (or in a bedsitter), compared with only 0.8% of other households. Of all households in Australia with more than two people per bedroom, about one in eight (12.1%) were Indigenous, even though Indigenous households comprised only 1.6% of all Australian households.

Income

Despite their larger size on average, Indigenous households had a lower median weekly income than other households ($540 and $632, respectively). Some 29% of Indigenous households had weekly incomes at or below $399 and 32% had incomes of between $400 and $799, compared with 28% and 27% of other households, respectively (table 2.15).

2.15 WEEKLY HOUSEHOLD INCOME—1996

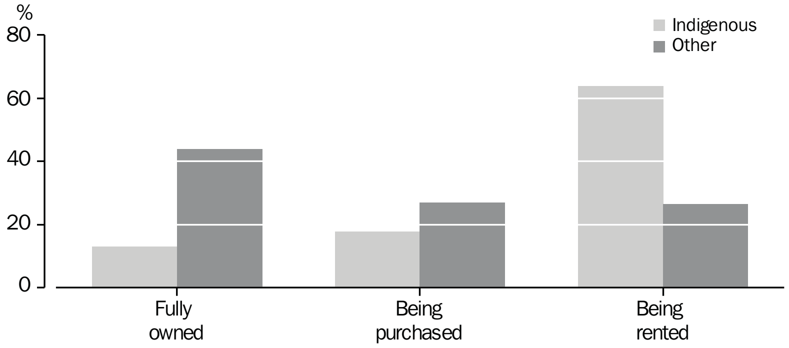
	Indigenous	Other
Dollars	%	%
Nil	0.7	0.7
1–199	8.4	9.6
200–399	19.9	17.4
400–599	18.9	14.7
600–799	13.5	12.2
800–1 199	14.8	17.6
1 200–1 999	7.4	11.9
2 000 and over	1.8	5.0
Insufficient information	14.8	10.8
Total	**100.0**	**100.0**

Source: ABS 1998c; unpublished data, 1996 Census.

Type of tenure

Census results show that the levels of home ownership and home purchasing for Indigenous households are well below those for other Australian households. While about 71% of non-Indigenous households lived in homes owned or being purchased by their occupants in 1996, the corresponding figure for Indigenous households was only 31% (graph 2.16). Conversely, about two out of three (64%) Indigenous households were renting their dwellings compared with about one in four (27%) other households. Indigenous households were also more likely than other households to live in improvised dwellings (see chapter 4 for more details).

2.16 TENURE TYPE(a)—1996

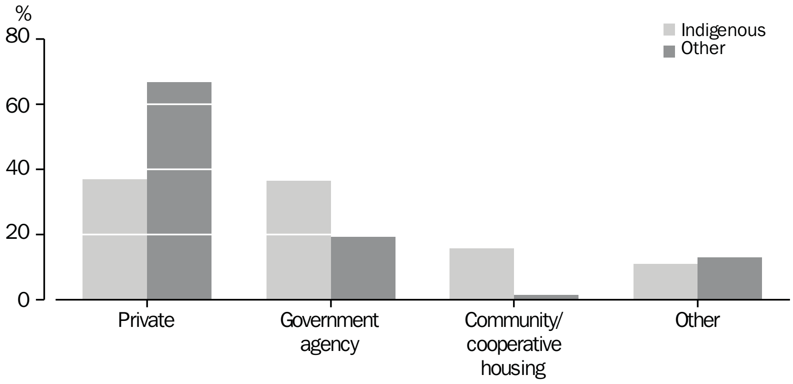


(a) Households with 'other' tenure or tenure not stated are not shown.

Source: ABS 1998c.

Among those renting their dwellings, 37% of Indigenous households were renting privately, 37% from a government agency and 16% from community/cooperative housing agencies. The majority (67%) of other households were renting privately (graph 2.17).

2.17 LANDLORD TYPE AMONG RENTER HOUSEHOLDS—1996



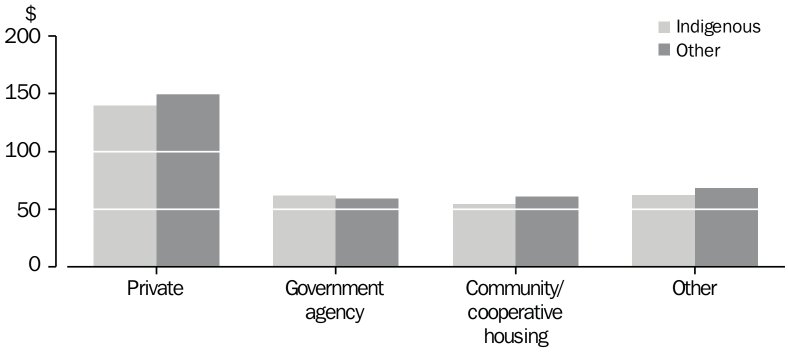
Source: ABS 1998c.

Weekly rent

Indigenous households tended to pay lower rents than other households, with 60% of Indigenous households paying less than $100 dollars rent per week compared with 37% of other households. About 3% of Indigenous households and 12% of other households paid $200 or more per week rent.

Much of this difference is explained by the higher proportions of Indigenous households renting from community and government landlords. Weekly rents were similar for Indigenous and other households for each type of landlord (graph 2.18). As discussed in the previous edition of this publication, data from the 1994 National Aboriginal and Torres Strait Islander Survey indicate that, although dwellings rented from community or government landlords may cost less to rent, they are also less likely to meet the needs of the people living in them, with the most commonly cited problems being the need for repairs and inadequate living space (ABS & AIHW 1997a).

2.18 MEDIAN WEEKLY RENT(a), BY TYPE OF LANDLORD—1996



(a) Excludes households with rent not stated.

Source: ABS, unpublished data, 1996 Census.

SUMMARY

As a group, Indigenous people are disadvantaged relative to other Australians with respect to a number of socioeconomic factors, such as education, employment, income and some aspects of housing. These disadvantages place them at greater risk of ill health and reduced wellbeing.

CHAPTER 3 WELFARE SERVICES AND CORRECTIONAL SERVICES

INTRODUCTION

Welfare is a complex area involving many different government portfolios. In its widest sense, it is more than just the provision of services and concerns the wellbeing of the whole community. Many relevant services may be provided either formally or informally. Informal assistance, such as occurs in family and community networks, is likely to be extensive among the Indigenous population but is difficult to quantify.

In this chapter, information is presented about a range of welfare-related services, including income support, housing assistance, child care, child welfare, disability services and aged care services. Information about Indigenous people's involvement with correctional services is also included. For all of these services, the amount of information available about Indigenous people at a national level is limited by the quality of identification of Indigenous people in the relevant administrative collections (see chapter 11).

INCOME SUPPORT

Government payments are a major component of social and welfare policy and can provide an important 'safety net' for people in need. Income support is available, subject to eligibility, for a variety of groups, such as retired people, people with disabilities and the sick, unemployed people, and families with children. Payments are also provided for housing assistance, as discussed later in this chapter.

The Commonwealth Department of Family and Community Services (DFCS) has overall responsibility for income support programs, but all payments to individuals are now made through Centrelink. Centrelink collects information on Indigenous status, but the quality of identification is presently believed to be inadequate for reporting. In recognition of the importance of this information, the Business Partnership Agreement between DFCS and Centrelink includes a commitment to improve the collection of data on the identification of Indigenous people (Department of Social Security 1998), so accurate information on the receipt of government payments by Indigenous people may become available in the future.

No information about income support payments is available from the Census. Although people were asked to include such payments when estimating their total income, they were not asked to indicate the source(s) of income or the amount, if any, received from government payments.

Some self-reported data are available from the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS), in which adults aged 15 years and over were asked whether they received any government payments and what their main source of income was. Some 50% of Indigenous males and 77% of Indigenous females reported receiving government payments of some kind. Government payments were reported to be the main source of income for 55% of Indigenous adults, with earned

INCOME SUPPORT *continued*

income from the Community Development Employment Projects (CDEP) scheme the main source for another 9%. Family payments were the most commonly reported type of government payment by females, while employment-related payments were the most commonly reported by males (ABS 1995). It should be noted that these figures are based on data from 1994. They would not reflect any changes that may have taken place in the five years since the survey was conducted.

Current information is available about government programs specific to Indigenous people, such as the CDEP scheme and ABSTUDY.

CDEP

The CDEP scheme was mentioned briefly in chapter 2. Participants forego their unemployment benefits in exchange for paid employment in the scheme. At the end of 1997–98, there were 30,257 people participating in the scheme on the mainland of Australia (ATSIC 1998), with another 1,655 participants in the Torres Strait region (Torres Strait Regional Authority 1998). Not all of these people would be working at any one time, however, as CDEP scheme employment may be somewhat sporadic.

ABSTUDY

ABSTUDY provides support for Indigenous secondary and tertiary students. The number of students receiving ABSTUDY payments over a four-year period is shown in table 3.1.

3.1 RECIPIENTS OF ABSTUDY(a)

	1994–95	*1995–96*	*1996–97*	*1997–98*
Educational level	*no.*	*no.*	*no.*	*no.*
Secondary	27 100	27 500	30 800	30 200
Tertiary	18 900	20 600	19 700	19 600
Total	**46 000**	**48 100**	**50 500**	**49 800**

(a) Figures are approximate.

Source: Department of Employment, Education, Training and Youth Affairs 1998.

HOUSING ASSISTANCE

Information about the housing-related disadvantage of Indigenous people is presented in chapters 2 and 4. A number of programs exist in Australia to assist with short-term and/or long-term housing need (see inset 3.2). As is the case for non-Indigenous Australians, the housing needs of Indigenous people may be addressed under such programs as the Commonwealth-State Housing Agreement (CSHA), the Rent Assistance Program, the Supported Accommodation Assistance Program (SAAP) and the Crisis Accommodation Program. Indigenous people are not always separately identified in the relevant data collections, and when information is collected, the quality of identification is not always adequate. Therefore, only limited data are available about the participation of Indigenous people in mainstream housing programs.

HOUSING ASSISTANCE *continued*

In addition to the general programs mentioned above, Indigenous people and/or communities are eligible to receive assistance from a number of special programs, including the Aboriginal and Torres Strait Islander Commission's (ATSIC) Community Housing and Infrastructure Program, the ATSIC Home Ownership Program, the CSHA Aboriginal Rental Housing Program, and the hostels run and/or funded by Aboriginal Hostels Limited (see inset 3.2).

3.2 SOME PROGRAMS TO ADDRESS HOUSING-RELATED NEED

Mainstream programs:

- The Commonwealth-State Housing Agreement (CSHA) aims ‘to provide access to housing which is adequate, secure, appropriate and affordable for all Australian households’ (AIHW 1997a, p. 154). Among the areas covered under this agreement are public rental housing, community housing, the Aboriginal Rental Housing Program (see below) and the Crisis Accommodation Program.
- The Rent Assistance Program provides financial assistance to recipients of certain government payments who are renting private accommodation.
- The Crisis Accommodation Program provides funds for the acquisition and maintenance of housing for people in crisis.
- The Supported Accommodation Assistance Program provides a variety of services for people who are homeless or at risk of being homeless, including accommodation, basic needs such as meals and laundry facilities, and support such as outreach and referral services. The program aims to ‘provide transitional supported accommodation and related support services to help homeless people achieve the maximum possible degree of self-reliance and independence’ (AIHW 1997b, p. 1).

Programs specifically for Indigenous people and/or communities:

- The Aboriginal and Torres Strait Islander Commission Home Ownership Program is a self-funding program that provides home loans to low-income Indigenous people who are unlikely to be able to secure financing from commercial lenders (ATSIC 1998).
- The Aboriginal and Torres Strait Islander Commission Community Housing and Infrastructure Program ‘aims to supplement and monitor programs operated by Commonwealth, State and local governments to address the substantial current backlog in appropriate housing and infrastructure in Indigenous communities...’ (ATSIC 1998, p. 98–99). Among the projects funded under this program are several relating to the National Aboriginal Health Strategy, including Health Infrastructure Priority Projects and the ATSIC–Army Community Assistance Projects.
- The Aboriginal Rental Housing Program provides funds for public and community housing specifically targeted for Indigenous people, especially those in non-urban areas. (The needs of Indigenous households in urban areas are expected to be met through mainstream CSHA public and community housing programs.) States and Territories administer the program in conjunction with advisory groups such as Indigenous Housing Organisations (Department of Social Security 1998).
- Aboriginal Hostels Limited (AHL) operates its own hostels and also provides grants to community organisations to operate hostels. The role of AHL is to support ‘government programs in health, education, employment, training and aged care’ (Aboriginal Hostels Limited 1998, p. 10).

More information about these programs is available elsewhere (see, for example, Aboriginal Hostels Limited 1998; AIHW 1997a, 1997b; ATSIC 1998; Department of Social Security 1998).

Mainstream housing assistance

In 1996–97, almost 400,000 households throughout Australia were accommodated in public housing (Department of Social Security 1998), but it is not known how many of these were Indigenous households. Among households renting private accommodation, over 900,000 income units were receiving rent assistance as at March 1998, but again it is not certain how many of these were Indigenous (Department of Social Security 1998). As noted in chapter 2, Indigenous households were more likely to live in rented dwellings and had a lower median income than other households at the time of the 1996 Census, so such housing programs would be of relevance to a higher proportion of Indigenous households than other households.

Programs for homeless people

The SAAP is one of the few mainstream programs with published information about Indigenous people. Information from this program is only available for those who have sought a SAAP-funded service, however, and this represents an unknown proportion of people who are homeless or at risk of becoming homeless. For the purposes of the SAAP Statistical Collection, a homeless person is defined as someone 'who does not have access to safe, secure and adequate housing' (AIHW 1997b).

In 1996–97, there were about 100,000 SAAP clients, who accounted for about 150,000 occasions of support. About 12% of SAAP clients were identified as Indigenous (table 3.3), with the proportions varying by jurisdiction (AIHW 1997b). Indigenous people were over-represented in the SAAP client population in all States and Territories. These figures are largely consistent with data from the 1996 Census. Almost 6,400 people were recorded as staying in a 'hostel for the homeless, night shelter, or refuge' on the night of the Census, of whom 13% were identified as Indigenous.

3.3 SAAP CLIENTS IDENTIFIED AS INDIGENOUS—1996–97

	Indigenous adults as a proportion of all adult SAAP clients	*Indigenous adults as a proportion of total adult population(a)*
State and Territory	%	%
New South Wales	13.5	1.3
Victoria	4.3	0.4
Queensland	13.0	2.4
South Australia	11.4	1.2
Western Australia	26.9	2.5
Tasmania	7.9	2.5
Northern Territory	36.8	24.0
Australian Capital Territory	10.1	0.8
Australia	**12.4**	**1.6**

(a) Aged 15 years or more, as at 30 June 1997.

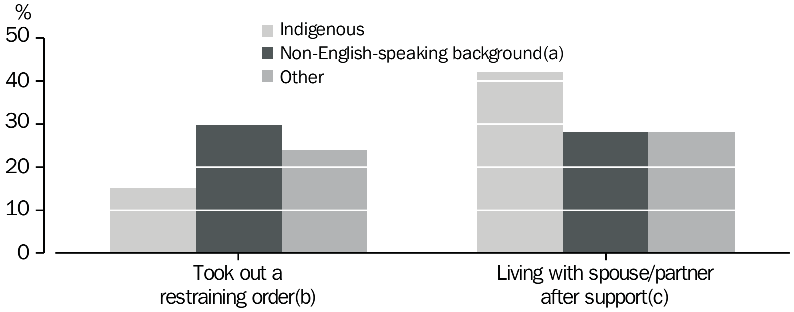
Source: ABS 1998e, 1998j; AIHW 1997b.

A higher proportion of female than male SAAP clients were identified as Indigenous. Some 17% of female clients (accounting for 18% of support periods) and 8% of male clients (accounting for 9% of support periods) were identified as Indigenous (AIHW 1997b).

Programs for homeless people *continued*

One of the target groups for SAAP is women escaping domestic violence. Of the support periods provided by agencies for whom this group was the primary support target, 25% were for Indigenous women. Among those escaping domestic abuse, Indigenous women were less likely than other women to take out a restraining order before or during support, and those who were living with a spouse or partner prior to receiving SAAP support were more likely than other women to be living with their spouse/partner after support (graph 3.4) (AIHW 1997b).

3.4 SAAP CLIENTS ESCAPING DOMESTIC VIOLENCE—1996–97



(a) Excludes Indigenous persons.
(b) Before or during SAAP support.
(c) Of those living with spouse/partner before support.
Source: AIHW 1997b.

As indicated in inset 3.2, one of the main aims of the SAAP program is to assist people to live independently in adequate housing, whether public or private. Indigenous people were at least as likely as people in other groups to be living in independent housing after SAAP support (table 3.5). They were more likely than other people to live in public housing (AIHW 1997b).

3.5 TYPE OF HOUSING AFTER SAAP SUPPORT(a)—1996–97

	Indigenous	*Non-English-speaking background(b)*	*Other*
	%	%	%
Independent housing			
Private rental	36	44	44
Public housing	28	16	12
Other(c)	14	17	16
Non-independent housing(d)	22	23	27
Total	**100**	**100**	**100**

(a) For closed support periods.
(b) Excludes Indigenous persons.
(c) Includes owner-occupied and other independent housing.
(d) Includes SAAP crisis, short-term, medium and long-term housing and other non-independent housing.

Source: AIHW 1997b.

Indigenous housing programs

As at 30 June 1998, the ATSIC Home Ownership Program had over 3,800 active accounts, representing a value of over $250 million. About 400 new loans (for housing for almost 1,300 people) were established in 1997–98 (ATSIC 1998).

In 1997–98, Aboriginal Hostels Limited funded 135 hostels which provided just under 3,000 beds in total (table 3.6). Some of these hostels received funding under SAAP and were included in the SAAP data collection described above. The occupancy rate for the year was 69% for all hostels combined, but some hostels operated at 100% occupancy for the year (Aboriginal Hostels Limited 1998).

3.6 HOSTELS FUNDED BY ABORIGINAL HOSTELS LIMITED(a)—1997–98

	Hostels	*Beds*
Category of accommodation	*no.*	*no.*
Transient	37	1 062
Medical transient	6	66
Homeless(b)	9	123
Substance abuse rehabilitation	26	435
Prison release and diversion	2	20
Tertiary education and training	14	196
Secondary education	19	587
Primary education	3	70
Aged care	19	344
Total	**135**	**2 903**

(a) Includes hostels run by Aboriginal Hostels Limited and hostels funded by Aboriginal Hostels Limited but operated by community organisations.

(b) Homeless persons may also use hostels designated as providing transient accommodation.

Source: Aboriginal Hostels Limited 1998.

CHILD CARE

The target group for child care is generally considered to be children aged 0–12 years. There were about 140,000 Indigenous children in this age group in 1997, which represents about 35% of the Indigenous population. By contrast, children aged 0–12 years represented 18% of total population in 1997. Not all Indigenous children (or other children) are likely to require formal child care, however. In the 1994 NATSIS, about 39% of Indigenous families said they did not use any child care for their children aged 0–12 years and another 45% said they used family and/or friends only. Furthermore, 82% of Indigenous families with children aged 0–12 said they had not wanted to use formal child care during the four weeks prior to the survey (ABS 1995).

For families that do want formal child care, the available options for children under school age include long-day care (in purpose-built centres), family day care (in private homes) and occasional care, while those for school-aged children include before school care, after school care and vacation care. Most are funded at least in part by the Commonwealth Government under the Children's Services Program (CSP), and most Commonwealth-funded programs give highest priority to children whose parents are working or seeking work, or who are undertaking study or training (Commonwealth Department of Health and Family Services 1998; Moyle et al. 1996, 1997).

Two special types of CSP-funded programs are Multifunctional Services and Multifunctional Aboriginal Children's Services (MACS). These programs are referred to as 'multifunctional' because they incorporate a number of different services, such as long-day care for pre-school aged children, after school care for school-aged children, vacation care, etc. Multifunctional Services are located in rural areas and provide services for children aged 0–12 years. MACS are not restricted by geography and are designed to provide culturally appropriate care for children in Aboriginal communities. They may also provide services to mothers, nutrition programs, playgroups, etc. (Moyle et al. 1996).

As shown in table 3.7, less than 0.3% of all child care places in Australia in 1998 were in MACS. MACS places remained steady between 1995 and 1998, while the total number of places increased. As a result, MACS places as a proportion of total places fell from about 0.4% in 1995 to less than 0.3% in 1998 (Commonwealth Department of Health and Family Services 1998).

3.7 CHILD CARE PLACES, BY SERVICE TYPE—AS AT 30 JUNE 1998

Service type	*no.*	*%*
Community long-day care centres	51 700	12.9
Private	129 700	32.5
Employer and non-profit	13 200	3.3
Family day care	63 700	15.9
Occasional care	5 000	1.3
Multifunctional	600	0.2
Multifunctional Aboriginal child care services(a)	1 100	0.3
Outside school hours care	134 400	33.7
Total	**399 400**	**100.0**

(a) Aboriginal children may attend other types of services.

Source: Commonwealth Department of Health and Family Services 1998.

It is important to note that Aboriginal and Torres Strait Islander children may, and do, attend child care services other than MACS, and that not all children attending MACS are Indigenous (table 3.8). Although 78% of children attending MACS in 1996 or 1997 were Indigenous, only 16% of Indigenous children in CSP-funded child care services were attending MACS. Nearly half of Indigenous children (48%) in CSP-funded services were attending non-MACS long-day care (AIHW, forthcoming).

3.8 CHILDREN USING CSP-FUNDED SERVICES(a)—1996 OR 1997

	Indigenous children		*Total children*		*Proportion of children using this service type who are Indigenous*
Service type	*no.*	*%*	*no.*	*%*	*%*
Long-day care centres	3 951	47.8	294 702	57.6	1.3
Family day care	873	10.6	84 971	16.6	1.0
Occasional care	130	1.6	11 238	2.2	1.2
Neighbourhood Model Occasional Care Services	323	3.9	15 350	3.0	2.1
Multifunctional Aboriginal Children's Services	1 338	16.2	1 715	0.3	78.0
Multifunctional Children's Services	72	0.9	1 020	0.2	7.1
Mobiles and Toy Library Services	669	8.1	3 267	0.6	20.5
Before/After school care	906	11.0	99 518	19.4	0.9
Total	**8 262**	**100.0**	**511 782**	**100.0**	**1.6**

(a) Estimates are derived from the CSP Census, Department of Family and Community Services. Due to non-response by some centres, figures are weighted estimates and are therefore subject to some error.

Source: AIHW, forthcoming.

ADOPTIONS

Policy and legislation with respect to adoption vary somewhat according to State and Territory, but in every jurisdiction there is either a preference or a requirement for Indigenous children to be adopted by Indigenous people whenever possible (AIHW 1998a). In practice, formal adoption of Indigenous children is not common. Many Indigenous children are placed with relatives or other members of their community informally or through processes other than adoption. Adoption orders are only made when alternative arrangements are not considered to be in the child's best interest (AIHW 1998a).

Between 1991–92 and 1997–98, 58 Indigenous children were formally adopted. Some 26 of these children (45%) were adopted by non-Indigenous people (AIHW 1999a).

CHILD PROTECTION

Child abuse and neglect 'can generally be defined as occurring when a child has been, is being, or is likely to be subjected to physical, emotional or sexual actions or inactions which have resulted in, or are likely to result in, significant harm or injury to the child' (AIHW 1998b, p. 6). It should be noted, however, that there are considerable variations in child protection policies, practices, legislation and definitions across jurisdictions. When a notification of child abuse and neglect is received by a State or Territory community services department, it is assessed to determine whether it warrants investigation or whether it is to be dealt with in some other way (for example, the family may be referred or provided with a service instead, or there may be no further action required). In general terms, finalised investigations have one of three main outcomes: 'substantiated'; 'child at risk' (used only in a few jurisdictions); or 'not substantiated'. In 1997–98, the proportion of finalised investigations resulting in a substantiation ranged from 23% to 54%, depending on the jurisdictions' definitions and practices (AIHW 1999b).

CHILD PROTECTION *continued*

If circumstances warrant (for example in the case of an abandoned child or an irretrievable family breakdown, or if other avenues have been exhausted), the community services department may apply to have the child placed on a care and protection order. Some children on care and protection orders are placed in out-of-home care, while others remain at home. Out-of-home care may also occur on a voluntary basis, or as the result of a different type of order (AIHW 1998b).

Data for 1997–98 on substantiated notifications of child abuse and neglect, children under care and protection orders, and out-of-home placements are presented in tables 3.9–3.10. These figures are not directly comparable with published data for earlier years (see AIHW 1998b and 1999b for more information).

Within a given year, care should be taken when comparing data from different jurisdictions. As noted above, there are differences in the definitions of child abuse and neglect, as well as differences in the relevant policies and practices, from place to place (AIHW 1999b). The differences shown in tables 3.9–3.10 in the rates of substantiated notifications, care and protection orders, and out-of-home placements for Indigenous children across States and Territories tend to reflect differences in the rates for all children. That is, the jurisdictions with the highest rates for Indigenous children also tended to have the highest rates for other children. Thus it is more useful to look at differences between rates for Indigenous and non-Indigenous children within a jurisdiction, rather than across jurisdictions. There may be differences in the quality of ascertainment and recording of Indigenous status from place to place, however, and this could affect comparisons both within and between jurisdictions.

Child abuse and neglect

A total of 21,663 children were the subject of substantiated notifications of child abuse and neglect in Australia in 1997–98, of whom 2,617 (12.1%) were identified as Indigenous children (AIHW 1999b). Rates of substantiated notifications were higher for children identified as Indigenous than for other children in every jurisdiction except Tasmania (in which only three children who were the subject of substantiated notifications were recorded as being Indigenous) (table 3.9).

3.9 SUBSTANTIATED NOTIFICATIONS OF CHILD ABUSE AND NEGLECT(a)—1997–98

	Indigenous		*Non-Indigenous(b)*		
State and Territory	*no.(a)*	*rate(c)*	*no.(a)*	*rate(c)*	*rate ratio(d)*
New South Wales	655	12.9	6 841	4.7	2.7
Victoria	460	46.4	5 932	5.6	8.3
Queensland	771	15.8	3 582	4.5	3.5
South Australia	260	26.3	1 309	4.0	6.6
Western Australia	272	10.8	783	1.9	5.7
Tasmania	3	0.4	127	1.1	0.4
Northern Territory	163	7.3	148	4.4	1.7
Australian Capital Territory	33	23.7	324	4.4	5.4

(a) Children aged 0–16 years. Numbers refer to children subject to a substantiation, not the number of substantiated notifications. A child may have been the subject of more than one substantiated notification.

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

(c) Rates per 1,000 children aged 0–16 years. Rates are not comparable to data from earlier years due to changes in population estimates after the 1996 Census (see chapter 11) and changes in policy and practice in jurisdictions over time. See AIHW 1998b and 1999b for more details.

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

Source: AIHW 1999b.

Children under care and protection orders and out-of-home placements

In every State and Territory, children identified as Indigenous were more likely to be under care and protection orders and/or out-of-home placements than were other children (table 3.10).

As at 30 June 1998, there were 2,868 Indigenous children aged 0–17 years on care and protection orders, a figure which represented about 17.4% of the 16,449 Australian children on these orders (AIHW 1999b). Rates varied by jurisdiction, but the rate for Indigenous children was about 5–8 times higher than that for other children in the majority of jurisdictions (table 3.10).

Indigenous children were also more likely to be in out-of-home placements (table 3.10). Some 2,634 of 14,422 children in out-of-home care (18.3%) were identified as Indigenous. In most jurisdictions, the rate of out-of-home care was about 5–14 times higher for Indigenous children than for other children (AIHW 1999b).

3.10 CHILDREN AGED 0–17 YEARS ON CARE AND PROTECTION ORDERS AND OUT-OF-HOME PLACEMENTS—AS AT 30 JUNE 1998

	Care and protection orders(a)			*Out-of-home placements(a)(b)*		
	Indigenous	*Non-Indigenous(c)*		*Indigenous*	*Non-Indigenous(c)*	
State and Territory	*rate(d)*	*rate(d)*	*rate ratio(e)*	*rate(d)*	*rate(d)*	*rate ratio(e)*
New South Wales	22.3	3.1	7.2	21.5	2.9	7.4
Victoria	28.5	3.5	8.1	32.2	2.9	11.1
Queensland	16.5	3.1	5.3	10.1	2.2	4.6
South Australia	15.3	2.7	5.7	18.0	2.4	7.5
Western Australia	8.1	1.7	4.8	11.6	1.7	6.8
Tasmania	(f)4.6	4.2	1.1	(f)4.6	3.5	1.3
Northern Territory	3.1	2.4	1.3	3.0	1.9	1.6
Australian Capital Territory	(f)31.2	3.2	9.8	(f)24.4	1.8	13.6
Australia	**14.6**	**3.3**	**4.4**	**14.3**	**2.6**	**5.5**

(a) See Glossary.

(b) Excludes 2 children of unknown sex and age from New South Wales and 3 from Queensland as well as 48 children from South Australia for whom no details were known. Australian Capital Territory data include SAAP placements if a payment was made by Family Services.

(c) Includes children for whom Indigenous status was unknown.

(d) Rate per 1,000 children aged 0–17 years.

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

(f) Rate based on fewer than 50 children.

Source: AIHW 1999b.

THE JUVENILE JUSTICE SYSTEM

Little statistical information is available about the involvement of Indigenous children in the juvenile justice system. There are, however, 'established links between juvenile offending and such factors as family support for children and young people, child protection issues, youth income support and accommodation' (AIHW 1998c, p. 18).

In the 1996 Census of Population and Housing, there were almost 600 children under 18 years old recorded as being in a 'corrective institution for children' on the night of the Census (table 3.11). Of these, about 41% were identified as being Indigenous. Although the proportion varied by State and Territory, there was an over-representation of Indigenous children in every jurisdiction except Victoria. Only a small number of children overall were counted in this type of institution in Victoria, which suggests that Victorian children in custody for committing offences may have been included under a different category of dwelling, such as 'other welfare institution', 'childcare institution' or 'other'. This may also have occurred to some extent in other jurisdictions. Children in custody may also have been in adult prisons, rather than in institutions for children. In 1996, there were 96 children under the age of 18 years counted in a 'prison, corrective or detention institution for adults' on census night, of whom 24 (25%) were identified as Indigenous. Despite limitations in the data, the available evidence shows an over-representation of Indigenous children in the justice system.

3.11 CHILDREN(a) COUNTED IN 'CORRECTIVE INSTITUTIONS FOR CHILDREN' IN THE 1996 CENSUS

	Indigenous	*Total*	*Indigenous children as a proportion of total*	*Indigenous children as a proportion of all children(b)*
State and Territory	*no.*	*no.*	*%*	*%*
New South Wales	73	186	39.0	3.1
Victoria	0	9	0.0	0.9
Queensland	74	169	44.0	5.2
South Australia	13	50	26.0	2.6
Western Australia	51	105	49.0	5.1
Tasmania	9	22	41.0	5.3
Northern Territory	10	13	77.0	36.2
Australian Capital Territory	3	15	20.0	1.6
Australia(c)	**233**	**573**	**41.0**	**3.6**

(a) Children aged under 18 years. Based on State or Territory of usual residence.
(b) Aged 0–17 years, as at 30 June 1996.
(c) Includes Other Territories and overseas visitors.

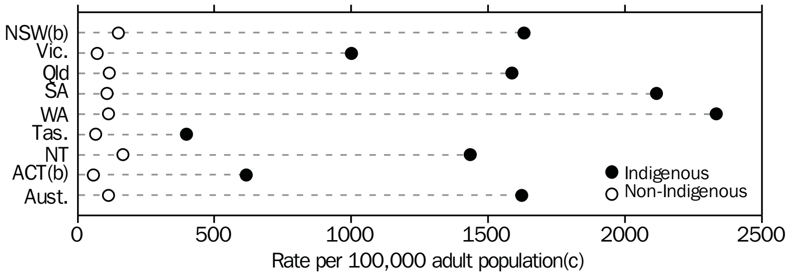
Source: ABS, unpublished data, 1996 Census.

ADULT CORRECTIVE SERVICES

People who are socially and economically disadvantaged are at increased risk of becoming involved with the legal system, whether as victims or as perpetrators (Mukherjee et al. 1998).

Indigenous people are much more likely than other Australians to be imprisoned. Some 3,580 prisoners (3,347 males and 233 females) were identified as Indigenous in the 1997 National Prisoner Census (ABS 1998d). This figure represented almost 19% of the total Australian prisoner population at that time. In Australia as a whole, Indigenous adults were imprisoned at the rate of 1,625 per 100,000, which is over 14 times the rate for the non-Indigenous adult population (112 per 100,000) (graph 3.12). There were differences in the Indigenous and non-Indigenous imprisonment rates by jurisdiction, but the Indigenous rate was at least six times the non-Indigenous rate in every State and Territory and was 10–20 times higher in most jurisdictions.

3.12 IMPRISONMENT RATES(a): BY STATE, TERRITORY AND INDIGENOUS STATUS—1997



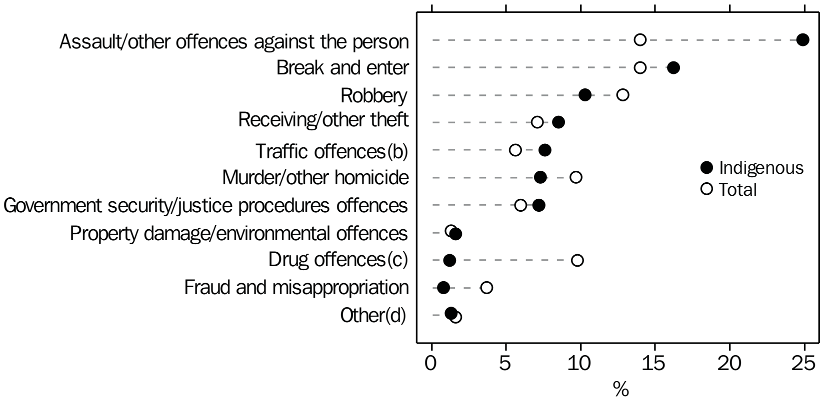
(a) Sentenced and unsentenced prisoners combined.
(b) Includes prisoners sentenced in the ACT and held in NSW prisons.
(c) All persons aged 17 years and over.
Source: ABS 1998l.

ADULT CORRECTIVE SERVICES *continued*

The reasons for imprisonment differed for the Indigenous and total prison populations (graphs 3.13–3.14). For about a quarter (24.9%) of Indigenous male prisoners, the most serious offence or charge was assault (graph 3.13). This was true for only 14.0% of the total male prison population. Similarly, among female prisoners, assault was the most serious offence or charge for 22.7% of Indigenous females but for only 11.1% of all females (graph 3.14).

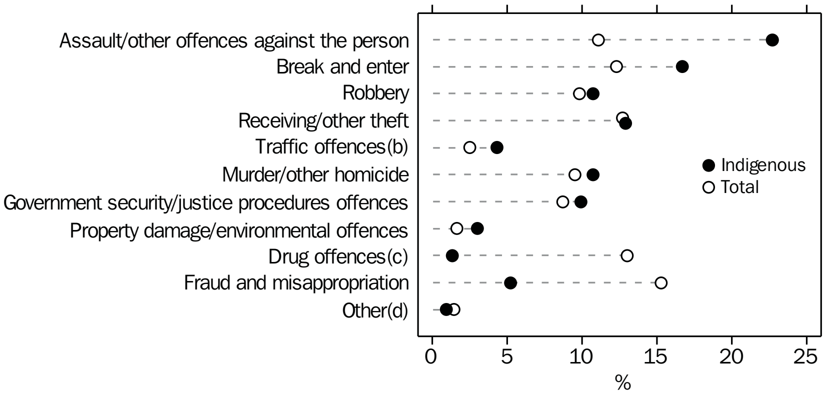
By contrast, Indigenous prisoners were much less likely than the total prison population to have a drug offence as their most serious offence (1.2% compared with 9.8% among males; 1.3% compared with 13.0% among females) (ABS 1998d).

3.13 REASON FOR IMPRISONMENT, MALES(a)—1997



(a) Most serious offence or charge. Sentenced and unsentenced prisoners combined.
(b) Includes driving, licence/registration, and other traffic offences.
(c) Includes possession/use, dealing/trafficking, and manufacture/growing of drugs.
(d) Includes extortion, unlawful possession of weapons, offences in custody and other offences.
Source: ABS 1998l.

3.14 REASON FOR IMPRISONMENT, FEMALES(a)—1997



(a) Most serious offence or charge. Sentenced and unsentenced prisoners combined.
(b) Includes driving, licence/registration, and other traffic offences.
(c) Includes possession/use, dealing/trafficking, and manufacture/growing of drugs.
(d) Includes extortion, unlawful possession of weapons, offences in custody and other offences.
Source: ABS 1998l.

DISABILITY SUPPORT SERVICES

Little is known about the level of disability in the Indigenous population, but some information is available about Indigenous people's use of disability support services provided under the Commonwealth-State Disability Agreement (CSDA). As discussed earlier in this chapter, little information is available about income support payments to Indigenous people, including income support for people with a disability, and this section focuses on other types of disability support services. Under the CSDA, the Commonwealth Government has responsibility for employment support services, while States and Territories have responsibility (with substantial funding from the Commonwealth Government) for accommodation support, respite care, day services, etc. (Commonwealth Department of Health and Family Services 1998). Not all disability support services are funded under the CSDA, but only CSDA-funded services are included in the CSDA data collection. It should be noted that use of services does not necessarily reflect the level of disability. Although there is overlap between disability services and aged care services, CSDA-funded services are generally aimed at people under 65 years (AIHW 1997a). Services aimed at older people, such as those under the Home and Community Care (HACC) Program, are discussed in the section on aged care services further on in this chapter.

Information about disability support services provided under the CSDA, as well as about the consumers of such services, is now collected annually, usually on a single 'snapshot' day determined by the relevant jurisdiction. In 1997, the last year for which data have been published, some 5,759 services (97% of all eligible services) participated in the collection (Black & Maples 1998).

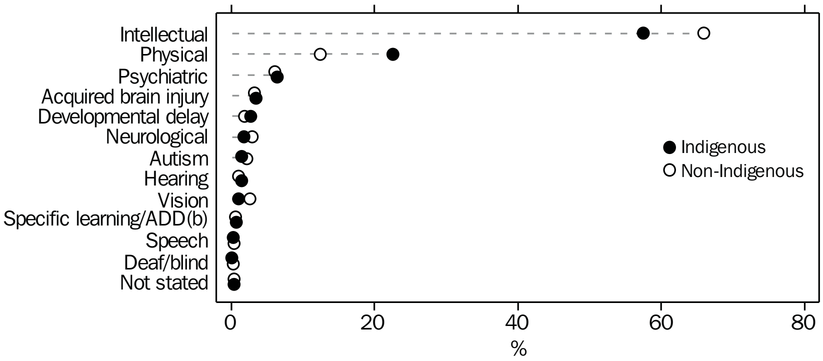
Of the 64,432 consumer forms completed for the 1997 data collection, 1,583 were identified as being Indigenous consumers, while 5,259 had Indigenous status not stated or 'not known'. People who received more than one type of service on the day of data collection may have been counted more than once. Forms on which the consumer was identified as Indigenous represented 2.5% of all forms, and 2.7% of those forms for which Indigenous status was stated (Black & Maples 1998). Some 3.2% of recipients of CSDA-funded accommodation support services and 1.6% of recipients of CSDA-funded open employment services were identified as Indigenous (Black & Maples 1998).

The CSDA figures on accommodation support services are largely consistent with data from the 1996 Census. Almost 12,000 people were counted in dwellings categorised as 'hostels for the disabled' on census night, of whom 245 (2%) were identified as Indigenous. This figure ranged from almost 6% of those under 18 years old, to less than 1% of those aged 65 years or more.

DISABILITY SUPPORT SERVICES *continued*

For both Indigenous and non-Indigenous recipients of CSDA-funded services in the 1997 data collection, the most commonly reported primary type of disability was intellectual disability (58% of Indigenous clients and 66% of non-Indigenous clients) (Black & Maples 1998). As can be seen in graph 3.15, physical disability was a distant second, and no other type of primary disability accounted for more than 10% of clients. Although these figures reflect differences in the use of services by people with different types of disabilities, they do not necessarily reflect the prevalence of particular types of disability among people in the community.

3.15 PRIMARY DISABILITY TYPE FOR RECIPIENTS OF CSDA-FUNDED SERVICES(a)—1997



(a) Percentages refer to completed consumer forms. An individual who received more than one type of service on snapshot day may have been counted more than once. Forms for which Indigenous status was not stated or not known are not included.

(b) Attention deficit disorder.

Source: Black and Maples 1998.

More information about issues in the identification of Indigenous people in CSDA collections is presented in inset 3.16.

3.16 ISSUES IN THE IDENTIFICATION OF INDIGENOUS PEOPLE IN COMMONWEALTH-STATE DISABILITY AGREEMENT (CSDA) COLLECTIONS

In response to concern about the level of ‘not stated’/’unknown’ responses to the question on Indigenous status in the 1996 CSDA data collection (14%; Black et al. 1998), a study of CSDA-funded disability support services was conducted to find out about Indigenous identification practices used in these services, and the attitudes of staff about collecting such data. The study was done shortly after the 1997 CSDA ‘snapshot’ day and included selected services in South Australia and Victoria, as these jurisdictions had expressed interest in participating.

About 90% of selected services participated in the study, for a total of 84 services in South Australia and 165 services in Victoria. Although it was intended that the questionnaire be filled out by the people who had previously collected information for the CSDA collection on ‘snapshot’ day, this was not always the case.

The study results revealed a wide variety of practices and attitudes. About 30% of services in South Australia and almost half of services in Victoria said they used oral and/or written questions to identify Indigenous clients, while 24–30% of services in these States said they did not use any method to do so. Some services reported using other methods, such as appearance or surname, either alone or in combination with oral or written questions. Almost one in five services said they had no Indigenous clients, but only 20% of these services used best practice (that is, oral or written questions for all clients) to ascertain whether a client was Indigenous. Therefore it is possible that these services had Indigenous clients but were not aware of them.

When asked about problems they had in finding out whether a client was Indigenous, the difficulties most commonly expressed by respondents in both States were that staff believed it was a personal matter and/or believed it to be discriminatory to collect the information. About a quarter of the services said they had no problems in this area, with a large majority of these services using oral and/or written questions to collect the information.

Services indicated that they were aware of valid reasons for collecting information about Indigenous clients, but it appears they did not all see themselves as a critical part of the information collection process. However, many services said they were interested in receiving more information and/or training on the collection of information about Indigenous clients.

Source: Beneforti & Paradies 1998.

Although income support is available for people with disabilities and for their carers, adequate information is not yet available from administrative data collections about whether the recipients of such support payments are Indigenous. In the 1994 NATSIS, about 6% of Indigenous adults aged 15 years or more reported receiving a disability support pension (ABS 1995), but no more recent information is available. As discussed above, DFCS and Centrelink have undertaken to improve the recording of information on Indigenous status of Centrelink clients, so this type of information may be available in the future (see chapter 11 for more information).

AGED CARE SERVICES

The term ‘aged care services’ can be somewhat misleading. Not everyone who is ‘aged’ requires services, and some ‘aged care services’, such as nursing homes, may provide services to younger people. The patterns of ill health and death among Indigenous people (see chapters 7 and 9) suggest that they may need ‘aged care’ services at younger ages than their non-Indigenous counterparts, and this is reflected in the data presented in this section. This section deals with community-based care, such as those services funded under the HACC Program, as well as residential facilities, including hostels and nursing homes. No information is available about informal care, such as that provided by family, friends and community members, but it is undoubtedly an important contributor to the care of older people.

The potential target group for aged care services is determined in part by the size of the population in the relevant age groups. For the total population, this is the age group 70 years and over. As can be seen in table 3.17, 8.3% of the Australian population was aged 70 years or more in 1996, compared with only 1.5% of the Indigenous population. In contrast to the total population, in which an increase in the proportion aged 70 and over is projected over the next 10 years, the proportion of Indigenous people in this age group is not projected to increase. However, the actual number of Indigenous people aged 70 or more is projected to increase by almost 1,000, an increase of about 16%.

Because of the shorter life expectancy of Indigenous people (see chapter 9) and the relatively early burden of chronic diseases among Indigenous adults (see chapter 7), the need for aged care services may begin at younger ages for Indigenous people than for their non-Indigenous counterparts. The Commonwealth has explicitly recognised this and uses estimates of the population aged 50 and over in planning for aged care for Indigenous people (Commonwealth Department of Health, Housing and Community Services 1991). As can be seen in table 3.17, about 9.0% of the Indigenous population was aged 50 years or more in 1996. This is projected to increase to about 10.3% by 2006.

3.17 ESTIMATED AND PROJECTED POPULATION DISTRIBUTION—1996 AND 2006(a)

	Age group (years)					
	50–69		*70 and over*		*Total*	
	’000	%	’000	%	’000	%
Indigenous population						
1996	28.9	7.5	5.9	1.5	386.0	100.0
2006(b)	41.2	8.8	6.8	1.5	469.1	100.0
Total population						
1996	3 245.0	17.7	1 510.9	8.3	18 310.7	100.0
2006(c)	4 388.0	21.5	1 847.1	9.1	20 366.2	100.0

(a) As at 30 June of the year indicated. Calculations made using unrounded figures.
(b) Assumes no change in the propensity to identify as Indigenous.
(c) Series I. For more information, see ABS (1998k).

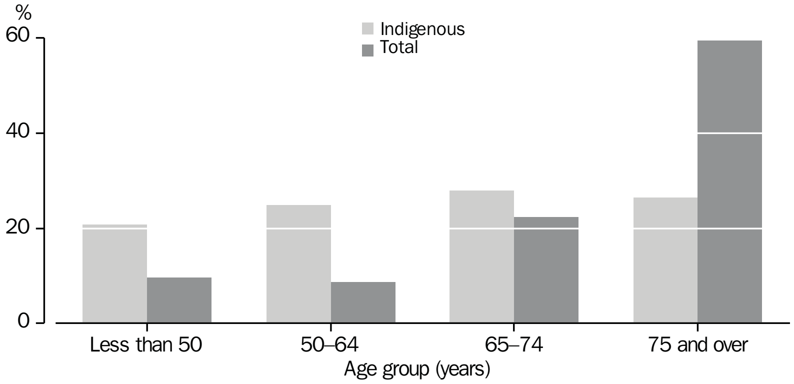
Source: ABS 1998c, 1998f, 1998k.

Home and Community Care

Services funded under HACC include home help, transport, centre day care, respite services, etc. The target group is people living in the community who have a moderate, severe or profound handicap, regardless of age. Residential care is reserved for people with high levels of dependency, and assessment is required before entry (Commonwealth Department of Health and Family Services 1998).

Graph 3.18 shows the age distribution of HACC service recipients in 1993–94. Indigenous service recipients tended to be younger than other service recipients. Almost half (46%) of Indigenous HACC recipients were less than 65 years old, while this was true for only 18% of HACC service recipients overall (AIHW 1997a).

3.18 AGE DISTRIBUTION OF HACC SERVICE RECIPIENTS—1993–94



Source: AIHW 1997a.

Indigenous people received HACC services at a higher rate than non-Indigenous people in every age group (AIHW 1997a), with the largest differences in relative terms among those in the age groups 50–64 years and 65–74 years (table 3.19).

3.19 AGE-SPECIFIC RATES OF USE OF HACC SERVICES—1993–94

Age group (years)	*Indigenous rate(a)*	*Non-Indigenous rate(a)*	*rate ratio*
Less than 50	0.8	0.3	2.7
50–64	13.7	1.3	10.5
65–74	53.6	6.4	8.4
75 and over	111.6	25.7	4.3

(a) Rate per 1,000.

Source: AIHW 1997a.

Residential care

As at 30 June 1997, less than 1% of residents of Australian nursing homes and hostels were identified as Indigenous (table 3.20). A high proportion of the 60,122 hostel residents and 72,543 nursing home residents did not have their Indigenous status recorded, however (AIHW 1998e, 1998h).

3.20 INDIGENOUS STATUS OF RESIDENTS OF HOSTELS AND NURSING HOMES—30 JUNE 1997

	Hostels	*Nursing homes*
	%	%
Indigenous	0.7	0.7
Non-Indigenous	59.0	78.6
Not stated	40.3	20.6
Total	**100.0**	**100.0**

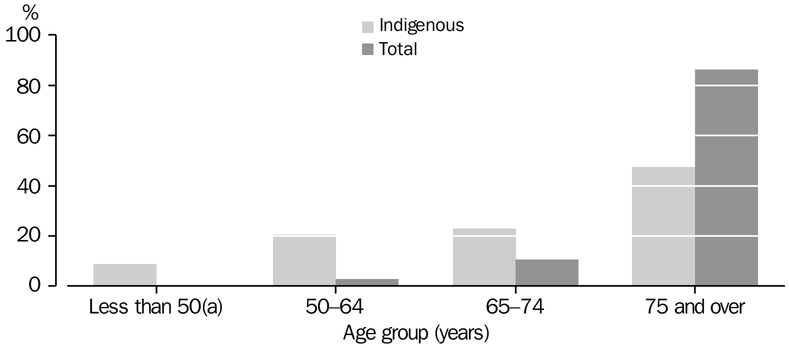
Source: AIHW 1998e, 1998h.

These figures are consistent with results from the 1996 Census. About 73,000 people were counted in a 'nursing home' on census night, of whom 482 (0.7%) were identified as Indigenous by the person who filled out the census form. This figure varied by age, however, with 3.9% of those under 18 years, 5.6% of those 18–49, 2.8% of those 50–64 and only 0.5% of those 65 or over identified as Indigenous. Indigenous status was not stated for 14.5% of people counted in nursing homes in the Census. It should be noted that the census category 'nursing home' does not necessarily equate to the group of institutions included in the Nursing Home Payment System, which is the basis of the national nursing home data collection. Therefore, some discrepancies would be expected between the Census and the national nursing home collection.

On census night in 1996, over 65,000 people were counted in the category 'accommodation for the retired or aged (cared)', of whom 357 (0.5%) were identified as Indigenous. (The term 'cared' refers to the provision of meals with accommodation.) The proportion identified as Indigenous ranged from 5.1% of those 18–49 years to 0.4% of those 65 years or over. Information on Indigenous status was not available for about 11.0% of people counted in this type of accommodation. Although many hostels would be included under 'accommodation for the retired or aged', the two categories are not identical.

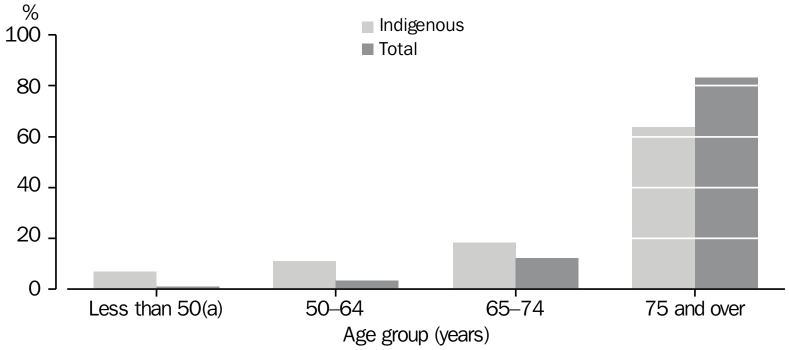
Hostel and nursing home residents who were identified as Indigenous were younger than hostel and nursing home residents in general (graphs 3.21 and 3.22). In the 1996 national data collections, about 30% of hostel residents and 18% of nursing home residents who were identified as Indigenous were less than 65 years old, compared with about 3% of hostel residents and 4% of nursing home residents overall (AIHW 1997a).

3.21 AGE DISTRIBUTION OF HOSTEL RESIDENTS—1996



(a) Data values too small to graph.
Source: AIHW 1997a.

3.22 AGE DISTRIBUTION OF NURSING HOME RESIDENTS—1996



(a) Data values too small to graph.
Source: AIHW 1997a.

Indigenous people used hostels and nursing homes at a greater rate than non-Indigenous people in every age group (AIHW 1997a).

SUMMARY

Indigenous Australians are disadvantaged relative to non-Indigenous Australians on a range of welfare indicators. Indigenous people are more likely to be in need of housing assistance and income support than their non-Indigenous counterparts. Indigenous children are more likely to be the subjects of substantiated cases of abuse and neglect, more likely to be under care and protection orders and more likely to be involved in the juvenile justice system than non-Indigenous children. Indigenous adults are more likely than non-Indigenous adults to have contact with legal and correctional services. Information on these and other aspects of welfare is limited by the incomplete identification of Indigenous people in national collections.

CHAPTER 4

HEALTH RISK FACTORS

INTRODUCTION

Health risk factors can have a positive or a negative impact on a person's health. For example, breastfeeding can protect against infant illness, while smoking can have a negative effect on respiratory and cardiovascular health. Health risk factors considered in this chapter include living conditions, nutrition, cigarette smoking, alcohol consumption, use of illicit drugs and other substances, and exposure to violence. Breastfeeding is discussed in chapter 6. Satisfactory national information on immunisation is not available, but information about vaccine-preventable diseases is presented in chapter 7.

The National Health Survey (NHS) of 1995 is the most recent source of national information about health risk factors (see Explanatory Notes paragraphs 17–22 for survey details) and allows for comparisons between the Indigenous and non-Indigenous populations living in non-remote areas. The 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) allows for more detailed examination of patterns within the Indigenous population and results are available for the whole of Australia, including remote areas. These two surveys can be compared to some extent but always with caution. Although many similar topics were addressed in the two surveys, the questions asked were not identical.

Data from the NATSIS and the NHS provide much of the material for this chapter. Other data sources, such as the Census of Population and Housing, the Australian Institute of Health and Welfare national hospital separations database, the National Drug Strategy (NDS) household surveys and various local reports, have been included where appropriate.

LIVING CONDITIONS

Adequate housing, access to clean water, and the removal of refuse and human waste are important factors in achieving and maintaining good health. The absence of any of these factors can result in a variety of infectious and parasitic diseases, including infections of the respiratory system, eyes, ears, skin, heart, kidneys and liver, as well as diarrhoeal diseases. In turn, such infections may lead to malnutrition, rheumatic heart disease, hearing loss, liver cancer and other long-term health problems (Benenson 1990; Cairncross & Feachem 1983; Menzies School of Health Research 1994).

In a recent paper on measuring Indigenous housing need, Jones, Neutze and Sanders (1998) proposed four measures of the adequacy of housing, including homelessness, overcrowding, the presence of functioning services (such as water and sewerage) and the condition of the dwelling. Information on these measures is provided in the following sections.

Homelessness

It is difficult to estimate accurately the number of homeless people in Australia. As discussed in chapter 3, information is collected about people who use services funded under the Supported Accommodation Assistance Program, but not all homeless people access such services. Another indicator of homelessness is the number of people counted in the Census in ‘improvised dwellings’, a category which includes sheds, humpies, tents (other than in caravan parks), park benches, etc. This measure underestimates homelessness because it does not include those in shelters (see chapter 3) or those who were staying with other people, such as friends or relatives. Although census collectors undoubtedly missed some people living in improvised dwellings due to the transient nature of such accommodation, on census night in 1996 there were over 5,800 households, with an average of almost three people per household, counted in improvised dwellings (ABS 1998c). Some 1,804 of these households (31%) were Indigenous households (table 4.1). Indigenous households in improvised dwellings were much larger on average (4.9 people per household) than other households in improvised dwellings (2.0 people per household).

Improvised dwellings were more commonly found in rural and remote areas than in urban areas (table 4.1). More than half (56%) of all Indigenous households living in improvised dwellings were counted in the Northern Territory, with most of the rest in Queensland (22%) and Western Australia (14%).

4.1 IMPROVISED DWELLINGS(a)(b)—1996

	Number of households		*Average number of persons per household*	
	Indigenous	*Other*	*Indigenous(c)*	*Other*
Major Urban	18	268	1.6	1.4
Other Urban	273	515	3.9	1.8
Bounded Locality	399	137	5.8	1.7
Rural Balance	1 114	3 084	4.8	2.2
Total	**1 804**	**4 004**	**4.9**	**2.0**

(a) Includes improvised homes, tents other than in caravan parks, and sleepers-out.

(b) Based on place of enumeration. Includes up to three persons temporarily absent. Excludes group, visitors only and other not classifiable households. See Glossary for definitions of part of State and Indigenous household.

(c) Average number of persons per household includes both Indigenous and other persons.

Source: ABS 1998c.

Overcrowding

As discussed in chapter 2, Indigenous households are larger on average than other households, and a higher proportion of Indigenous households than other households have more than two people per bedroom. Such figures do not necessarily indicate the extremes of overcrowding in a population group, however.

Overcrowding *continued*

In this section, dwellings with 10 or more people are examined. (Non-private dwellings, such as motels, boarding houses, hospitals and prisons, are excluded, but improvised dwellings are included.) The choice of a cutoff of 10 people as an indicator of overcrowding is arbitrary. Dwellings can be overcrowded with fewer than 10 people, but it is also possible that a very large dwelling could have 10 or more residents and not be overcrowded. However, most dwellings with 10 or more people could probably be considered overcrowded, and having such a large number of people in a dwelling would tend to place services and facilities under stress and increase the risk of their breaking down.

Over 2% of Indigenous households in Australia lived in dwellings with 10 or more people in 1996 (table 4.2). This was true for only a very small proportion (0.04%) of other households. Nearly half (49%) of all dwellings in Australia with 10 or more people were occupied by Indigenous households (ABS 1998c). Some 10% of Indigenous households with 10 or more people lived in dwellings with two or fewer bedrooms and 69% lived in dwellings with 3–4 bedrooms. Only about 7% lived in dwellings with 5 or more bedrooms, while the number of bedrooms was not specified for the remaining 15% (ABS 1998c).

Almost 7% of Indigenous people lived in a dwelling with 10 or more people in 1996, which was almost 50 times greater than the proportion of non-Indigenous people living in such conditions (0.14%). Half (50%) of all Australians living in dwellings with 10 or more people in 1996 were identified as Indigenous people. The majority of Indigenous people living in dwellings with 10 or more people were counted in the Northern Territory (53%), Queensland (22%) and Western Australia (17%).

About 29% of Indigenous people in the Northern Territory were living in dwellings with 10 or more people at the time of the 1996 Census (table 4.2). This was true for 8% of Indigenous people in Western Australia, 5% in Queensland and 4% in South Australia. Although the proportions were lower in other jurisdictions, Indigenous people in New South Wales, Victoria and Tasmania were still at least three times more likely than non-Indigenous people in those States to be living in dwellings with 10 or more people.

4.2 DWELLINGS WITH 10 OR MORE PERSONS(a)(b)—1996

	Households in dwellings with 10 or more persons		*People in dwellings with 10 or more persons(c)*	
	Indigenous	*Other*	*Indigenous*	*Non-Indigenous*
State and Territory	*%*	*%*	*%*	*%*
New South Wales	0.28	0.04	0.92	0.17
Victoria	0.22	0.04	0.76	0.16
Queensland	1.79	0.03	5.38	0.13
South Australia	1.18	0.02	3.91	0.08
Western Australia	2.87	0.02	8.15	0.09
Tasmania	0.10	0.02	0.32	0.10
Northern Territory	13.21	0.04	29.17	0.17
Australian Capital Territory	0.00	0.02	0.00	0.09
Australia(d)	**2.14**	**0.04**	**6.63**	**0.14**

(a) Based on place of enumeration. Includes partners, children and co-tenants who were temporarily absent on census night. A maximum of three temporary absentees could be counted in each household.

(b) Family and lone person households only. Excludes group, visitors only and other not classifiable households.

(c) Persons with Indigenous status not stated were excluded.

(d) Includes Jervis Bay Territory and Christmas and Cocos (Keeling) Islands.

Source: ABS, unpublished data, 1996 Census.

In a recent analysis, Jones (1999) used census data to estimate the number of additional bedrooms needed to eliminate overcrowding and homelessness among the Indigenous population in 1996. According to his calculations, almost 35,000 additional bedrooms would be needed (table 4.3). In accordance with the data provided above on improvised dwellings and dwellings with 10 or more people, the largest estimated bedroom need was in the Northern Territory (almost 13,000), followed by Queensland and Western Australia. Jones also compared estimated bedroom need in 1996 with his earlier estimates based on the 1991 Census (Jones 1994). As shown in table 4.3, despite the increase in the Indigenous population between 1991 and 1996, estimated bedroom need decreased overall by 2%. Not all States and Territories showed a decrease, however. Most notably, the estimated bedroom need in the Northern Territory increased by 13% between 1991 and 1996.

4.3 ESTIMATED NUMBER OF BEDROOMS NEEDED

	1991	*1996*	*Change in need*
State and Territory	*no.*	*no.*	*%*
New South Wales	4 769	4 461	–6
Victoria	866	701	–19
Queensland	9 871	8 954	–9
South Australia(a)	1 860	1 320	–29
Western Australia	6 166	5 932	–4
Tasmania	265	273	3
Northern Territory	11 350	12 793	13
Australia(b)	**35 205**	**34 527**	**–2**

(a) The results for South Australia for 1996 should be interpreted with caution, due to known problems in the collection phase of the 1996 Census in the northern part of the State. For more details about census data quality problems, see Working Group to Establish Guidelines for Interpreting Census Data (1998) or Ross (1999).

(b) Includes Australian Capital Territory and Other Territories.

Source: Jones 1999.

Services and condition of stock

According to data from the 1994 NATSIS, about 30% of Indigenous people were living in dwellings which were reported by a resident to be unsatisfactory (that is, they did not meet the needs of the people living in them). The most commonly cited problems were a shortage of bedrooms, insufficient living area, and a need for repair. About 10% of Indigenous people were living in dwellings which were said to have been affected by a breakdown in water, toilet, electricity and/or gas service in the four weeks prior to the survey (ABS 1996d; ABS & AIHW 1997a).

Data from the 1992 Housing and Community Infrastructure Needs Survey (HCINS) were presented in the previous edition of this publication (ABS & AIHW 1997a). More recent data are available for Western Australia (see inset 4.4). The proposed 1999 Community Housing and Infrastructure Needs Survey (CHINS) is expected to provide extensive information about essential services and the condition of housing stock in discrete Indigenous communities throughout Australia. It will update and expand on the data collected in the 1992 HCINS (see chapter 11 for more details about the 1999 CHINS).

4.4 ENVIRONMENTAL HEALTH NEEDS IN WESTERN AUSTRALIA

The most recent data on the environmental health needs of discrete Aboriginal communities comes from a Western Australian study conducted in 1997. A total of 210 occupied discrete Aboriginal communities (containing almost 16,000 people) were surveyed. Of these, about 8% of communities had an inadequate water source, 8% were without adequate sewerage treatment and/or disposal systems, and 5% had no electricity supply. Among communities that did have electricity, about 40% had regular interruptions in supply. At the time of the survey, about 44% of dwellings had no functioning hot water service (24% had no service at all, while 20% had a service that was not currently working). About 25% of dwellings had no functioning kitchen sink, bath/shower and/or toilet.

Source: Environmental Health Needs Coordinating Committee 1998.

NUTRITION

The importance of good nutrition to health has long been recognised, and diet has been linked to diseases such as coronary heart disease and cancer, two of Australia's major causes of illness and death (AIHW 1998f), as well as diabetes. Measures of weight adjusted for height, such as body mass index, as well as diabetes, can be important indicators of nutritional status and risk of ill health. Being underweight in childhood may be a reflection of poor nutrition, which can lead to slower physical and mental growth (see inset 4.5, for example), and being underweight in pregnancy is associated with increased risk of having a baby of low birthweight. Conversely, being overweight is a risk factor for a number of health conditions in adult life, such as diabetes and heart disease. More information about these conditions is presented in chapters 6, 7 and 9.

4.5 EFFECTS OF MALNUTRITION ON HEALTHY BRAIN DEVELOPMENT IN CHILDREN UNDER TWO YEARS

In a study of 157 Aboriginal children aged under two years who were admitted with diarrhoea to Royal Darwin Hospital between May 1990 and April 1991, wasting (an indicator of malnutrition) was found to be significantly associated with microcephaly (small head circumference). The authors recommended that there be an emphasis on improved nutrition during pregnancy, lactation and infancy. These periods were seen as critical for the healthy brain development of children, with long-term consequences for intelligence and cognitive functioning.

Source: Skull, Ruben and Walker 1997.

An adequate supply of healthy and affordable food is an important factor in maintaining good nutrition but this is not always achieved, particularly in remote communities. Systematic national data are not available on the supply of food in remote areas, but local and regional studies have identified a range of problems. Inset 4.6 describes one project that attempts to address some of these problems.

4.6 THE TERRITORY FOOD PROJECT

The Territory Food Project (Northern Territory) aims to 'improve the quality, quantity and affordability of the food supply in remote Aboriginal communities; encourage the food industry to adopt nutrition policies consistent with national nutrition guidelines; increase access to nutrition education for consumers, educators and health professionals and for training the nutrition workforce; and develop a food and nutrition monitoring system to monitor changes in the food supply and nutritional status in these communities' (AIHW & CDHFS 1997, p. 34).

The project is a collaboration involving communities, health services/government agencies and industry, and addresses issues in the areas of demand, supply, management and community control.

Source: AIHW and CDHFS 1997.

The 1995 National Nutrition Survey (NNS), which included a sub-sample of people who participated in the NHS, provided detailed information about the food intake of the Australian population, but the number of Indigenous people included in the survey was too small to allow separate estimates for the Indigenous population.

Although detailed information about the dietary habits of Indigenous people is not available at the national level, information about BMI is available from both the NATSIS and the NHS. In the NATSIS (and in the NNS), those who agreed had their height and weight measured by a member of the survey team. In the NHS, by contrast, measurements of height and weight were reported by the respondent. Self-reported measurements in the NHS were shown to underestimate BMI based on actual measurements for people who were participants in both the NHS and NNS (ABS 1998f).

Data from the NATSIS have been analysed extensively to explore the distribution of height, weight and BMI of Indigenous Australians, and to make comparisons with reference data from other populations (Cunningham & Mackerras 1998).

Indigenous children aged 7–15 years in the NATSIS were more likely to be categorised as either underweight or overweight, and less likely to be categorised as being of acceptable weight, compared with Australian reference data (Cunningham & Mackerras 1998). The proportion of children underweight and overweight varied by place of residence, as shown in table 4.7.

4.7 CHILDREN'S(a) RELATIVE WEIGHT(b), BY PLACE OF RESIDENCE—1994

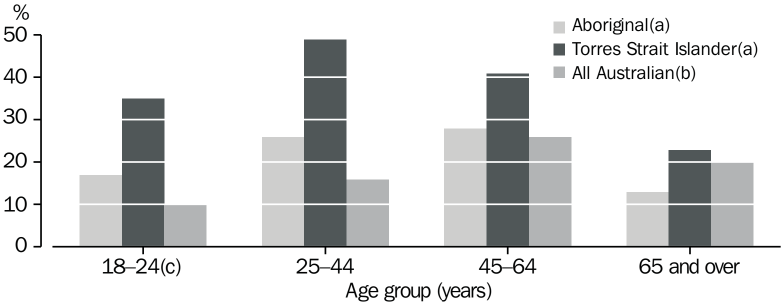
	Males			*Females*		
	Underweight	*Acceptable weight*	*Overweight*	*Underweight*	*Acceptable weight*	*Overweight*
	%	%	%	%	%	%
Capital city	16.0	56.0	28.0	16.0	54.0	30.0
Other urban	26.0	43.0	31.0	23.0	48.0	29.0
Rural	30.0	46.0	24.0	26.0	49.0	25.0
All Indigenous	**24.0**	**48.0**	**28.0**	**22.0**	**50.0**	**28.0**
Expected	15.0	70.0	15.0	15.0	70.0	15.0

(a) Indigenous children aged 7–15 years.
(b) Categories are based on Australian reference values reported by Harvey and Althaus 1993.

Source: Cunningham and Mackerras 1998.

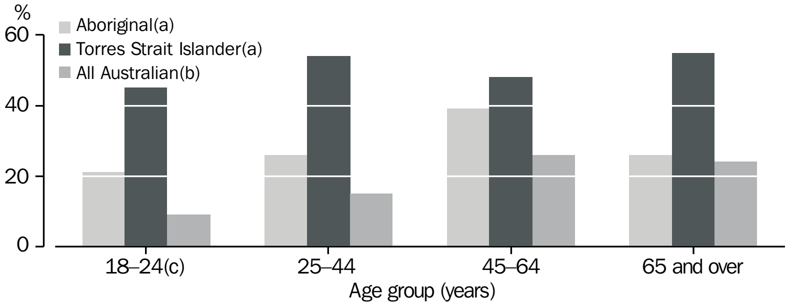
Among adults aged 18 years or more, about 25% of Indigenous males and 28% of Indigenous females in the NATSIS were classified as obese (BMI of 30 or more), compared with about 19% of all Australian males and females aged 19 years and over in the NNS. Torres Strait Islander adults in the NATSIS tended to be taller and heavier and have a higher BMI than Aboriginal adults (graphs 4.8 and 4.9) (Cunningham & Mackerras 1998).

4.8 OBESITY IN ADULT MALES—1994



(a) 1994 NATSIS.
(b) 1995 NNS.
(c) Data from the NNS are for males aged 19 years or more.
Source: Cunningham and Mackerras 1998.

4.9 OBESITY IN ADULT FEMALES—1994



(a) 1994 NATSIS.
(b) 1995 NNS.
(c) Data from the NNS are for females aged 19 years or more.
Source: Cunningham and Mackerras 1998.

Results for adults in the NHS are largely consistent with those of the NATSIS, after taking into account the likely underestimation of BMI in the NHS due to self-reporting of height and weight. Indigenous people in non-remote areas were nearly twice as likely as their non-Indigenous counterparts to be classified as obese after adjusting for age (ABS 1999a).

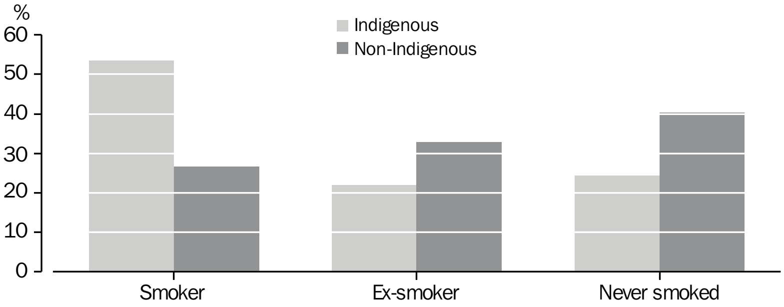
SMOKING

In the first edition of this publication (ABS & AIHW 1997a), the health risks, prevalence and perceptions of smoking among Indigenous people were examined in detail. Tobacco smoking is a major risk factor for a number of serious conditions such as heart disease, lung disease and various cancers (United States Department of Health and Human Services 1989). As chapters 7 and 9 show, Indigenous people are at greater risk than other Australians of hospitalisation and/or death from these conditions. Smoking 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 other babies.

Both the NHS and the NATSIS revealed a high prevalence of smoking among Indigenous adults. Among adults in the NHS aged 18 years and over and living in non-remote areas, some 56% of Indigenous males and 46% of Indigenous females said they currently smoked, compared with 27% of non-Indigenous males and 20% of non-Indigenous females (ABS 1999a). These results are largely consistent with data from the NATSIS.

After adjusting for age, Indigenous males and females were less likely than their non-Indigenous counterparts to report never having smoked (graphs 4.10 and 4.11).

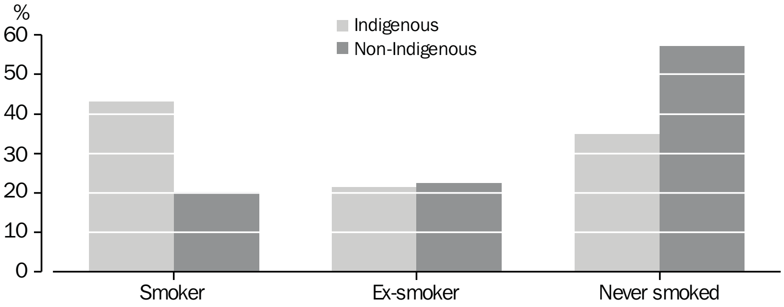
4.10 SMOKER STATUS, MALES(a)(b)—1995



(a) Aged 18 and over. Excludes males living in remote areas.
(b) Directly age-standardised to the 1995 Australian population.

Source: ABS, unpublished data, 1995 National Health Survey.

4.11 SMOKER STATUS, FEMALES(a)(b)—1995



(a) Aged 18 and over. Excludes females living in remote areas.
(b) Directly age-standardised to the 1995 Australian population.

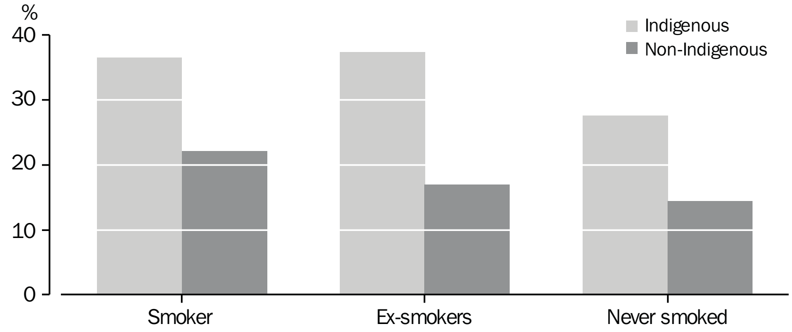
Source: ABS, unpublished data, 1995 National Health Survey.

A variety of factors, such as education, employment status and alcohol consumption, may be associated with smoking. An extensive analysis of NATSIS data revealed that both Indigenous males and Indigenous females aged 15 and over who had completed at least year 12 at school were less likely than those who left school earlier to report that they smoked. Indigenous people in forms of employment other than in the Community Development Employment Projects (CDEP) Scheme were less likely to report that they smoked than those in CDEP scheme employment, the unemployed and people not in the labour force (Cunningham 1997). Similarly, in the NHS, Indigenous adults aged 18 years and over from non-remote areas were less likely to report smoking if they were employed (49%) than if they were unemployed (63%) or not in the labour force (55%). This was also largely true for non-Indigenous adults, with 24% of employed people reporting they smoked, compared with 42% of unemployed people and 26% of those not in the labour force. The relationship between alcohol consumption and smoking is discussed in the next section.

SMOKING *continued*

As discussed in chapter 7, Indigenous people in the NHS were more likely than non-Indigenous people to assess their health as fair or poor. However, as graph 4.12 illustrates, both Indigenous and non-Indigenous current smokers in non-remote areas were more likely, after adjusting for age, to assess their health as fair or poor than those who said they had never smoked. After adjusting for age, Indigenous people were consistently more likely to report fair or poor health than non-Indigenous people, regardless of smoking status, however.

4.12 ASSESSED HEALTH AS FAIR/POOR(a)(b), BY SMOKER STATUS—1995



(a) Among adults aged 18 and over. Excludes persons living in remote areas.
(b) Directly age-standardised to the 1995 Australian population.
Source: ABS, unpublished data, 1995 National Health Survey.

ALCOHOL CONSUMPTION

The excess consumption of alcohol is a major health risk factor (see Glossary for the National Health and Medical Research Council guidelines for alcohol consumption). Alcohol consumption has been linked to numerous health conditions such as road injuries, cirrhosis of the liver, suicide and stroke (Unwin, Thomson & Gracey 1994), as well as social problems. In their study of alcohol consumption in the Kimberley area of Western Australia, Hunter, Hall and Spargo (1991, p. 5) noted that ‘there is a consensus that alcohol has had a major, and generally damaging impact on Aboriginal traditional life, family structure, health and capacity for self-determination’.

A number of studies have shown that Indigenous people are less likely than non-Indigenous people to be drinkers of alcohol. In the NDS household surveys of 1993 and 1994, for example, it was found that the proportion of adults who were current regular drinkers was lower for the urban Indigenous population (33%) than for the general urban population (45%) (Commonwealth Department of Human Services and Health 1996).

Similarly, in the 1995 NHS, Indigenous adults aged 18 years or more living in non-remote areas were less likely than non-Indigenous adults to report consuming alcohol in the week prior to interview. Recent alcohol consumption was reported by 59% of Indigenous males, 40% of Indigenous females, 66% of non-Indigenous males and 46% of non-Indigenous females (ABS 1999a). In the NATSIS, 59% of Indigenous males and 37% of Indigenous females aged 18 and over living in urban areas reported that they had consumed alcohol in the week prior to interview. Recent alcohol consumption was reported by 52% of Indigenous males and 32% of Indigenous females in rural areas.

Despite the lower proportion of Indigenous adults who drink, alcohol continues to be of concern for Indigenous people because those who do consume alcohol are more likely to consume it at hazardous levels. In the NHS, some 21% of Indigenous adult males who drank alcohol (13% of all Indigenous adult males) were classified as high risk drinkers (based on their reported consumption levels for the previous week) compared with 8% of non-Indigenous male drinkers (5% of all non-Indigenous adult males). High risk drinking was less common among females, with 9% of Indigenous female drinkers and 3% of non-Indigenous female drinkers in that category (ABS 1999a).

A range of factors may be associated with drinking at harmful levels, although this does not necessarily imply a causal relationship. An analysis of Indigenous drinkers aged 18 years and over in the NHS showed that those in the high risk category were less likely than low risk drinkers to have a higher educational degree and more likely to have left school before the age of 15, to be unemployed or not in the labour force, to earn the majority of their income through government pensions, to earn less than $10,000 per annum and to come from a household where English was not usually spoken at home. Although the numbers of people in each category are small, the patterns are consistent in suggesting that high risk drinking among Indigenous people is more common among the more socioeconomically disadvantaged.

Alcohol has frequently been cited as a factor in such health conditions as road injuries and interpersonal violence. Inset 4.13 describes a recent study of the relationship between alcohol and injury in some North Queensland Aboriginal communities.

4.13 INJURY AND ALCOHOL IN CAPE YORK COMMUNITIES

A pilot project was carried out in a number of Aboriginal communities in Cape York in 1996–97 in order to address the increasingly critical problem of injury in the area. The project included a 12-month audit of case notes in one community, as well as a series of case studies in five communities and a comparison of a community with a canteen and one without a canteen.

In the community in which the audit took place, about 24% of initial presentations to the health clinic were because of injury, and about half (51%) of these injuries were associated with alcohol. Some 74% of alcohol-related injuries (43% of all injuries) were due to assault (including domestic violence).

In contrast with many Aboriginal communities, alcohol use was found to be highly prevalent in this community, with 93% of adults aged 15 years or more reporting that they drank regularly. Alcohol consumption per drinker averaged 26 cans of full strength beer each week (most of it consumed on only four days), and expenditure on alcohol was estimated to represent about 40% of the community's total income. Alcohol-related injuries were more common around paydays and when the canteen was open. When this community was compared with another community without a canteen, the rates of injury were found to be about twice as high in the first community. The amount and quality of information about injuries varied within and between clinics, and this was seen as a limiting factor in the potential for injury surveillance at the community level.

The case studies in five communities helped the study team to understand better the context of and circumstances surrounding injury, including alcohol-related injury.

Since the study was conducted, there have been several positive responses to the recommendations of the report, and a pilot injury prevention project is being implemented in three remote Aboriginal communities in Cape York. This project will include the development and piloting of a locally managed information system to enhance injury surveillance, training of a local person to run the system, and a range of community-based interventions related to injury and alcohol.

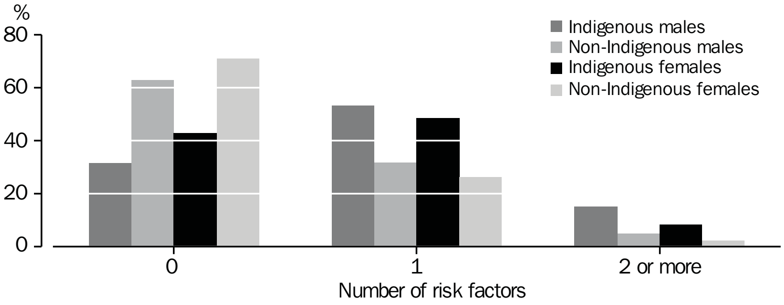
Source: Gladman et al. 1998.

MULTIPLE RISK FACTORS: OBESITY, SMOKING AND ALCOHOL CONSUMPTION

In the sections above, risk factors such as obesity, cigarette 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. 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. As graph 4.14 shows, Indigenous adults were also much more likely than non-indigenous adults to be exposed to more than one of these three risk factors.

4.14 NUMBER OF RISK FACTORS REPORTED(a)(b)—1995



(a) Adults aged 18 years and over living in non-remote areas.
(b) Risk factors include obesity, current cigarette smoking and consumption of alcohol at high risk levels.

Source: ABS, unpublished data, 1995 National Health Survey.

OTHER DRUGS AND SUBSTANCES

The most recent source of national information on the use of illicit drugs among Indigenous people remains the NDS household surveys of 1993 and 1994, which were conducted in urban areas. The 1994 survey included a special Indigenous supplement to the sample. A repeat of the NDS survey was completed in 1998 but there was no Indigenous supplement, although respondents were asked whether they were of Aboriginal or Torres Strait Islander origin. Results from the 1998 survey were not yet available at the time of this writing and it is not certain whether there will be a sufficient number of Indigenous respondents to allow for the separate reporting of Indigenous estimates.

According to the 1993 and 1994 NDS surveys, just over half the Indigenous population aged 14 years and over in urban areas said they had tried at least one illicit drug, compared with 38% of the general urban population. Marijuana was the most commonly tried illicit drug among the Indigenous urban population, with almost half of those aged 14 and over reporting they had tried it. About a quarter of the Indigenous urban population said they were currently using an illicit drug compared to 15% of the general urban population. Some 10% of Indigenous youth aged 14–19 years said they were using at least one illicit drug other than marijuana. Indigenous males were more likely than Indigenous females to try illicit drugs and to continue their use (Commonwealth Department of Human Services and Health 1996).

About 2–3% of the urban population, both Indigenous and general, reported that they had tried heroin, but less than half a per cent said they were currently using the drug. Similar results were recorded for cocaine while 'speed' (i.e. amphetamines) was reportedly tried by 6% of both populations and in current use by less than 2% (Commonwealth Department of Human Services and Health 1996).

There is some evidence that the use of illicit drugs may be increasing. Inset 4.15 describes one such study.

4.15 HOSPITAL ADMISSIONS FOR ILLICIT DRUG PROBLEMS IN WESTERN AUSTRALIA

A study of hospital admissions for an illicit drug problem in Western Australia for the period 1980–95 revealed a rapid increase in first-time admission rates, particularly for Aboriginal people. The age-standardised admission rates per 100,000 rose from 9.2 for Aboriginal people and 16.4 for non-Aboriginal people in 1980 to 180.7 and 95.5 respectively in 1995. The largest increases in admissions among Aboriginal people were related to amphetamines, opiates and marijuana (Patterson et al., forthcoming).

Although the results may have been affected by changing levels of Indigenous identification, changes in the coding of diseases and conditions, and changes in population denominators over time, it seems unlikely that these factors could have accounted for all of the very large increases observed.

Injecting drugs with contaminated injecting equipment is a risk factor for blood-borne diseases such as hepatitis B and C, and HIV. The NDS survey estimated that about 2% of urban Indigenous people were currently injecting drugs compared with about half a per cent of the general urban population (Commonwealth Department of Human Services and Health 1996). A survey of hepatitis C prevalence among injecting drug users attending needle exchanges in 1995–96 found that about 70% of Indigenous injecting drug users were infected with the virus. A similar prevalence among non-Indigenous users was observed (ANCARD 1997). Of 100 HIV cases notified among the Indigenous population in 1992–97 (in all jurisdictions excluding Victoria and the Australian Capital Territory), 12 were among people exposed to injecting drug use (of whom nine were also exposed to male homosexual contact) (NCHECR 1998).

Petrol sniffing also continues to be a problem in some Indigenous communities, with serious consequences for those who sniff, ranging from mental disturbances to death. Some communities are tackling the problem by, among other things, switching from lead-based petrols to AVGAS. Inset 4.16 describes an evaluation of one such program.

4.16 'MOVING ON'—A REPORT ON PETROL SNIFFING AND THE IMPACT OF THE INTRODUCTION OF AVGAS ON THE ANANGU PITJANTJATJARA LANDS

In 1995, Nganampa Health Council undertook a project to evaluate the impact on petrol sniffing of the introduction of AVGAS (aviation gasoline) to the Anangu Pitjantjatjara (AP) lands. AVGAS was introduced onto the AP lands in 1994 following news of the success of AVGAS in reducing petrol sniffing in other communities, such as Maningrida in the Top End of the Northern Territory. By the end of 1994, only one community in the AP lands still stocked super (leaded) petrol.

In 1984, it was estimated that a minimum of 10.0% of the people living on the AP lands were sniffing petrol. By 1994, just before the introduction of AVGAS, the estimate was 6.4%. One year later, it was estimated that about 3.8% of the population were petrol sniffers. The prevalence of petrol sniffing had been decreasing over time before the introduction of AVGAS, but much of the reduction had been among occasional users. With the introduction of AVGAS, the number of chronic petrol sniffers (those most at risk of the negative health consequences related to sniffing) decreased from 121 in 1994 to 81 in 1995. Almost half of chronic sniffers in 1995 lived in the community which still had super petrol.

Chronic petrol sniffers were found to be an aging population. The peak in the 1980s was among those aged 15–19 years. By 1995, most chronic sniffers were in their middle to late 20s. The study team found that there was very little recruitment of new sniffers.

Nganampa Health Council recommended that communities continue to use AVGAS as a means of discouraging petrol sniffing. It was acknowledged that AVGAS alone was not sufficient and that a commitment to alternative activities and employment for youth were also vital components in the ongoing prevention of sniffing.

Source: Roper and Shaw 1996.

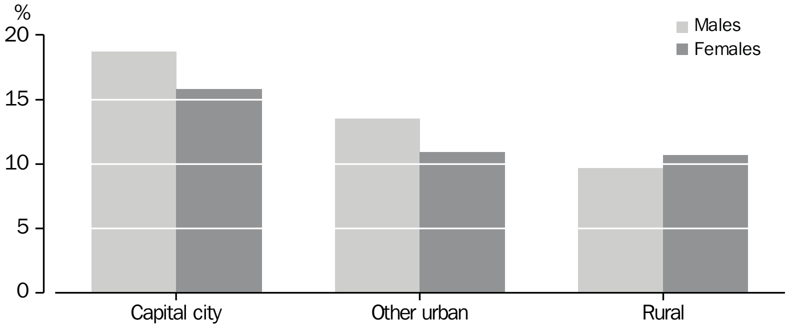
EXPOSURE TO VIOLENCE

Violence is often ignored as a risk factor for poor health, but personal safety is an essential element of wellbeing. Indigenous people are more likely than other Australians to be victims of violence.

The 1994 NATSIS provided the first national data on Indigenous people as victims of crime. Among Indigenous people aged 13 years and over in the NATSIS, 13% reported that they had been physically attacked or verbally threatened in the year prior to the survey, and 11% of households were reported as having been a victim of break and enter, and theft (ABS 1998g). By contrast, in the 1993 National Crime and Safety Survey of the general Australian population, some 2.5% of respondents aged 15 and over said they were victims of assault in the year prior to interview and 7% of households were reported to have been victims of an actual or attempted break and enter (ABS 1994). Although the questions in the two surveys were not identical and comparisons should be made with caution, the results are suggestive of a higher level of exposure of Indigenous people to these types of crimes.

In the NATSIS, Indigenous people in capital cities were more likely to report having been physically attacked or verbally threatened than people in other urban areas or rural areas, and males were generally more likely to report being attacked or verbally threatened than females (graph 4.17).

4.17 ATTACKED OR VERBALLY THREATENED(a)(b)—1994



(a) In the last year.
(b) Indigenous persons aged 13 years and over.
Source: ABS 1998h.

Of those Indigenous people aged 13 years or more who said they had been attacked or verbally threatened in the year prior to interview, some 44% indicated that they had been attacked or threatened on three or more occasions (ABS 1998g).

In 1996–97, injury purposely inflicted by others (that is, intentional injury) accounted for about 3% of hospital separations among males and females identified as Indigenous. The rates of hospitalisation for intentional injury were many times higher for Indigenous people than for non-Indigenous people, as is discussed in chapter 7.

Indigenous people are also over-represented in intimate partner homicides, that is, those in which the victim and the killer are or were involved in an intimate relationship. Approximately 22% of all offenders and 20% of victims in intimate partner homicides in 1989–96 were identified as Indigenous people (Carcach & James 1998).

SUMMARY

Indigenous people are at higher risk of ill health due to factors such as poor living conditions, poor nutrition, smoking, consumption of alcohol at hazardous levels, and use of illicit drugs and other harmful substances. They are more likely than non-Indigenous people to be victims of violence and to suffer intentional injuries resulting in hospitalisation. Community-initiated programs, such as the AVGAS project and the Cape York injury prevention project, appear to be having a positive impact at the local level.

CHAPTER 5 HEALTH SERVICES: PROVISION, ACCESS AND USE

INTRODUCTION

This chapter presents information from a variety of sources about the provision of health services to Indigenous people and their access to and use of such services. (Information about the use of hospitals is presented in chapter 7, and information on welfare services is presented in chapter 3.) The participation of Indigenous people in the health and community services workforce and in higher education courses in these fields is also discussed.

It is difficult to quantify the provision of health services to Indigenous people because many relevant services are not specific to the Indigenous population (Deeble et al. 1998). In addition, services that affect the health and wellbeing of Indigenous people are provided by a range of public and private organisations and go beyond the traditional boundaries of 'health'. For example, as was discussed in chapter 4, housing and environmental infrastructure are important factors in achieving and maintaining good health. Provision of other services (such as education) could also be seen to be health-related, but they are beyond the scope of this publication. In this chapter, the focus is on government and non-government expenditure on services which are specific to health. Much of this information has become available for the first time with the recent publication of a report for the financial year 1995–96 (Deeble et al. 1998).

Access is also difficult to measure directly. Many factors can influence the likelihood of a person being able to make use of a service, including physical factors (such as distance and the availability of transport), economic factors (such as the cost of transport and the cost of the service), cultural factors (such as language barriers and the attitudes of staff) and personal factors (such as one's ability to cope with different barriers to access). (For a review of factors affecting access to health services by Indigenous people, see Ivers et al. 1997.) As no single measure of access is available, this chapter includes information on a range of factors which may be relevant and for which data exist, such as the availability of motor vehicles, distance to services, health insurance coverage, proficiency in English, and the involvement of Indigenous people in the provision of health services.

The use of services is generally much easier to measure than provision or access, but the accuracy depends on the quality of Indigenous identification in service records and on the quality of self-reported data from surveys. Information on the use of hospital services is presented in chapter 7. Some information on the use of other health services is available from the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) and the 1995 National Health Survey (NHS), and is presented later in this chapter.

INTRODUCTION *continued*

It is important to note that the provision of, use of and access to services do not necessarily reflect the actual need for such services. While need is an important concept, it is difficult to measure, especially given the data currently available. A number of measures of health status, which provide an indication of need, are presented in chapters 6–9.

PROVISION OF HEALTH SERVICES

In 1997, the National Centre for Epidemiology and Population Health and the Australian Institute of Health and Welfare were commissioned by the Commonwealth Office for Aboriginal and Torres Strait Islander Health to analyse expenditure on health services for Indigenous people (AIHW 1998f). The resulting report provides estimates of public and private expenditure for 1995–96 on 'those formal activities directed primarily towards improving health or reducing the effects of illness and injury' (Deeble et al. 1998, p. 3). The project specifically excluded 'many aspects of the living conditions which bear on health (housing, sanitation, water supply, economic standing, etc.) and which may have as large an influence on final outcomes as the results of any personal health services' (Deeble et al. 1998, p. 3). Indirect costs related to illness were also excluded from consideration.

The issue of identification of Indigenous people in relevant mainstream data collections (such as public and private hospital separations data and Medicare records) was critical, as most of the expenditure on health services for Indigenous people comes from mainstream health funds rather than funds specifically allocated for Indigenous health. Where identification was inadequate or unavailable, estimates were made based on all available information. While this resulted in uncertainty in the estimation of expenditure, the report's authors noted that the results are more likely to overstate than understate the true amount of expenditure on health services for Indigenous people (Deeble et al. 1998).

Total expenditure

Based on the available data, it was estimated that about $853 million was spent on health services provided to Indigenous people in 1995–96 (table 5.1). This figure represented 2.2% of total health expenditure and included both government and private expenditure. The estimated expenditure per person was $2,320 for Indigenous people and $2,163 for non-Indigenous people (Deeble et al. 1998). The differential in expenditure (8%) is smaller in relative terms than the differential in various measures of health status, such as those described in chapters 6–9.

There were differences in the patterns of expenditure according to type of service and source of expenditure (table 5.1), as well as by jurisdiction (table 5.2).

As shown in table 5.1, expenditure per person was greater for Indigenous people than for non-Indigenous people for public hospital services, mental institutions, patient transport, community health services and public health services, but much lower for Medicare, the Pharmaceutical Benefits Scheme (PBS), nursing homes, private hospitals, dental and other professional services, and non-prescribed medications.

Total expenditure *continued*

This suggests differences in the pattern of service use by Indigenous and non-Indigenous people, with a greater reliance on the public system by Indigenous people. About 95% of all expenditure on health services to Indigenous people was from government rather than private sources, compared with 67% from government for services to non-Indigenous people (Deeble et al. 1998).

5.1 ESTIMATED GOVERNMENT AND PRIVATE EXPENDITURE ON HEALTH SERVICES(a)—1995–96

	Indigenous				*Non-Indigenous*				
	Government	*Private*	*Total*	*Per person*	*Government*	*Private*	*Total*	*Per person*	
	$m	*$m*	*$m*	*$*	*$m*	*$m*	*$m*	*$*	*ratio(b)*
Subsidised services									
Public hospitals—inpatients	340	4	344	939	8 222	948	9 170	515	1.82
Public hospitals—outpatients	98	0	98	267	2 129	0	2 129	120	2.23
Mental institutions	10	0	10	27	399	0	399	22	1.23
Nursing homes	16	4	20	49	2 065	672	2 737	154	0.35
Community health	199	0	199	543	1 438	5	1 443	81	6.70
Patient transport	35	1	36	98	295	264	559	31	3.16
Public health	26	0	26	71	489	0	489	27	2.63
Medicare and other medical	32	2	34	93	6 523	1 374	7 870	442	0.22
PBS drugs and appliances	10	3	13	35	2 366	483	2 879	162	0.22
Administration and research	43	1	44	120	1 295	620	1 915	107	1.12
Other services									
Private hospitals	0	5	5	13	258	2 858	3 116	175	0.07
Dental and other professional	1	11	12	32	296	3 108	3 404	191	0.17
Non-prescribed medicines	0	12	12	33	0	2 440	2 440	137	0.24
Total	**810**	**43**	**853**	**2 320**	**25 775**	**12 775**	**38 550**	**2 163**	**1.08**

(a) Includes total and per person expenditure by and for Indigenous and non-Indigenous persons.
(b) Ratio is equal to Indigenous expenditure per person divided by non-Indigenous expenditure per person.

Source: Deeble et al. 1998.

Government expenditure

The majority (79%) of government expenditure on health services to Indigenous people was through State, Territory and local governments (Deeble et al. 1998). This is explained in part by the different patterns of service use by Indigenous and non-Indigenous people discussed above (see table 5.1). About 80% of government expenditure for Indigenous people was for public hospitals (55%) and community health services (25%), while these two categories accounted for just under half of government expenditure for non-Indigenous people (43% for public hospitals and 6% for community health services) (Deeble et al. 1998). By contrast, Medicare and PBS accounted for over a third of government expenditure for non-Indigenous people (26% for Medicare and 10% for PBS) but only 5% for Indigenous people (4% for Medicare and 1% for PBS). On a per capita basis, total expenditure on Medicare and PBS for Indigenous people was only about one-fifth as much as for non-Indigenous people (table 5.2) (Deeble et al. 1998). More information about Indigenous people's access to Medicare and the PBS is presented in inset 5.4.

5.2 ESTIMATED EXPENDITURE THROUGH GOVERNMENT-SUBSIDISED PROGRAMS(a)—1995–96

	Indigenous	*Non-Indigenous*	
	$	*$*	*ratio(b)*
Through State and local governments	*1 763*	*806*	*2.2*
Through Commonwealth programs			
Medicare and PBS	128	535	0.2
Aboriginal health organisations and other Commonwealth programs	344	213	1.6
Total Commonwealth	*472*	*748*	*0.6*
Total	**2 235**	**1 554**	**1.4**

(a) Estimated gross expenditure per person.

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

Source: AIHW 1998b.

The Northern Territory was estimated to have the highest per capita government expenditure on health services to Indigenous people, followed by Western Australia, Queensland and South Australia (table 5.3). As noted by Deeble et al. (1998), the jurisdictions with a higher 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.

5.3 ESTIMATED STATE AND TERRITORY GOVERNMENT EXPENDITURES ON HEALTH SERVICES(a)—1995–96

	Indigenous	*Non-Indigenous*	
State and Territory	*$*	*$*	*ratio(b)*
New South Wales	1 334	825	1.6
Victoria	1 326	747	1.8
Queensland	1 518	716	2.1
Western Australia	2 152	807	2.7
South Australia	1 500	827	1.8
Tasmania	1 227	788	1.6
Australian Capital Territory	659	869	0.8
Northern Territory	3 221	963	3.3
Australia	**1 753**	**785**	**2.2**

(a) Estimated gross expenditure per person through State and Territory authorities.

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

Source: Deeble et al. 1998.

5.4 ACCESS TO MEDICARE AND THE PHARMACEUTICAL BENEFITS SCHEME (PBS)

In a study conducted by Keys Young on behalf of the Health Insurance Commission (HIC), the researchers found that, while Medicare and the PBS work well for the Australian community in general, 'Aboriginal and Torres Strait Islander peoples everywhere face considerable barriers which impede their full access to both Medicare and the PBS' (Keys Young 1997, p. i).

The researchers found that Medicare benefits were not available to many Indigenous people because they did not have access to a current Medicare number or card, either because they had never been enrolled, they were not currently enrolled (that is, the card had expired) or they were not effectively enrolled (they could not produce a current card or number, even though one might exist). The proportion of Indigenous people having no effective access to a current Medicare number or card ranged from about 15–20% in some urban areas to nearly 40% in some remote areas. People who can not access services under Medicare may defer necessary care because they can not afford it and/or they may seek treatment at a hospital (generally at a greater cost to the health care system).

Enrolment and re-enrolment were often hampered by difficulty in producing acceptable proof of identity. The HIC has recognised this problem and has introduced an alternative Proof of Identity form (where a referee attests to the identity of the person), but the researchers found that this form was not widely known about or used.

Many Aboriginal Community Controlled Health Services and clinics expressed frustration with the system. Not only did they report spending a considerable amount of time ensuring that their patients were currently enrolled, but they were not adequately reimbursed for the clinical work performed by Aboriginal Health Workers and nurses (whose services are not covered by Medicare).

The problems with the PBS were for the most part related to enrolment for concession cards, which reduce the level of the required co-payment for prescribed medications. As with Medicare cards, the researchers found that many people who were eligible for a concession card did not have access to one. Some people (including many participants in the Community Development Employment Projects scheme) were not aware that they were entitled to one. Others had been given a card but could not locate it and did not know the number. The Department of Family and Community Services (formerly Department of Social Security) will not provide information on entitlements to a third party for reasons of privacy, so health providers were not able to obtain the number on behalf of the client and therefore could not apply the concessions. In addition, most people were not aware of the Safety Net scheme, which sets a ceiling on the amount of money families have to pay for medications in a given year. While pharmacists were aware of the scheme, they reported that it was not always possible to keep track of the amounts spent by their clients due to mobility and the use of different surnames within families. The shortage of pharmacists in some areas (especially in rural and remote areas) was also a barrier to the use of the PBS by some Indigenous people.

The report makes a number of recommendations to the HIC about how the Medicare and PBS systems could be made to work more effectively for Indigenous people, in areas such as improving enrolment mechanisms, implementing better ways of accessing Medicare and PBS concession entitlement numbers, compensating health services for clinical work carried out by Indigenous Health Workers, improving medication compliance, and providing adequate and appropriate information to providers, patients and the general community.

Source: Keys Young 1997.

Improving the coordination of health care has been the subject of great interest in Australia in recent years. Trials are currently being conducted in a number of communities to assess whether better coordination of care for patients with complex health needs can provide improved health outcomes within sustainable funding levels (Commonwealth Department of Health and Family Services 1998). Some of these trials involve Aboriginal communities (see inset 5.5).

5.5 COORDINATED CARE TRIALS IN ABORIGINAL COMMUNITIES

Australian Coordinated Care Trials were initiated by the Council of Australian Governments as an attempt to address what it perceived as duplication and excessive complexity in the health care system for clients with chronic and complex health care needs.

There are 13 trials in all, four of which focus primarily on Aboriginal populations: two in the Northern Territory (Tiwi Islands and the remote communities west of Katherine), one in New South Wales (Wilcannia), and one covering two sites in Western Australia (Perth and Bunbury). The Commonwealth Department of Health and Aged Care has funded the Trials' development and their external evaluation at the local and national levels.

The three key innovations of the Aboriginal Trials are:

- A flexible funding pool: consisting of funds previously held by State and Territory health authorities and other providers, to resource their provision of health services to the region, as well as funds from the Department of Health and Aged Care (capitation payments equivalent to national average rates of use of the Medicare Benefits Schedule and the Pharmaceutical Benefits Scheme).
- Community control: local community organisations hold the pool of funds and purchase or provide health services on behalf of the Trial clients.
- Care Coordination: Trials have developed best practice guidelines for treating the most prevalent health problems, as well as for population health services specific to age and gender. Information technology systems have been installed to allow health staff to individualise care plans. Service level coordination is achieved through the purchasing decisions of the fundholding organisations.

The Northern Territory Coordinated Care Trials are sponsored by the Tiwi Health Board and the Katherine West Health Board, with the support of Territory Health Services. The Wilcannia Trial is sponsored by the Far West Ward Aboriginal Health Service, with the principal support of the New South Wales Department of Health's Area Health Service and the Royal Flying Doctor Service. The Western Australian Trial is sponsored by Derbarl Yerrigan Health Service and South West Aboriginal Medical Service with the support of the Health Department of Western Australia.

The Trials are due to conclude by the end of 1999.

Source: Office for Aboriginal and Torres Strait Islander Health, 1999, personal communication.

ACCESS TO SERVICES

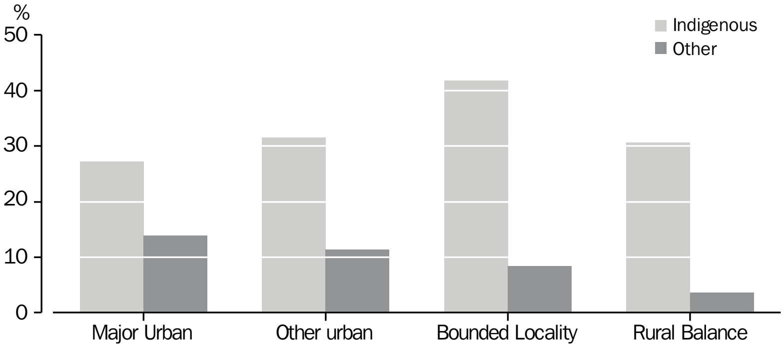
As discussed above, a range of physical, economic, cultural and personal factors can affect one's access to services. In this section, information is presented about some of these factors, including availability of transport, distance to and availability of services, possession of private health insurance, 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 1996 Census on the number of vehicles per dwelling, although no information is available about the roadworthiness of the available vehicles. As was discussed in chapter 2, Indigenous households are larger on average than other households, and this may result in greater stress on the vehicles in Indigenous households.

As shown in graph 5.6, Indigenous households were more likely than other households to be without a vehicle in 1996. The proportion of Indigenous dwellings with no vehicle was high (around 30–40%) regardless of location.

5.6 DWELLINGS WITH NO VEHICLES(a)—1996



(a) Excludes dwellings where the number of vehicles was not stated.
Source: Unpublished data, 1996 Census.

In Australia, the average number of vehicles per dwelling was lower for Indigenous dwellings (1.1) than for other dwellings (1.5) (table 5.7). The Northern Territory had the lowest average number of vehicles for Indigenous dwellings, as well as the largest discrepancy between Indigenous and other dwellings. Tasmania was the only jurisdiction in which the average number of vehicles was higher for Indigenous dwellings than for other dwellings.

5.7 AVERAGE NUMBER OF VEHICLES PER DWELLING(a)—1996

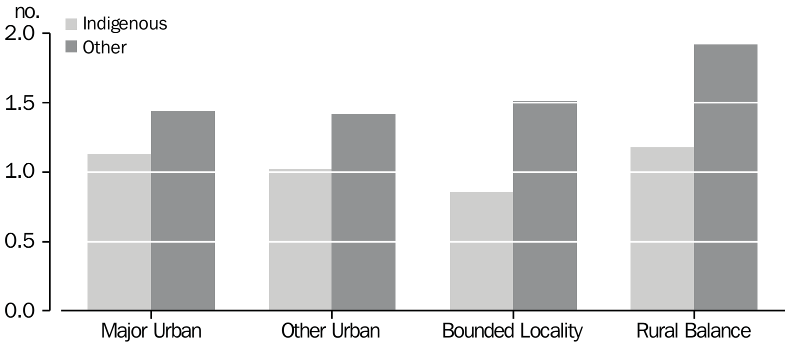
State and Territory	*Indigenous*	*Other*	*Total*
New South Wales	1.1	1.4	1.4
Victoria	1.3	1.6	1.6
Queensland	1.0	1.5	1.5
South Australia	1.1	1.5	1.5
Western Australia	1.1	1.6	1.6
Tasmania	1.6	1.5	1.5
Northern Territory	0.7	1.5	1.4
Australian Capital Territory	1.2	1.5	1.5
Australia	**1.1**	**1.5**	**1.5**

(a) Excludes dwellings where the number of vehicles was not stated.

Source: ABS, unpublished data, 1996 Census.

With the exception of dwellings in the Rural Balance (see Glossary), the average number of vehicles decreased away from capital cities for Indigenous dwellings, while it remained stable for other dwellings (graph 5.8). Although the average number of vehicles was slightly higher for Indigenous dwellings in the Rural Balance than for those in capital cities, Indigenous dwellings in very remote areas of Australia such as the Jabiru, Cooktown and Kununurra Aboriginal and Torres Strait Islander Commission (ATSIC) Regions (see map 2.6) had the lowest average number of vehicles per dwelling (0.3–0.6).

5.8 AVERAGE NUMBER OF VEHICLES PER DWELLING(a)—1996



(a) Excludes dwellings where the number of vehicles was not stated.

Source: Unpublished data, 1996 Census.

The data on vehicles per household suggest that non-Indigenous people have better access to personal transport than their Indigenous counterparts 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.

Distance to and 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 rurality. In 1995, for example, there were about 2–3 times as many general medical practitioners and pharmacists and 11 times as many medical specialists per person in capital cities than in the most remote areas (table 5.9). The same pattern was not seen for nurses, however (AIHW 1998h).

5.9 HEALTH PROFESSIONALS PER 100,000 PERSONS(a)—1995

	Capital cities	*Other metropolitan areas*	*Large rural centres*	*Small rural centres*	*Other rural centres*	*Remote centres*	*Other remote areas*
General medical practitioners(b)	123	111	107	95	80	90	66
Medical specialists	108	84	113	44	7	(c)9	—
Nurses	1 168	1 212	1 879	1 436	990	1 082	1 092
Community pharmacists	62	58	63	57	46	34	24

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

(b) Data refer to 1996.

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

Source: AIHW 1998d.

Several programs have been introduced in recent years to try to increase the availability of health professionals in rural and remote areas.

Distance to and availability of health professionals, services and facilities *continued*

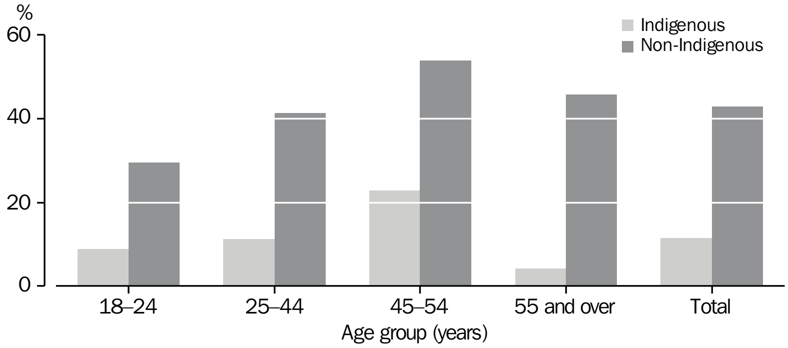
Additional information on distance to professionals, services and facilities for Indigenous people living in private households is available from the 1994 NATSIS and was presented in the previous edition of this publication (ABS & AIHW 1997a). In short, there were large differences in the distances that Indigenous people had to travel to get to health services, facilities and professionals, depending on where they lived. For example, over half of all Indigenous people living in rural areas had to travel more than 50 kilometres to hospital while this was true for only a small proportion of Indigenous people living in urban areas (ABS & AIHW 1997a).

Indigenous people in rural areas were also at a disadvantage relative to their urban counterparts with respect to the availability of health services such as mental health, health promotion, antenatal care, diabetic services, women's health, baby health and sexually transmitted disease clinics. The availability of health professionals also varied according to location. In many cases, services in rural and remote areas are provided by visiting professionals. Even with visiting professionals included, however, about three out of five Indigenous people in rural areas were reported to have no dental services, one in five did not have an Aboriginal Health Worker and about one in seven did not have a doctor or nurse available within 25 kilometres of their community (ABS & AIHW 1997a). Local availability of many non-health services is also reduced for people living outside urban areas. No comparable data are available for the non-Indigenous population, but similar disparities between urban and rural residents are likely.

Private health insurance and government health care cards

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 1995 NHS, non-Indigenous adults aged 18 years or more living in non-remote areas were nearly four times more likely to report having private health insurance (including hospital and/or ancillary cover) than their Indigenous counterparts (43% compared with 11%). The highest level of private health insurance was reported by people aged 45–54 years (graph 5.10) (ABS 1999a). The large gap between the Indigenous and non-Indigenous populations have been due at least in part to the relative economic disadvantage of Indigenous Australians, as discussed in chapter 2.

5.10 PERSONS REPORTING PRIVATE HEALTH INSURANCE(a)—1995



(a) Excludes persons living in remote areas. Includes hospital cover and/or ancillary care cover.
Source: ABS 1999a.

For some people, the inability to pay for health costs which are not covered by Medicare is compensated in part by government health care cards. Health care cards are available, subject to eligibility requirements, to people on government pensions and allowances and to some other low income earners. Benefits may include entitlement to hospital and medical services, pharmaceutical benefits, and dental, optical, hearing and ambulance services (ABS 1998h).

Indigenous adults in non-remote areas were almost twice as likely as non-Indigenous adults to report having some type of government health care card (other than a Medicare card). About half (47–58%) of Indigenous people aged 18–54 years and 89% of those aged 55 years or more reported that they had a government health care card. By contrast, the proportion of non-Indigenous people reporting a health care card only exceeded 30% in the oldest age group (ABS 1999a).

Language

Limited proficiency in English is another potential barrier to accessing services. In the 1996 Census, about 17% of Indigenous people reported that they spoke a language other than English at home. (This figure includes 13.3% who said they spoke an Indigenous language at home (see chapter 2) and 3.5% 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 1996, 26% of Indigenous people who spoke a language other than English at home were reported to speak English ‘not well’ or ‘not at all’. This group represented over 4% of all Indigenous people, although the proportion varied widely from place to place.

Language *continued*

Not having the confidence to speak, read and write English can mean that some Indigenous people find it difficult to approach services such as health and welfare services. 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.

Involvement of Indigenous people in the provision of health and community services

According to the results of the 1994 NATSIS, Indigenous people feel strongly about the importance of Indigenous involvement in health services. Over three-quarters of Indigenous people in the NATSIS said they thought it was important for Indigenous people to be involved in the provision of health services. This opinion was strongest in the Northern Territory (89%), but was high in all States and Territories, with about 70–80% of people in other jurisdictions reporting that such involvement was important. People living in rural areas were more likely to report that this was important (83%) than those in capital cities (71%) (ABS 1996c).

Community-controlled health services

Indigenous community-controlled health services have the potential to reduce or eliminate many of the cultural barriers that exist between Indigenous people and health services, as does community involvement in government-run health services. Community-controlled health services usually operate through a community board which decides on the policies, programs and administration of the organisation. The degree of actual community control varies from service to service, however (Scrimgeour 1997). As discussed in inset 5.11, these services play an important role in increasing Indigenous people's access to health services.

5.11 THE ROLE OF COMMUNITY-CONTROLLED HEALTH CLINICS

As part of the Keys Young (1997) research into Medicare and the Pharmaceutical Benefits Scheme (see inset 5.4), the consultants explored the role of Aboriginal Community Controlled Health Services (ACCHSs). They found that some of the reasons why ACCHSs might be preferred by Indigenous people included the following:

- They provide services at no cost to the patient (by bulk-billing, for example).
- There is often a sense of community 'ownership' of ACCHSs.
- In areas where English is not the main language, the staff are likely to speak the local language.
- They often serve as a community centre, thereby fulfilling a social role.
- Many Indigenous people find or expect to find negative attitudes and/or racism in mainstream services.
- Many ACCHSs provide transport for their patients.
- ACCHSs may provide medication, dressings, etc. on-site at no cost.
- A wide range of services may be offered.

Source: Keys Young 1997.

Community-controlled health services *continued*

In 1995, responsibility for the funding of community-controlled health services was transferred from ATSIC to the Commonwealth Department of Health and Family Services and its Office for Aboriginal and Torres Strait Islander Health (OATSIH). In 1997–98, there were 114 Aboriginal health services funded by OATSIH, the majority of which were community-controlled health services. Some 25 of these services were in New South Wales, 22 in the Northern Territory, 21 in Victoria, 20 in Western Australia, 17 in Queensland, 6 in South Australia, 2 in Tasmania and 1 in the Australian Capital Territory (Office for Aboriginal and Torres Strait Islander Health, unpublished data, List of Services Funded by OATSIH). This figure excludes OATSIH-funded services that provided substance misuse programs only. In total, 70 services were funded to provide substance misuse programs, some of which also provided community health services (Office for Aboriginal and Torres Strait Islander Health, unpublished data, List of Services Funded by OATSIH).

Other cultural barriers

Limited proficiency in English, a lack of involvement of Indigenous people in the provision of services and lack of community control are only some of the potential cultural barriers that Indigenous people face with respect to accessing health and other services. Other cultural barriers occur when health care providers lack an understanding of, or sensitivity to, Aboriginal and Torres Strait Islander peoples' cultural beliefs, practices and preferences with respect to health, wellbeing and illness (see, for example, Ivers et al. 1997; Mobbs 1991; Saggers & Gray 1991). Although these and other cultural barriers may be important, little statistical information is available about them.

USE OF HEALTH SERVICES

While data are available about the use of hospitals (see chapter 7), there is currently limited information about the use of other health services, other than by self-report. Other sources of administrative data about health service use, such as Medicare data, do not currently include separate identification of Indigenous people. Some information about the use of general practitioner services by Indigenous people may be available in the near future through the Bettering the Evaluation and Care of Health (BEACH) Program. BEACH involves the collection of information about doctors, patients (including information on Indigenous status) and medical consultations from randomly selected general medical practitioners (GPs) working in private practice on a fee-for-service basis (AIHW 1998g). The first year of data collection was not yet complete at the time of this writing, but a report on the first six months of the study was recently released. Of 47,600 consultations reported by participating GPs in April–September 1998, 636 (1.3%) involved patients identified as Aboriginal or Torres Strait Islander (Britt et al. 1999). More information about BEACH is provided in chapter 11.

Self-reported information on the use of health services is available from the NHS and the NATSIS. The NATSIS included Indigenous people from across Australia, but there was no non-Indigenous comparison group. While results from the NHS are only available for non-remote areas, the survey included both Indigenous and non-Indigenous people, thus allowing direct comparisons. In both surveys, respondents were asked about health-related actions they had taken in the two weeks prior to being interviewed. Although there are some limitations with self-reported data (for example, 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.

Table 5.12 presents information about recent health-related actions reported by participants in the NHS. Because the Indigenous population is younger than the non-Indigenous population, the estimates have been adjusted for age (for more information about age standardisation, see inset 9.1). The results from the 1994 NATSIS were broadly similar for Indigenous people living in non-remote areas, although the questions were not identical in the two surveys.

Some 75% of Indigenous people living in capital cities and 69% of those in other non-remote areas in the 1995 NHS reported taking a recent health-related action (table 5.12). The proportion of non-Indigenous people who reported a recent health-related action was slightly higher after adjusting for age, but the types of actions taken varied considerably. For both Indigenous and non-Indigenous people, the most commonly reported recent health action was the use of medications (ABS 1999a). More information about medication use is presented in chapter 7.

5.12 REPORTED HEALTH ACTIONS IN THE LAST TWO WEEKS(a)—1995

	Indigenous			*Non-Indigenous*		
	Capital city	*Other(b)*	*Total(b)*	*Capital city*	*Other(b)*	*Total(b)*
	%	%	%	%	%	%
Took an action(c)	74.7	69.3	71.1	75.2	77.4	76.0
Type of action taken(d)						
Hospital inpatient episode	0.3	2.9	1.9	0.7	0.7	0.7
Visited emergency/outpatients	4.0	11.8	8.9	2.5	3.0	2.7
Hospital day clinic visit	1.6	2.1	1.9	1.3	1.4	1.3
Any hospital visit	*5.1*	*15.0*	*11.3*	*4.1*	*4.7*	*4.3*
Consulted doctor	26.9	22.9	24.2	24.4	21.7	23.4
Any hospital visit or doctor consultation	*29.9*	*30.8*	*30.4*	*25.9*	*23.7*	*25.1*
Consulted dentist	4.4	3.0	3.6	5.8	5.2	5.6
Consulted other health professionals	11.3	8.8	9.8	9.4	10.7	9.9
	'000	'000	'000	'000	'000	'000
Total population	116	193	309	11 246	6 361	17 606

(a) Directly age-standardised to the 1995 Australian population.
(b) Excludes persons living in remote areas.
(c) Also includes use of medications and reduction of daily activities.
(d) Persons may have reported more than one type of action.

Source: ABS, unpublished data, 1995 National Health Survey.

USE OF HEALTH SERVICES *continued*

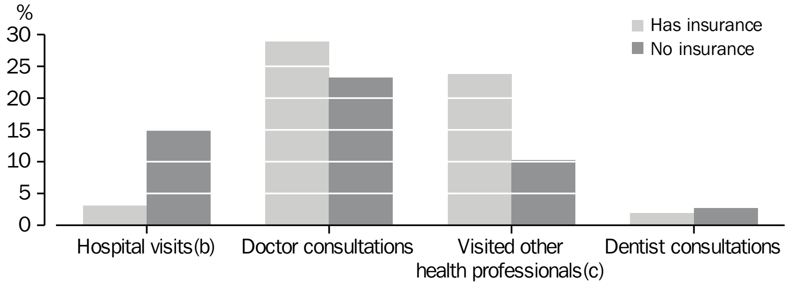
After adjusting for age, Indigenous people outside capital cities (but excluding remote areas) were about three times as likely as those in other groups to report a recent visit to hospital, whether as an inpatient, outpatient or visitor to casualty or a day clinic (15% versus 4–5%). A recent consultation with a doctor was reported by 22–27% of respondents, with reporting slightly higher in capital cities than in other non-remote areas. Some people may use hospitals rather than general practitioners for their primary health care for a variety of reasons (see inset 5.4, for example). When hospital visits and doctor consultations were combined, there was very little variation by location within the Indigenous and non-Indigenous groups, although the proportions were slightly higher among Indigenous people than non-Indigenous people.

Just under 4% of Indigenous people reported that they had visited a dentist in the two weeks prior to the survey (table 5.12), compared with almost 6% of non-Indigenous people. More information about use of dental services is presented in chapter 7.

Private health insurance and health-related actions

Indigenous and non-Indigenous adults in the NHS who had private health insurance were more likely to report a recent health-related action than those who did not. After adjusting for age, about 86% of Indigenous people and 83% of non-Indigenous people living in non-remote areas who had private health insurance said they took a health-related action in the two weeks prior to interview, compared with 76% of Indigenous people and 78% of non-Indigenous people who did not have private health insurance. Among Indigenous people, the differences were most marked for hospital visits and for consultations with health professionals other than doctors and dentists (graph 5.13).

5.13 PRIVATE HEALTH INSURANCE AND HEALTH-RELATED ACTIONS(a)—1995



(a) For Indigenous persons living in non-remote areas.
(b) Includes inpatient episodes, visits to casualty, day clinic visits.
(c) Other than general practitioners, specialist doctors or dentists.

Source: ABS, unpublished data, 1995 National Health Survey.

THE CURRENT AND FUTURE HEALTH AND WELFARE WORKFORCE

In this section, information is presented about the participation of Indigenous people in the health workforce, the welfare and community services workforce, and in higher education courses in health and welfare-related fields.

The health workforce

Little national information is currently available about the size and characteristics of the workforce providing health services to the Indigenous population. In recognition of the need for accurate data, and in order to consider fundamental health workforce requirements for the future, the Commonwealth Government has commissioned a National Workforce Modelling Project. The project includes an investigation of the numbers and types of health professionals currently providing health services to Aboriginal and Torres Strait Islander people and an assessment of future workforce requirements, which will assist in the development of a national workforce strategy. It is anticipated that this work will also result in an increase in the availability of data on the health workforce. A report on the project is expected at the end of 1999 (Office for Aboriginal and Torres Strait Islander Health, 1999, personal communication).

Data from the Office for Aboriginal and Torres Strait Islander Health indicate that, as at February 1999, there were approximately 27 Indigenous registered medical practitioners, 145 Indigenous nurses and almost 1,300 Aboriginal Health Workers working in the government and community sectors (Office for Aboriginal and Torres Strait Islander Health, unpublished data, National Workforce Modelling Project). These figures differ from 1996 Census results. Some of the discrepancy may be due to differences in the coding of occupation, differences in whether people are identified as Indigenous in different data collections, and the inclusion of private (i.e. non-government, non-community) health sector employment as reported in the Census.

In the 1996 Census, about 1% of employed people aged 15 years and over who were identified as Indigenous listed an occupation which could be classified as 'health professional or paraprofessional' (table 5.14). 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 (ASCO) (see ABS 1996a and 1997a for more details).

At the time of the 1996 Census, 1,257 people identified as Indigenous were working as nursing professionals or enrolled nurses, and 669 were employed in positions classified as Aboriginal Health Workers. It should be noted that Aboriginal Health Workers may work in a variety of different roles. They 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 generalists, as hospital liaison officers, etc. If the occupation title reported on the census form did not explicitly specify 'health worker', then it is possible that the occupation was coded as something other than 'Aboriginal Health Worker'.

5.14 EMPLOYMENT(a) IN HEALTH-RELATED OCCUPATIONS—1996

	Indigenous			*Other(b)*		
		Proportion of population(a)	*Proportion of persons in health-related occupations*		*Proportion of population(a)*	*Proportion of persons in health-related occupations*
	no.	*%*	*%*	*no.*	*%*	*%*
Medical practitioners	(c)61	0.03	2.63	44 094	0.32	14.11
Nursing professionals	693	0.33	29.84	160 906	1.17	51.47
Enrolled nurses	564	0.27	24.29	24 003	0.18	7.68
Aboriginal and Torres Strait Islander Health Workers	669	0.32	28.81	37	0.00	0.01
Miscellaneous health professionals(d)	94	0.04	4.05	60 197	0.44	19.26
Dental associate profesionals	17	0.01	0.73	4 436	0.03	1.42
Occupational and environmental health workers	144	0.07	6.20	7 791	0.06	2.49
Ambulance officers and paramedics	49	0.02	2.11	5 917	0.04	1.89
Health services managers	28	0.01	1.21	5 041	0.04	1.61
Total(e)	**2 321**	**1.10**	**100.00**	**312 605**	**2.28**	**100.00**

(a) Persons aged 15 years and over.

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

(c) Of the 61 people who were identified as Indigenous and classified as medical practitioners based on their census responses, some 28 reported working in the public sector, which is largely consistent with figures from OATSIH cited on the previous page.

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

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

Source: ABS, unpublished data, 1996 Census.

Indigenous adults were less likely than other adults in every State and Territory to be employed in health-related occupations in 1996 (table 5.15)

5.15 EMPLOYMENT(a) IN HEALTH-RELATED OCCUPATIONS(b)(c), BY STATE AND TERRITORY—1996

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	***Aust.(d)***
Indigenous									
Persons in health-related occupations (no.)	658	180	630	147	308	78	294	24	**2 321**
Proportion of the population aged 15 and over (%)	1.1	1.4	1.1	1.2	1.0	0.9	1.0	1.4	**1.1**
Other(e)									
Persons in health-related occupations (no.)	104 458	79 557	55 236	28 594	28 486	8 454	2 712	5 075	**312 605**
Proportion of the population aged 15 and over (%)	2.2	2.3	2.2	2.5	2.2	2.4	2.7	2.2	**2.3**

(a) Persons aged 15 years and over.

(b) Health occupations include those listed in table 5.14.

(c) Excludes those whose occupation was not stated.

(d) Includes Other Territories.

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

Source: ABS, unpublished data, 1996 Census.

The welfare and community services workforce

People identified as Indigenous in the 1996 Census were more likely to report being employed in selected welfare and community service-related occupations (table 5.16) than in health-related occupations (table 5.14). The proportion of adults employed in welfare and community services-related occupations was higher for Indigenous adults than for other adults in every State and Territory (table 5.17).

5.16 EMPLOYMENT(a) IN SELECTED WELFARE AND COMMUNITY SERVICE-RELATED OCCUPATIONS—1996

	Indigenous			*Other(b)*		
		Proportion of population(a)	*Proportion of persons in welfare and community service-related occupations*		*Proportion of population(a)*	*Proportion of people in welfare and community service-related occupations*
	no.	*%*	*%*	*no.*	*%*	*%*
Child care coordinators	89	0.04	1.21	7 047	0.05	2.63
Pre-primary school teachers	131	0.06	1.78	12 457	0.09	4.66
Special education teachers	193	0.09	2.62	10 894	0.08	4.07
Children's care workers	1 259	0.60	17.08	60 749	0.44	22.71
Education aides	2 272	1.07	30.82	33 544	0.24	12.54
Other carers and aides(c)	1 369	0.65	18.57	85 163	0.62	31.84
Social workers	113	0.05	1.53	7 081	0.05	2.65
Welfare and community workers	1 120	0.53	15.19	21 009	0.15	7.86
Counsellors	287	0.14	3.89	9 216	0.07	3.45
Psychologists	14	0.01	0.19	6 911	0.05	2.58
Welfare associate professionals(d)	513	0.24	6.96	12 718	0.09	4.76
Total(e)	**7 373**	**3.48**	**100.00**	**267 445**	**1.95**	**100.00**

(a) Persons aged 15 years and over.
(b) Includes persons for whom Indigenous status was not stated.
(c) Includes special care workers, personal care and nursing assistants, and carers and aides not further defined.
(d) Includes parole or probation officer, youth worker, residential care officer, disabilities services officer and family support worker.
(e) Includes persons whose occupation was coded as 'social welfare professional, not further defined'.

Source: ABS, unpublished data, 1996 Census.

5.17 EMPLOYMENT(a) IN WELFARE-RELATED OCCUPATIONS(b)(c)—1996

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	***Aust.(d)***
Indigenous									
Persons in welfare occupations(b) (no.)	2 067	512	1 912	517	1 214	262	817	66	**7 373**
Proportion of the population aged 15 and over (%)	3.4	3.9	3.4	4.2	4.0	3.2	2.8	3.9	**3.5**
Other(e)									
Persons in welfare occupations(b) (no.)	83 002	66 144	51 509	23 939	26 033	8 584	2 608	5 593	**267 445**
Proportion of the population aged 15 and over (%)	1.8	1.9	2.1	2.1	2.0	2.4	2.6	2.4	**2.0**

(a) Persons aged 15 years and over.
(b) Welfare and community service occupations include those listed in table 5.16.
(c) Excludes those whose occupation was not stated.
(d) Includes Other Territories.
(e) Includes persons for whom Indigenous status was not stated.

Source: ABS, unpublished data, 1996 Census.

Commencements, enrolments and completions in undergraduate level health courses

In 1998, 333 students who were identified as Indigenous began an undergraduate course in a health field (table 5.18). Indigenous students represented 1.8% of all undergraduate commencements in health fields in that year. The fields with the most Indigenous students beginning study in 1998 were 'health support activities' (such as health administration, health counselling, and health surveying and environmental health) and nursing. Ten students who began studying medicine at the undergraduate level in 1998 were identified as Indigenous (Department of Education, Training and Youth Affairs, unpublished data, Higher Education Student Statistics Collection).

There were 735 beginning and continuing students enrolled in undergraduate level health courses in 1998 who were identified as Indigenous, including 327 students in health support activities, 239 nursing students and 49 medical students (table 5.18). Another 128 Indigenous students were enrolled in postgraduate health courses in 1998, including 38 in health support activities, 36 in nursing and 12 in medicine (Department of Education, Training and Youth Affairs, unpublished data, Higher Education Student Statistics Collection).

In 1997 (the last year for which data are available), 165 Indigenous students completed the requirements for an undergraduate course in a health field (table 5.18). About half of all health course completions by Indigenous students were in health support activities, while about 38% were in nursing. Three students identified as Indigenous completed the requirements for an undergraduate medical degree in 1997 (Department of Education, Training and Youth Affairs, unpublished data, Higher Education Student Statistics Collection).

An analysis of data for earlier years has recently been published by Schwab and Anderson (1998). Schwab noted an increase in the number of completions in health fields between 1994 and 1996 by Indigenous students. He pointed out that a large proportion (45% in 1996) were in 'health support activities', a field which tends to result in a lower level of qualification than other health-related fields.

5.18 UNDERGRADUATE COMMENCEMENTS, ENROLMENTS AND COMPLETIONS(a)

	1997 completions		*1998 commencements*		*1998 enrolments*	
		Indigenous as proportion of total		*Indigenous as proportion of total*		*Indigenous as proportion of total*
	no.	*%*	*no.*	*%*	*no.*	*%*
HEALTH						
Health, general	5	5.38	10	5.41	13	2.47
Dentistry(b)	0	0.00	1	0.34	6	0.53
Health support activities(c)	82	9.57	164	10.98	327	8.55
Health sciences and technologies(d)						
Nursing (basic or post-basic)	62	0.87	108	1.21	239	1.03
Other	10	0.54	30	0.96	55	0.64
Total	*72*	*0.80*	*138*	*1.14*	*294*	*0.92*
Medical science, medicine						
Medical science	0	0.00	2	0.36	3	0.20
Medicine	3	0.25	10	0.82	49	0.76
Total	*3*	*0.20*	*12*	*0.68*	*52*	*0.65*
Rehabilitation services(e)	3	0.23	8	0.36	43	0.59
Total	**165**	**1.26**	**333**	**1.84**	**735**	**1.40**
WELFARE						
Counselling(f)	0	0.00	0	0.00	1	1.04
Social work	15	1.25	41	1.85	115	1.94
Welfare studies	23	4.50	21	3.07	62	3.36
Early childhood education(g)	49	3.52	101	4.24	207	3.11
Special education(h)	2	0.70	1	0.23	8	0.81
Total	**89**	**2.62**	**164**	**2.85**	**393**	**2.53**

(a) For students identified as Indigenous.
(b) Includes dentistry and dental therapy.
(c) Includes health support activities (general), health administration, health counselling, health surveying and environmental health, and health support activities (other).
(d) 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).
(e) Includes rehabilitation services (general), occupational therapy, physiotherapy, speech pathology/audiology, and rehabilitation services (other).
(f) Includes educational counselling and counselling (not health or educational).
(g) Includes early childhood education and post-initial early childhood education.
(h) Includes initial special teacher education and post-initial special teacher education.

Source: Department of Education, Training and Youth Affairs, unpublished data, Higher Education Student Statistics collection.

Commencements, enrolments and completions in undergraduate level welfare courses

The proportion of students identified as Indigenous was higher in undergraduate welfare-related courses than in health-related courses. About 2.8% of students beginning undergraduate level courses in welfare fields in 1998 were identified as Indigenous, as were 2.5% of enrolled students (beginning and continuing students combined) (table 5.18). About 62% of commencements and 53% of enrolments of Indigenous students in welfare-related undergraduate courses were in the field of early childhood education (Department of Education, Training and Youth Affairs, unpublished data, Higher Education Student Statistics Collection).

Some 89 Indigenous students completed the requirements for an undergraduate course in a welfare-related field in 1997, which represented 2.6% of all completions in this area.

Training of Aboriginal Health Workers

The training of Aboriginal Health Workers is largely undertaken in the Vocational Educational and Training (VET) sector, which includes Technical and Further Education institutions, secondary schools, community-based providers and private employers. In 1997, there were 856 Aboriginal Health Worker student enrolments in accredited VET sector courses in Queensland (327), New South Wales (286), the Northern Territory (103), South Australia (92) and Victoria (49) combined. No data were available for Western Australia or Tasmania (National Centre for Vocational Education Research, unpublished data, Vocational Education and Training Statistics Collection).

The education and training of Aboriginal Health Workers varies by jurisdiction and is in part a function of the diverse history of Aboriginal Health Workers in different parts of Australia. The Australian Health Ministers' Advisory Council has recently agreed to a comprehensive national review of health worker training in Australia which will assess the availability, accessibility and quality of training at the basic, post-basic and specialist levels. Topics such as career pathway development, mobility, professional recognition and practice issues will also be considered (Office for Aboriginal and Torres Strait Islander Health, 1999, personal communication).

SUMMARY

Indigenous people 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 PBS, the proximity of culturally appropriate services, the proportion of Indigenous people 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 people is estimated to be slightly more than that for non-Indigenous people, but the difference is less than might be expected, given the much poorer health status of Indigenous people, as described in the following chapters.

CHAPTER 6 MOTHERS AND BABIES

INTRODUCTION

In this chapter, information is presented about Indigenous mothers and their babies. There are two main sources for this information: the perinatal collections (sometimes referred to as the Midwives Collections) from each State and Territory, and records of birth registrations from the State and Territory Registrars of Births, Deaths and Marriages. Some of the strengths and weaknesses of these two collections are described in inset 6.1. This chapter also provides information about breastfeeding from two surveys, the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS) and the 1995 National Health Survey (NHS).

6.1 STRENGTHS AND WEAKNESSES OF PERINATAL COLLECTIONS AND BIRTH REGISTRATIONS

Perinatal collections:

- provide the most comprehensive information about mothers and their babies such as antenatal care, complications of pregnancy and labour, health of the baby at birth, etc.;
- are likely to be more complete than birth registrations because the midwife or medical practitioner is responsible for perinatal data collection forms, whereas registration is usually carried out by parents, who may not have experience in filling in the forms;
- involve prompt recording of births, which then appear in the collection for the same year in which they occurred;

but

- do not include any information about the father. Therefore if the father is Indigenous and the mother is not, the birth will not be recorded as an Indigenous birth. This means that Indigenous births will be underestimated, by an amount that varies from place to place, based on the proportion of Indigenous children who have an Indigenous father and a non-Indigenous mother;
- underestimate perinatal deaths because neonatal deaths are not always identified through linkage with perinatal death registrations.

Birth registrations (through the Registrar of Births, Deaths and Marriages):

- include paternal characteristics such as Indigenous status so it is possible to identify Indigenous births where only the father is Indigenous (provided the quality of identification is adequate);

but

- provide less detail than the perinatal collections;
- generally relate to the year in which the birth is registered rather than when it occurred. Some parents may not register the birth of their child immediately so that the birth may appear in the statistics for a later year than when it actually took place;
- may be less accurate than the perinatal collections because not all parents register the birth of their child even though there is a legal requirement to do so.

In this publication, the perinatal collections are used wherever possible as the main source of information although this is supplemented by information from registrations where it can increase our understanding of Indigenous births.

INTRODUCTION *continued*

All births are required by law to be registered with a Registrar of Births, Deaths and Marriages. A few parents may report births straight to the Registrar without a perinatal form being filled out (for some homebirths, for example), while some births may not be registered at all. Therefore some discrepancies may occur between figures from these different sources.

The quality of identification in both perinatal collections and birth registrations is variable, and this may affect the data (see chapter 11 for more information about identification in these collections).

While some Indigenous babies have two Indigenous parents, others have either a mother only or a father only who is Indigenous. The proportions vary from place to place. For example, birth registrations for 1997 show that 7.1% of Indigenous babies in the Northern Territory were recorded as having an Indigenous father and a non-Indigenous mother, while in Western Australia, South Australia and Queensland the proportions were 19.5%, 24.5% and 25.7%, respectively (ABS 1998j). Indigenous identification in other jurisdictions was not considered complete enough to allow for reporting (see chapter 11). In the 1996 Census, data for Australia as a whole showed that, among children under one year old who were identified as Indigenous, about 34% had two Indigenous parents, 32% had an Indigenous mother only and 31% had an Indigenous father only. Because not all Indigenous babies are born to Indigenous mothers, measures of the fertility of Indigenous women underestimate the impact of Indigenous births on the growth of the Indigenous population.

Information from States and Territories for calendar years 1994–96 is presented in the following tables and graphs. Queensland is the only State to record Aboriginal mothers and Torres Strait Islander mothers separately. More information about Torres Strait Islander mothers and their babies is presented in chapter 10.

MOTHERS

Women who were identified as Indigenous made up 3% of all women who gave birth in Australia in 1994–96 (table 6.2). The proportion varied by jurisdiction, ranging from less than 1% in Tasmania and Victoria to 35% in the Northern Territory. There were a higher number of Indigenous women who gave birth in Queensland, New South Wales and Western Australia than in the Northern Territory, however (Day, Sullivan & Lancaster 1999b).

The number of women giving birth who are recorded as Indigenous is affected by the quality of identification, which varies from jurisdiction to jurisdiction. More information about the quality of identification in birth registrations and perinatal collections is presented in chapter 11.

6.2 INDIGENOUS MOTHERS—1994–96

State and Territory	*no.*	*%(a)*
New South Wales	4 981	1.9
Victoria	1 293	0.7
Queensland	7 436	5.2
South Australia	1 118	1.9
Western Australia	4 290	5.7
Tasmania(b)	17	0.1
Northern Territory	3 674	35.0
Australian Capital Territory	187	1.3
Australia	**22 996**	**3.0**

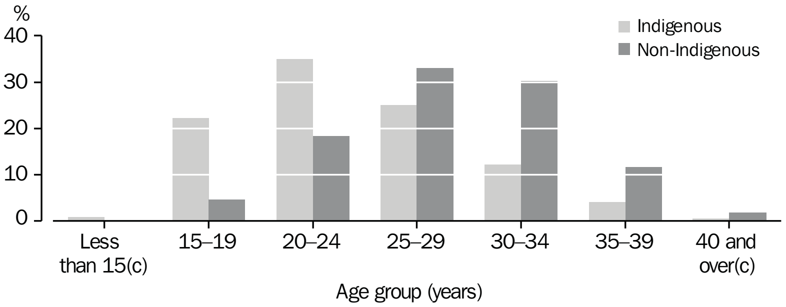
(a) Proportion of total mothers.

(b) Data for Tasmania were unavailable for 1996. Data from 1995 have been used as an estimate.

Source: AIHW National Perinatal Statistics Unit, unpublished data, National Perinatal Data Collection; Day, Sullivan and Lancaster 1999b.

Indigenous mothers have babies at much younger ages than non-Indigenous mothers. The distribution of births by the age of the mother is shown for Australia as a whole in graph 6.3 and for States and Territories in table 6.4. The mean age of Indigenous mothers in 1994–96 was 24.0 years, while the mean age for non-Indigenous mothers was 28.6 years (Day, Sullivan & Lancaster 1999b).

6.3 MATERNAL AGE(a), BY INDIGENOUS STATUS(b)—1994–96



(a) Excludes mothers for whom age was not stated.
(b) Data for Tasmania were unavailable for 1996. Data from 1995 have been used as an estimate.
(c) Data values too small to graph.

Source: Day, Sullivan and Lancaster 1999b.

6.4 MATERNAL AGE, BY INDIGENOUS STATUS—1994–96

	Under 20 years		*20–34 years*		*Over 34 years*		***Total(a)***	
State or Territory	*no.*	*%*	*no.*	*%*	*no.*	*%*	*no.*	*%*
New South Wales								
Indigenous mothers	1 065	21.4	3 686	74.0	222	4.5	**4 981**	100.0
Non-Indigenous mothers	11 949	4.7	205 419	81.1	35 754	14.1	**253 320**	100.0
Victoria								
Indigenous mothers	213	16.5	980	75.8	100	7.7	**1 293**	100.0
Non-Indigenous mothers	6 383	3.4	153 258	81.8	27 804	14.8	**187 450**	100.0
Queensland								
Indigenous mothers	1 573	21.2	5 498	73.9	365	4.9	**7 436**	100.0
Non-Indigenous mothers	8 172	6.0	110 425	81.7	16 489	12.2	**135 086**	100.0
South Australia								
Indigenous mothers	244	21.8	825	73.8	49	4.4	**1 118**	100.0
Non-Indigenous mothers	2 922	5.2	46 410	82.1	7 163	12.7	**56 495**	100.0
Western Australia								
Indigenous mothers	1 112	25.9	3 010	70.2	168	3.9	**4 290**	100.0
Non-Indigenous mothers	3 523	5.0	58 198	81.9	9 342	13.1	**71 063**	100.0
Tasmania(b)								
Indigenous mothers	0	0.0	16	94.1	1	5.9	**17**	100.0
Non-Indigenous mothers	1 473	7.3	16 568	82.3	2 068	10.3	**20 129**	100.0
Northern Territory								
Indigenous mothers	1 080	29.4	2 437	66.3	157	4.3	**3 674**	100.0
Non-Indigenous mothers	404	5.9	5 557	81.3	874	12.8	**6 835**	100.0
Australia Capital Territory								
Indigenous mothers	24	12.8	147	78.6	16	8.6	**187**	100.0
Non-Indigenous mothers	530	3.8	11 372	80.8	2 156	15.3	**14 074**	100.0
Australia								
Indigenous mothers	5 311	23.1	16 599	72.2	1 078	4.7	**22 996**	100.0
Non-Indigenous mothers	35 356	4.7	607 207	81.6	101 650	13.7	**744 452**	100.0

(a) Total includes mothers for whom age was not stated.

(b) Data for Tasmania were unavailable for 1996. Data from 1995 have been used as an estimate.

Source: AIHW National Perinatal Statistics Unit, unpublished data, National Perinatal Data Collection; Day, Sullivan and Lancaster 1999b.

Antenatal care is an important factor in ensuring a positive birth outcome, but Indigenous women face many potential obstacles to receiving such care, some of which are discussed in inset 6.5.

6.5 PERSPECTIVES ON PROVIDING ANTENATAL CARE TO KOORI WOMEN IN VICTORIA

In a report published by the Koori Health Unit in Victoria, health workers from the Victorian Aboriginal Health Service, Mercy Hospital and the Rumbalara Aboriginal Medical Service wrote about their experiences in providing care to pregnant Koori women.

One of the greatest difficulties in getting Koori women to attend antenatal classes and check-ups was that pregnancy was seen as normal and most women did not feel sick. As a result, they did not see the need for medical care or for changes to their lifestyle.

Many women said their mothers, grandmothers and aunts told them what they needed to know. However, this information often conflicted with what they were told by doctors and nurses, and this caused confusion and anxiety for some women. The information that was available was sometimes seen as inappropriate, inadequate and/or presented in an insensitive way.

Hospital-based antenatal classes were seen to be intimidating to many Koori women. When fees were charged, Koori women were less likely to be able to attend. Community-based classes seemed to be more successful, but time was needed to establish a relationship of trust between the health workers and the women.

All the health workers wrote of the importance of providing transport. One noted that public transportation could be difficult for women with small children. Another wrote that women appreciated being transported to and from classes and clinic visits and felt that it showed someone cared, that they were part of a community. In addition, time spent going to or from classes and clinic visits allowed the health workers to spend time alone with the women and many women used this opportunity to confide in the health workers.

The costs of providing appropriate services were recognised. One health worker said she used to pay for some things herself, just so the classes could continue. In her community, she said that few Koori mothers breastfed their babies before the antenatal classes were introduced, but that this had increased to about half of all mothers breastfeeding at the time they leave hospital.

Source: Koori Health Unit 1996.

BABIES

Babies weighing less than 2,500 grams at birth are classified as 'low birthweight' babies. There are a number of reasons a baby may be of low birthweight, including the size and age of the mother; her nutrition, illness and cigarette smoking during the pregnancy; and premature birth of the baby. Low birthweight babies are less likely to survive and those who do survive are more likely to have worse health early in life and perhaps even in adulthood (Alberman 1994).

In 1994–96, the proportion of low birthweight among babies born to Indigenous mothers was almost twice that of babies born to non-Indigenous mothers (12.4% compared with 6.2%) (Day, Sullivan & Lancaster 1999b). Babies born to Indigenous mothers were more likely than other babies to be of low birthweight in every jurisdiction except Tasmania, in which only a few births to Indigenous mothers were recorded as such (table 6.6). The proportion of low birthweight babies varied according to the age of the mother, and was highest among Indigenous mothers aged 30 years or more and those under 15. In every age group, however, at least 10% of babies born to Indigenous mothers weighed less than 2,500 grams (Day, Sullivan & Lancaster 1999b).

6.6 BIRTHS, BY BIRTHWEIGHT AND MOTHER'S INDIGENOUS STATUS—1994–96

	Low birthweight (under 2 500 g)		*Normal or high birthweight (2 500 g or more)*		***Total(a)***	
State or Territory	*no.*	*%*	*no.*	*%*	*no.*	*%*
New South Wales						
Babies of Indigenous mothers	560	11.1	4 460	88.7	**5 026**	100.0
Babies of non-Indigenous mothers	14 681	5.7	241 920	94.2	**256 778**	100.0
Victoria						
Babies of Indigenous mothers	139	10.6	1 168	89.4	**1 307**	100.0
Babies of non-Indigenous mothers	12 106	6.4	178 118	93.6	**190 291**	100.0
Queensland						
Babies of Indigenous mothers	869	11.6	6 631	88.4	**7 503**	100.0
Babies of non-Indigenous mothers	8 883	6.5	128 150	93.5	**137 065**	100.0
South Australia						
Babies of Indigenous mothers	178	15.7	957	84.3	**1 135**	100.0
Babies of non-Indigenous mothers	3 885	6.8	53 512	93.2	**57 397**	100.0
Western Australia						
Babies of Indigenous mothers	571	13.2	3 755	86.8	**4 326**	100.0
Babies of non-Indigenous mothers	4 489	6.2	67 642	93.8	**72 131**	100.0
Tasmania(b)						
Babies of Indigenous mothers	0	0.0	17	100.0	**17**	100.0
Babies of non-Indigenous mothers	1 231	6.0	19 128	93.9	**20 381**	100.0
Northern Territory						
Babies of Indigenous mothers	539	14.5	3 163	85.3	**3 708**	100.0
Babies of non-Indigenous mothers	463	6.7	6 464	93.2	**6 935**	100.0
Australian Capital Territory						
Babies of Indigenous mothers	18	9.5	169	88.9	**190**	100.0
Babies of non-Indigenous mothers	871	6.1	13 239	92.7	**14 281**	100.0
Australia						
Babies of Indigenous mothers	2 874	12.4	20 320	87.5	**23 212**	100.0
Babies of non-Indigenous mothers	46 609	6.2	708 173	93.8	**755 259**	100.0

(a) Total includes births for which birthweight was not stated.

(b) Data for Tasmania were unavailable for 1996. Data from 1995 have been used as an estimate.

Source: Day, Sullivan and Lancaster 1999b.

A number of programs have been initiated to try to improve the health outcomes of Indigenous mothers and their babies (for a review of some of these, see Commonwealth Department of Health and Family Services 1997). Two of these programs are described in insets 6.7 and 6.8.

6.7 BIBBULUNG GNARNEEP (‘SOLID KID’)

Bibbulung Gnarneep is a collaborative research project involving the TVW Telethon Institute for Child Health Research, Derbarl Yerrigan Health Service (formerly Perth Aboriginal Medical Service), and the Perth Aboriginal community. The major aim of Bibbulung Gnarneep is to identify factors that assist mothers and families to rear healthy children, who then have a strong chance of becoming healthy adults.

The first phase of the project was to document infant care practices, to identify barriers to maternal and child health as perceived by mothers, to document morbidity of mother and child, and to identify characteristics which enabled children to be healthy and resilient to illness. Additional information was collected about antenatal and perinatal characteristics of the mothers and infants, such as pregnancy complications, birthweight and gestational age.

The analysis phase of the project involves communication of the results to participants and to the community, followed by application of the results to health promotion programs at a community level. As a result of the initial analysis, brochures addressing Sudden Infant Death Syndrome have been designed and widely distributed. Other issues to be addressed include providing additional support during pregnancy and afterwards; the design of programs to encourage and assist mothers to breastfeed; and studies on mothers’ health, cigarette smoke exposure of children and the dental health of infants and very young children.

Training of Aboriginal people in maternal and child health research is an important aspect of Bibbulung Gnarneep which, together with its strong community base and collaborative nature, has the potential to lead to long-term improvements for mothers and families.

Source: The Bibbulung Gnarneep Team, personal communication, 1998.

6.8 THE STRONG WOMEN, STRONG BABIES, STRONG CULTURE PROGRAM

The Strong Women, Strong Babies, Strong Culture Program was developed to try to improve birth outcomes in Aboriginal communities in the Northern Territory. The program, supported by Territory Health Services and under the management and operational control of local Aboriginal women, began in three pilot communities in the Top End of the Northern Territory in 1993. The communities were chosen because low birthweight was known to be a problem there and people in those communities expressed interest in finding solutions.

Strong Women Workers were selected and trained to support pregnant women in the community. They encourage a range of practices, such as antenatal clinic visits, proper nutrition during pregnancy, good compliance with prescribed medications, and family involvement and support, in culturally appropriate ways. Traditional women’s birth-related practices and ceremonies have also been revitalised.

In 1998, an evaluation of the program was undertaken. Data from the pilot communities were examined for periods before and after the implementation of the program, and the pilot communities were compared with other communities in the region. In the three pilot communities, the mean birthweight increased by 171 grams between 1990–91 and 1994–96 (from 2,915 grams to 3,086 grams), and the proportion of babies who weighed less than 2,500 grams decreased from 19.8% to 11.3%. There were improvements over the same period in communities that did not have the program, but they were not as large. Mean birthweight in other communities increased by 92 grams (from 2,947 grams to 3,039 grams), and the proportion of low birthweight babies fell from 17.4% to 15.9%. Other changes in health services occurred in the pilot communities, and these may have had an effect on birthweight, but the evaluation team concluded that it was likely that the program had been beneficial.

Seven new communities (five in the Top End and two in Central Australia) adopted the program in 1997.

Source: Mackerras 1998.

PERINATAL MORTALITY

In 1994–96, the perinatal mortality rate for babies of Indigenous mothers was more than twice that for babies born to non-Indigenous women (table 6.9).

There have been reductions in perinatal mortality in at least some jurisdictions over the last decade or so. In Western Australia, for example, the perinatal mortality rate for babies of Indigenous mothers fell from 23.3 per 1,000 births in 1986 to 17.2 in 1995, although the rates remained more than double the non-Indigenous figure of 6.8 per 1,000 in 1995 (Gee 1996). (These figures are based on babies with birthweight of 500 grams or more, or 22 weeks gestational age or more where birthweight is unknown, while the figures in table 6.9 include babies of 400 grams or more, or 20 weeks gestational age or more where birthweight is unknown.) In the Northern Territory, the perinatal mortality rates per 1,000 births for babies born to Indigenous mothers fell even more dramatically, from 48.9 in 1986 to 26.4 in 1995 (Markey et al. 1998). As in Western Australia, the rate was still more than twice that for babies born to non-Indigenous mothers (11.6). This fall in perinatal mortality in the Northern Territory may be related to other improvements between 1986 and 1995 in birth outcomes for babies born to Indigenous mothers, such as an increase in the mean birthweight by 85 grams and a decrease in the proportion of low birthweight babies (Markey et al. 1998).

6.9 PERINATAL MORTALITY(a), BY MOTHER'S INDIGENOUS STATUS—1994–96

	Stillbirths		*Neonatal mortality*		*Perinatal mortality(b)*	
State or Territory	*no.*	*rate(c)*	*no.*	*rate(c)*	*no.*	*rate(c)*
New South Wales						
Babies of Indigenous mothers	55	10.9	27	5.4	82	16.3
Babies of non-Indigenous mothers	1 507	5.9	645	2.5	2 152	8.4
Victoria						
Babies of Indigenous mothers	13	9.9	9	7.0	22	16.8
Babies of non-Indigenous mothers	1 408	7.4	647	3.4	2 055	10.8
Queensland						
Babies of Indigenous mothers	116	15.5	66	8.9	182	24.3
Babies of non-Indigenous mothers	939	6.9	508	3.7	1 447	10.6
South Australia						
Babies of Indigenous mothers	17	15.0	12	10.7	29	25.6
Babies of non-Indigenous mothers	391	6.8	195	3.4	586	10.2
Western Australia						
Babies of Indigenous mothers	64	14.8	23	5.4	87	20.1
Babies of non-Indigenous mothers	516	7.2	162	2.3	678	9.4
Northern Territory						
Babies of Indigenous mothers	55	14.8	45	12.3	100	27.0
Babies of non-Indigenous mothers	46	6.6	34	4.9	80	11.5
Australia(d)						
Babies of Indigenous mothers	322	13.9	182	8.0	504	21.7
Babies of non-Indigenous mothers	5 064	6.7	2 294	3.1	7 358	9.7

(a) Data for Tasmania and the Australian Capital Territory are not presented due to small numbers and data quality concerns.
(b) Perinatal deaths include stillbirths and neonatal deaths. For definition of other terms, see Glossary.
(c) Rate per 1,000 total births.
(d) Includes Australian Capital Territory and Tasmania.

Source: Day, Sullivan and Lancaster 1999b.

BREASTFEEDING

Breastfeeding is a factor in preventing infections such as gastrointestinal and respiratory infections in young children and may also assist in neurological development (see, for example, Howie et al. 1990; Lanting et al. 1994; Wright et al. 1989).

Some 70% of Indigenous children aged 0–12 years had been or were currently being breastfed in 1994, according to the results of the NATSIS (ABS 1996c). Breastfeeding was more commonly reported in rural areas than in urban areas, and babies in rural areas were more likely to be breastfed for longer than six months than those in urban areas. Indigenous children in the Northern Territory were most likely to have been breastfed, with about 90% of children under 13 having been or currently being breastfed at the time of the survey. Over half of Indigenous babies (57%) in the Northern Territory were breastfed for over 12 months, compared with 10–38% of Indigenous babies in other jurisdictions (ABS 1996c).

In the 1995 NHS, which allows direct comparison between Indigenous and non-Indigenous children in non-remote areas, questions on breastfeeding history were asked for children up to four years of age. Indigenous children in non-remote areas were somewhat less likely than their non-Indigenous counterparts to have been breastfed. About 75% of Indigenous children aged less than four years were reported to have been breastfed, compared with about 86% of non-Indigenous children. Among those who had been breastfed and who were at least six months old, 60% of Indigenous children and 53% of non-Indigenous children were reported to have breastfed for 24 weeks or more (ABS 1999a).

Inset 6.10 describes some factors that may influence initiation and continuation of breastfeeding among urban Aboriginal women.

6.10 FACTORS INFLUENCING BREASTFEEDING PRACTICES IN THE MELBOURNE ABORIGINAL COMMUNITY

In a study conducted by the Victorian Aboriginal Health Service, a series of focus groups was used to explore factors influencing breastfeeding practices. The vast majority of women said they expected to breastfeed their babies and most did, at least to some extent. Reasons for not breastfeeding included embarrassment and a belief that breastfeeding would be painful and/or inconvenient. Some women were of the opinion that artificial feeding was as good as breastfeeding. Many women started to breastfeed but stopped sooner than they had intended because their nipples were sore, because they were too tired, or because they were worried about whether they were producing enough milk.

The authors pointed to a number of factors that contributed to less than optimal breastfeeding practices, including a lack of relevant information, inappropriate advice, inadequate support and lack of self-confidence. The results of the study are being used to develop programs to promote breastfeeding by Aboriginal women in metropolitan Melbourne.

Source: Holmes, Thorpe and Phillips 1997.

SUMMARY

Indigenous mothers tend to give birth at younger ages and have babies of lower birthweight than their non-Indigenous counterparts. The perinatal mortality rate for babies of Indigenous mothers remains higher than for babies of non-Indigenous mothers, although the rate has been declining over recent years for babies of Indigenous mothers in at least some jurisdictions. Local programs designed to improve health outcomes for Indigenous mothers and their babies have been implemented successfully in a number of areas.

CHAPTER 7 ILL HEALTH

INTRODUCTION

This chapter draws on data from a range of health-related collections to provide a picture of the health status of Indigenous Australians. Included is information on the illnesses and conditions for which Indigenous people are admitted to hospital, and the procedures that are performed on them there, as well as information on conditions and illnesses which may not lead to hospitalisation. There are also sections on injury, cancer, communicable diseases, mental health and dental health. While some information is available about each of these topics, the quantity, quality and completeness of the data are often unknown and may vary from topic to topic and from State to State. As a result, the information presented in this chapter should be interpreted with caution.

ILL HEALTH IN THE COMMUNITY

Until recently, the only major source of data allowing comparison of the ill health of the Indigenous and non-Indigenous populations was hospital records. As discussed later in this chapter, and in chapter 11, such comparisons continue to be limited by incomplete identification of Indigenous people in hospital records. In addition, although hospital admissions are an important indicator of the level of ill health in a population, not everyone who gets sick goes to hospital, and not everyone who is in hospital is equally sick, so hospital data do not provide a complete picture.

The 1995 National Health Survey (NHS) (ABS 1999a) provides the first national level data on self-reported illness among Indigenous people which can be directly compared with data collected in the same way from non-Indigenous people. Due to concerns about the appropriateness of the survey for Indigenous people living in remote areas, and the resulting data quality, only data for people (both Indigenous and non-Indigenous) from non-remote areas have been released. In addition, people who were inpatients in hospitals, or living in nursing homes or some other institutions were not included in the survey, and this would tend to exclude the sickest members of the community. Thus the results reported in this section describe the health of non-institutionalised Indigenous and non-Indigenous Australians living in predominantly urban and more densely populated rural areas.

Types of conditions reported

In the 1995 NHS, the majority of Indigenous and non-Indigenous people from non-remote areas (76% and 86%, respectively) reported a recent and/or long-term health condition. The difference between the two populations is almost entirely accounted for by age. The reporting of conditions increased with age, and the Indigenous population is younger than the non-Indigenous population (see chapter 2). After adjusting for age, the proportions reporting recent and/or long-term conditions were similar (ABS 1999a).

Types of conditions reported *continued*

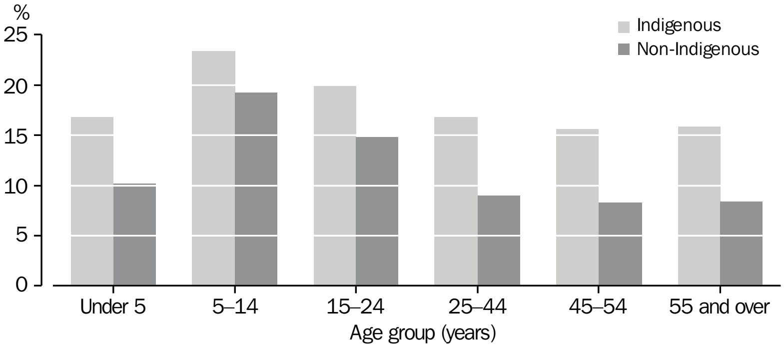
Respiratory illnesses and conditions, including common colds, asthma, hayfever, sinusitis, bronchitis and influenza, were common in all groups, reported by 31–41% of Indigenous and non-Indigenous people in each age group. Diseases of the nervous system (primarily eye/vision problems and ear/hearing problems) were also reported by a high proportion of Indigenous and non-Indigenous people, with the proportions increasing with age (ABS 1999a).

Among more specific conditions, asthma, diabetes, high blood pressure, eye/vision problems, ear/hearing problems and arthritis were reported by a significant proportion of Indigenous people, at least in some age groups. More information on these conditions is presented below.

Asthma

Asthma was the most commonly reported condition for Indigenous children and young adults aged less than 5 years (17%), 5–14 years (23%) and 15–24 years (20%) (graph 7.1). Although not the most common condition in older age groups, it was still reported by 16–17% of Indigenous adults aged 25 years or more. Asthma was more commonly reported for Indigenous people than for non-Indigenous people in every age group (ABS 1999a).

7.1 REPORTED ASTHMA(a)—1995

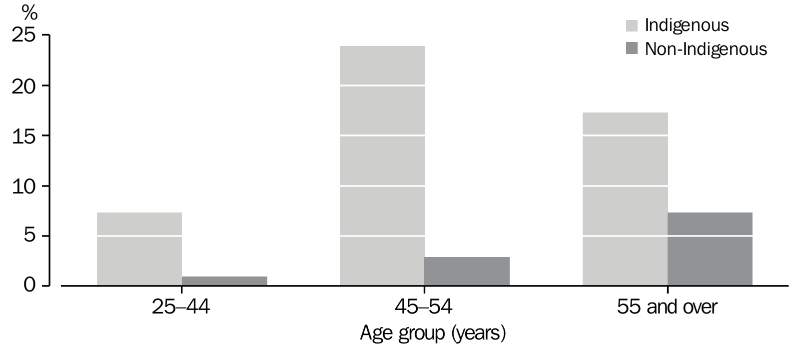


(a) Excludes persons living in remote areas.
Source: ABS 1999a.

Diabetes

Diabetes was reported by 7% of Indigenous adults aged 25–44 years, 24% of those aged 45–54 and 17% of those 55 and over (graph 7.2). Reporting of diabetes was 7–8 times higher among Indigenous people than non-Indigenous people among those aged 25–44 and 45–54 years, and almost three times higher among those 55 years or more (ABS 1999a).

7.2 REPORTED DIABETES(a)—1995

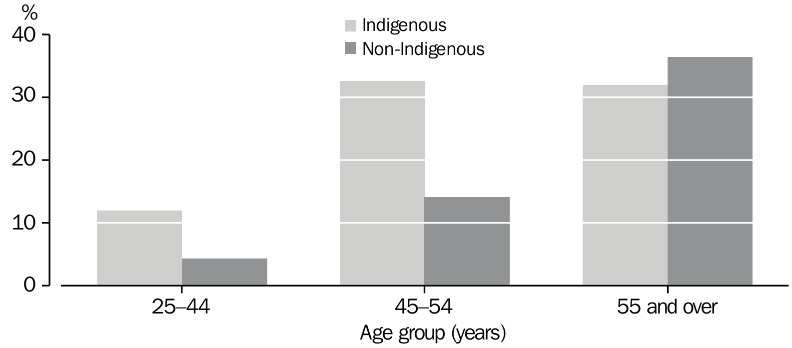


(a) Excludes persons living in remote areas.
Source: ABS 1999a.

High blood pressure

Hypertension was also reported by significant proportions of Indigenous adults, rising from 12% of those aged 25–44 years to 33% of those aged 45–54 years and 32% of those 55 years and over (graph 7.3). Among non-Indigenous adults in the same age groups, hypertension was reported by 4%, 14% and 36%, respectively (ABS 1999a).

7.3 REPORTED HYPERTENSION(a)—1995

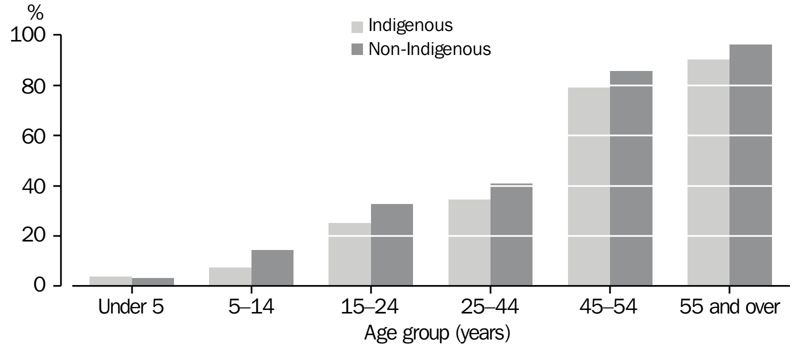


(a) Excludes persons living in remote areas.
Source: ABS 1999a.

Eye/vision problems

A large proportion of Indigenous and non-Indigenous people reporting diseases of the nervous system cited eye/vision problems, the reporting of which ranged from under 4% in the youngest age group to over 90% in the oldest age group (graph 7.4). Non-Indigenous people were slightly more likely than Indigenous people to report eye problems in every age group except the youngest. The majority of eye problems reported were disorders of refraction and accommodation, such as far-sightedness, near-sightedness and astigmatism (ABS 1999a).

7.4 REPORTED EYE/VISION PROBLEMS(a)—1995



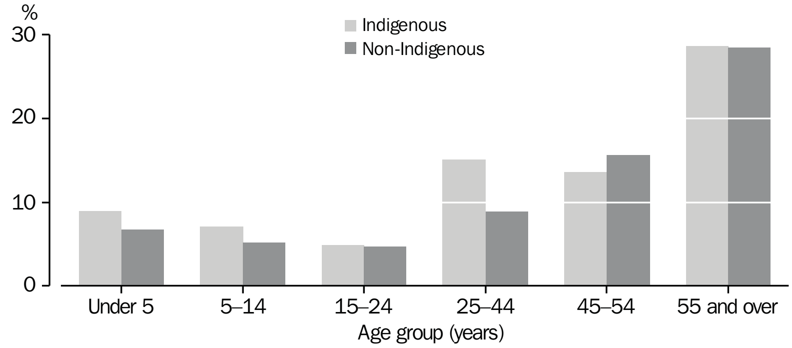
(a) Excludes persons living in remote areas.
Source: ABS 1999a.

A review of information about the eye health of people in Aboriginal and Torres Strait Islander communities was published in 1997 and is available elsewhere (Taylor 1997).

Ear/hearing problems

Ear/hearing problems were reported by between 5% and 29% of Indigenous and non-Indigenous people, depending on age (graph 7.5). The highest reporting was in the oldest age group, with partial or complete deafness being the most common problem. In the youngest age group, by contrast, otitis media (a type of ear infection) was responsible for the majority of ear/hearing problems (ABS 1999a).

7.5 REPORTED EAR/HEARING PROBLEMS(a)—1995

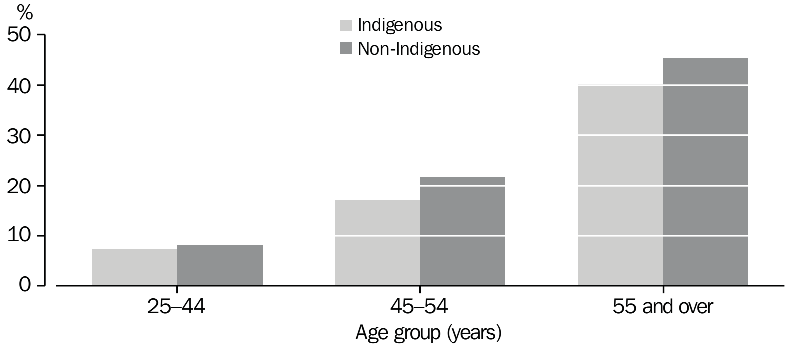


(a) Excludes persons living in remote areas.
Source: ABS 1999a.

Arthritis

Although perhaps not usually considered a leading health problem for Indigenous people, arthritis was nearly as commonly reported by Indigenous people as by non-Indigenous people. Arthritis is not generally life-threatening, but it can be debilitating and can interfere with the quality of a person’s life. Arthritis was one of the most common conditions among those aged 55 years or more, reported by 40% of Indigenous people and 45% of non-Indigenous people (graph 7.6). About 8% of Indigenous people aged 25–44 years and 17% of those aged 45–54 years reported they had some form of arthritis (ABS 1999a).

7.6 REPORTED ARTHRITIS(a)—1995

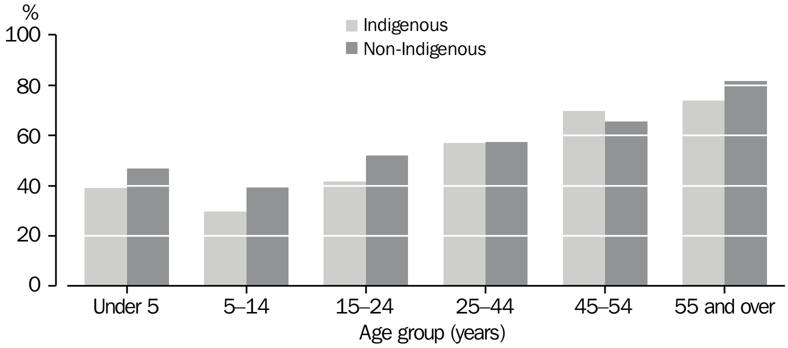


(a) Excludes persons living in remote areas.
Source: ABS 1999a.

MEDICATION USE

Almost half (46%) of non-remote Indigenous people in the 1995 NHS reported using medication in the two weeks prior to being interviewed. This ranged from 30% of 5–14 year olds to 74% of Indigenous people aged 55 and over (graph 7.7) (ABS 1999a).

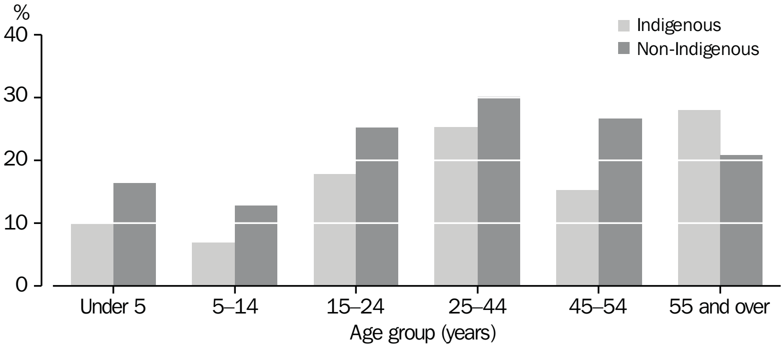
7.7 REPORTED USE OF MEDICATION(a)—1995



(a) Excludes persons living in remote areas.
Source: ABS 1999a.

Pain relievers (graph 7.8) were the most commonly used type of medication, reported by 16% of Indigenous people and 24% of non-Indigenous people overall. Although type of medication varied by age group, pain relievers were the first or second most commonly reported medication in every age group for both Indigenous and non-Indigenous people (ABS 1999a).

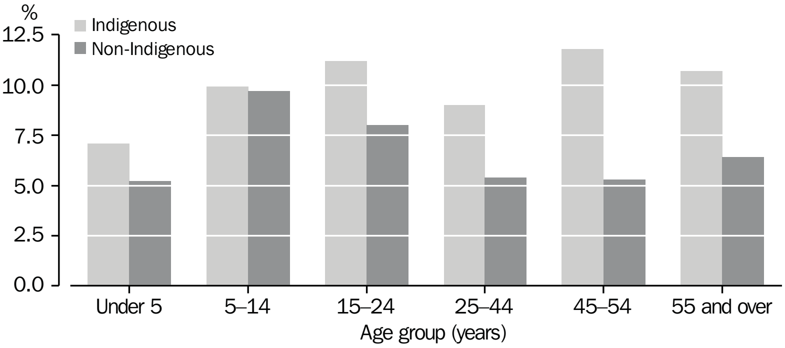
7.8 REPORTED USE OF PAIN RELIEVERS(a)—1995



(a) Excludes persons living in remote areas.
Source: ABS 1999a.

For the Indigenous population as a whole, asthma medication ranked second (10%), followed by medication for coughs/colds (6%) and skin ointments (6%). As might be expected given the higher reporting of asthma (graph 7.1), use of asthma medications was more commonly reported among Indigenous than non-Indigenous people in all age groups (graph 7.9) (ABS 1999a).

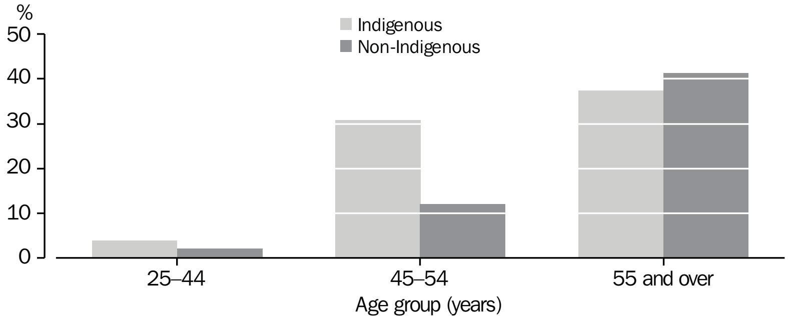
7.9 REPORTED USE OF ASTHMA MEDICATIONS(a)—1995



(a) Excludes persons living in remote areas.
Source: ABS 1999a.

Use of medication for heart problems/blood pressure was reported by a higher proportion of Indigenous people than non-Indigenous people among those aged 25–44 years and 45–54 years (graph 7.10) (ABS 1999a).

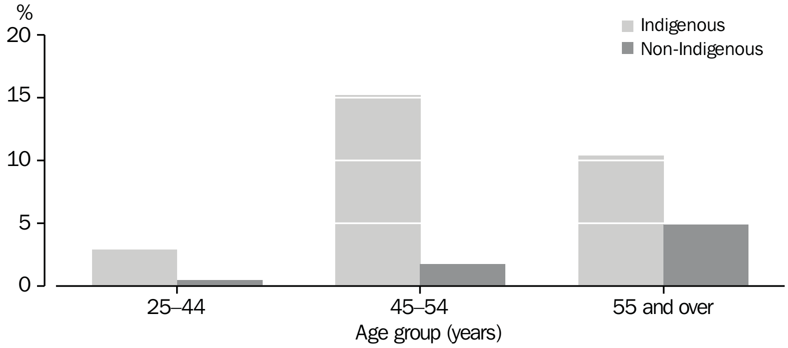
7.10 REPORTED USE OF MEDICATIONS FOR HEART DISEASE/HIGH BLOOD PRESSURE(a)—1995



(a) Excludes persons living remote areas.
Source: ABS 1999a.

Indigenous people in all age groups aged 25 years or more were more likely than non-Indigenous people to report recent use of medications for diabetes (graph 7.11), which is consistent with the higher reporting of diabetes shown in graph 7.2 (ABS 1999a).

7.11 REPORTED USE OF MEDICATIONS FOR DIABETES(a)—1995



(a) Excludes persons living in remote areas.
Source: ABS 1999a.

The use of vitamins, minerals, natural and/or herbal medicines was less commonly reported by Indigenous people than non-Indigenous people both overall and in every age group (ABS 1999a).

Information about other health-related actions, such as consultation with doctors and visits to hospital, is presented in chapter 5. Information on consultations with dentists is presented in the following section.

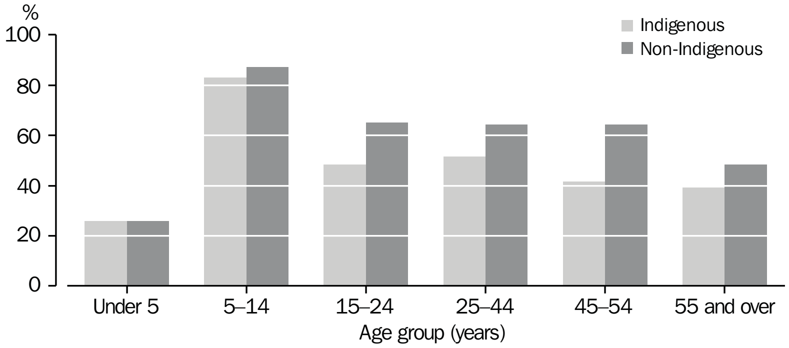
DENTAL HEALTH

Dental health is sometimes overlooked among the many serious health problems experienced by Indigenous people. However, the consequences of poor oral health may include pain, infection, impaired speech, interference with proper eating function which may necessitate a change in diet, embarrassment about one's appearance, and financial burden incurred when dental intervention is necessary. Barriers to receiving adequate dental care include possible financial difficulties, lack of accessible services, lack of recognition of the need for dental care and treatment, and the previous experiences of and levels of satisfaction with dental care received (AIHW Dental Statistics and Research Unit 1995).

In the 1995 NHS, among people aged two years old or more in non-remote areas, about 4% of Indigenous people and 6% of non-Indigenous people reported a consultation with a dentist in the two weeks prior to interview. Indigenous people were less likely than non-Indigenous people to report a recent consultation in every age group.

The reporting of recent consultations does not necessarily represent routine and preventative care, but this is also of interest. Overall, about 56% of Indigenous people and 63% of non-Indigenous people aged two years or more reported that they had visited a dentist within the last two years. Reporting of a visit within the last two years was most common among children of school age (graph 7.12) (ABS 1999a), which is probably due to the impact of school dental health programs in many jurisdictions.

7.12 VISITED A DENTIST WITHIN THE LAST TWO YEARS(a)—1995



(a) Excludes persons living in remote areas.
Source: ABS 1999a.

In a smaller study of access to dental care, Indigenous adults were more likely than non-Indigenous adults to report complete tooth loss. Among patients using public-funded dental services, Indigenous patients were more likely than other patients to have tooth extractions (Brennan & Carter 1998).

NOTIFIABLE COMMUNICABLE DISEASES

Many of the diseases responsible for illness, hospitalisation (see later in this chapter) and death (see chapter 9) are communicable (that is, they can be spread to others), but the focus of this section is on diseases and infections which are notifiable to health authorities. Not all such diseases or infections will result in hospitalisation or death, so it is important to have alternative sources of information. Notification to health authorities of cases of communicable disease is an important public health tool in preventing and managing epidemics.

In 1997, there were over 40 diseases or disease groups which were reportable in at least some States and Territories, including tuberculosis, various types of hepatitis, malaria, leprosy, measles, Haemophilus influenzae type b, syphilis, gonococcal infection, arbovirus infections (such as Ross River fever), chlamydial infection, meningococcal infection, mumps, pertussis, rubella, salmonellosis, and other diseases. Health authorities from States and Territories forward information about disease notifications to the National Notifiable Diseases Surveillance System (NNDSS), which reports regularly. The completeness of notifications to State and Territory health authorities (and therefore to the NNDSS) is unknown and is likely to vary from disease to disease and by jurisdiction (Hargreaves et al. 1995; O'Brien et al. 1999).

Indigenous status can be recorded for diseases and infections which are reported and forwarded to the NNDSS, but as is the case for notifications overall, information on Indigenous status is believed to vary in completeness for different diseases and different States and Territories. The likelihood of testing for infection and of notification of positive test results may differ for Indigenous and non-Indigenous people, but the extent of any such difference is unknown. Overall, Indigenous status was reported for just under a third of all notifications in Australia in 1994 (Hargreaves et al. 1995). Information on notifications about people identified as Indigenous was published in the 1994 NNDSS annual report (Hargreaves et al. 1995) and summarised in the previous edition of this publication (ABS & AIHW 1997a). Despite shortcomings in the quality of the data, it was apparent that Indigenous people suffered a greater burden of infectious disease than did non-Indigenous Australians in 1994. Later published NNDSS annual reports have not included information on the Indigenous status of notifications, but unpublished data are available from the NNDSS.

Table 7.13 presents information on notifications for selected diseases in the three-year period 1996–98. A high proportion of notifications had no information on the Indigenous status of the person who was the subject of the notification. Indigenous status was unknown for more than half of all notifications for most of the diseases and infections listed in table 7.13.

The rates presented in table 7.13 for notifications identified as Indigenous underestimate the true notification rates for the Indigenous population. If all notifications correctly indicated the Indigenous status of the person who was the subject of the notification, then the rate would be higher than that shown in the table. (There would be a higher number of notifications for the same size population.) The all-Australian rate is not affected by the recording of Indigenous status, however, and so would not change solely in response to more accurate recording of the Indigenous status of existing notifications. Therefore, if the rate of notifications identified as Indigenous (that is, the notification rate presented in table 7.13) is greater than the total Australian rate, then the true notification rate must also be higher for Indigenous people than for the total Australian population. If the apparent Indigenous notification rate in the table is lower than the all-Australian rate, then it is not possible to say with certainty whether the true rate is lower or higher than the all-Australian rate.

In 1996–98, the notification rates for people identified as Indigenous were higher than rates for the total population for chlamydial infection, donovanosis, gonococcal infection, *Haemophilus influenzae* type b, hepatitis A, hepatitis B, measles, meningococcal infection, mumps, salmonellosis, shigellosis, syphilis and tuberculosis (table 7.13). Although the apparent excess was small in a few cases (such as measles and mumps), the difference would almost certainly have been larger if all notifications relating to Indigenous people were correctly identified as such.

The rates in table 7.13 are crude rates and do not take in to account differences in the age structures of the populations. Diseases and infections which are more common in children and young people would be expected to have higher crude rates in the Indigenous population than in the total population even if there were no differences in age-specific rates. However, this is of little concern given the very high level of missing information about Indigenous status in the notifications.

Despite such major shortcomings in the quality of the data, the burden of infectious disease among Indigenous people relative to all Australians is apparent. However, considerable improvements in the quality of Indigenous identification are necessary before trends in incidence over time can be assessed.

7.13 COMMUNICABLE DISEASE NOTIFICATIONS—1996–98(a)

		Proportion of notifications identified as			*Crude rates per 100 000(b)*	
	Notifications	*Indigenous*	*Non-Indigenous*	*Unknown*	*Notifications identified as Indigenous*	*All Australian*
	no.	*%*	*%*	*%*	*rate*	*rate*
Campylobacterosis(c)(d)	37 002	1.6	29.6	68.8	67.7	100.6
Chlamydial infection(e)	28 349	13.8	19.9	66.3	462.4	77.1
Donovanosis(e)(f)	131	88.6	2.3	9.2	14.9	0.4
Gonococcal infection(d)	12 013	43.6	18.4	38.0	619.0	32.7
Haemophilus influenzae type b(d)	97	14.4	16.5	69.1	1.7	0.3
Hepatitis A(d)	4 353	3.4	18.5	78.2	17.3	11.8
Hepatitis B(d)(g)	8 205	3.8	32.2	64.0	37.0	22.3
Hepatitis C(d)(g)	31 125	1.2	32.3	66.6	42.3	84.7
Measles(d)	1 088	2.4	35.8	61.9	3.1	3.0
Meningococcal infection	1 402	6.6	45.4	48.0	7.9	2.5
Mumps(d)	404	2.7	46.5	50.7	1.3	1.1
Pertussis(d)	13 370	1.1	32.8	66.1	17.8	36.4
Ross River virus(d)	14 400	0.6	19.5	79.9	9.9	39.2
Rubella(d)	4 466	0.1	16.7	83.2	0.6	12.1
Salmonellosis(d)	15 767	5.5	24.2	70.3	102.3	42.9
Shigellosis(c)(d)	2 079	28.8	26.2	45.1	70.7	5.7
Syphilis(d)	2 535	38.2	8.6	53.2	114.5	6.9
Tuberculosis	3 361	3.3	60.8	35.9	9.3	6.0

(a) Data for 1998 are provisional.
(b) The denominators exclude persons living in States in which the disease is not notifiable or not fully notifiable, or for which no data were available.
(c) In New South Wales, notifiable only as 'foodborne disease' or 'gastroenteritis in an institution'.
(d) Data not available for New South Wales.
(e) Not notifiable in New South Wales.
(f) Not notifiable in South Australia.
(g) Includes incident and unspecified cases.

Source: ABS 1997b, 1998e, 1998j; Communicable Diseases Network—Australia New Zealand, National Notifiable Diseases Surveillance System, personal communication.

In addition to the limited data on the incidence of infectious disease (such as that provided by disease notifications), there is clear evidence of higher rates of hospitalisation and death from such causes among Indigenous people. In 1996–97, the category 'infectious and parasitic diseases' accounted for 3.6% of hospital separations among males identified as Indigenous and 2.8% of separations among females identified as Indigenous (table 7.19), or about twice as many separations as expected based on all-Australian rates. In 1995–97 there were 4–6 times more deaths than expected from diseases in this category among Indigenous people in Western Australia, South Australia and the Northern Territory (table 9.5). Not all infectious diseases are included in this category, however. For example, included in the category 'diseases of the respiratory system' are acute respiratory infections and pneumonia/influenza, which each accounted for 2–4% of hospital separations among males and females identified as Indigenous in 1996–97 (Hospital Separations Database, AIHW).

Great progress has been made in the control of at least some communicable diseases, as inset 7.14 shows.

7.14 LEPROSY CONTROL IN THE NORTHERN TERRITORY

From the first recorded case of leprosy in an Aboriginal person in the Northern Territory in 1890, the disease spread throughout the Top End. The epidemic peaked in the 1950s and 1960s, with up to 10% of people in some communities affected. Control of the epidemic was achieved through 'active case finding and treatment...combined with an integrated program of patient education, reconstructive surgery and rehabilitation' (Lush, Hargrave & Merianos 1998, p. 709).

Over the last 25 years, the average annual case diagnosis rates per 100,000 fell from 55.6 among Aboriginal people and 5.1 among non-Aboriginal people in 1970–74 to 4.3 (Aboriginal) and 1.0 (non-Aboriginal) in 1990–94. Although great progress has been made, Lush, Hargrave and Merianos (1998) point out that transmission of leprosy does still occur in the Northern Territory and continued vigilance is required.

Source: Lush, Hargrave and Merianos 1998.

More information on communicable disease notifications in North Queensland is presented in chapter 10.

HIV/AIDS

Information on HIV/AIDS among Indigenous people is published by the National Centre in HIV Epidemiology and Clinical Research (NCHECR 1998). Between 1992 and 1997, a total of 100 notifications of HIV infection and 38 notifications of AIDS diagnosis were identified as being of Indigenous people. No information on Indigenous status was available for Victoria or the Australian Capital Territory, and the quality of identification in other jurisdictions (and the resulting underestimation) is unknown (NCHECR 1998).

Most HIV notifications in Australia in 1992–97 were for males (about 91%), and the majority (about 80%) were attributed to male homosexual contact (with or without injecting drug use). This was also the case for HIV notifications among people identified as Indigenous, although not to the same extent. About 25% of HIV notifications in 1992–97 among people identified as Indigenous were females and 35% of infections were attributed to heterosexual contact (NCHECR 1998). Based on the available data, the rates of HIV infection appeared to be similar for Indigenous people and non-Indigenous people in 1992–97 (NCHECR 1998), but these figures must be interpreted with caution.

According to the Working Party on Indigenous Australians' Sexual Health, 'the problem of HIV/AIDS cannot successfully be addressed in isolation from other sexually transmitted diseases, related blood-borne viruses and sexuality' (ANCARD 1997, p. 23). The working party noted that the higher rates of sexually transmitted diseases among Indigenous Australians (such as those presented in table 7.13) may increase the likelihood of HIV transmission (ANCARD 1997).

MENTAL HEALTH

Mental health encompasses a wide range of factors and is concerned not only with mental illness but also with the mental and emotional wellbeing of an individual, his or her family and the community. Very little information is available about the mental health of Indigenous people, and what exists is primarily concerned with illness rather than wellbeing. Although the importance of an holistic approach to mental health has been recognised (see for example Swan & Raphael 1995), there does not appear to be agreement at present as to how to measure the wellbeing of Indigenous people.

Some information is available about a number of factors related to mental health, such as reported mental conditions, hospital separations for mental disorders, suicide and self-harm, substance misuse, and injury intentionally inflicted by others. These are discussed in this section. Child abuse and neglect, which can be a symptom of mental health problems in the person committing the abuse or neglect, as well as a risk factor for mental health problems in the child, is discussed in chapter 3.

In the 1995 NHS, some 7% of Indigenous people and 6% of non-Indigenous people living in non-remote areas reported a recent or long-term condition which could be categorised as a ‘mental disorder’ (ABS 1999a). Diseases and conditions coded under this classification include depression, psychosis, ‘nerves’, alcohol and drug dependence, eating disorders, etc. These figures are likely to underestimate the prevalence of mental disorders quite considerably. Because of the stigma attached to mental illness, people may have been less willing to report these types of conditions to an interviewer. Also, people in hospitals, nursing homes and other institutions were not included in the NHS, so people who were in institutional care for such conditions at the time of the survey would not have been represented.

In 1996–97, there were about twice as many hospital separations as expected for mental disorders among people identified as Indigenous (table 7.19). This category includes a number of alcohol- and drug-related conditions, including abuse and dependence, as well as depression, psychosis and other conditions. (More information about substance abuse is presented in chapter 4.) Mental disorders accounted for about 6.4% of separations among males identified as Indigenous and 3.5% among females identified as Indigenous. The figures must be treated with caution since the diagnosis and categorisation of mental disorders, as well as the place of treatment, may vary from place to place and across cultures.

Deaths categorised as being due to mental disorders were also more common among Indigenous people (at least among those in jurisdictions with adequate data quality) than among Australians in general. In an analysis of mortality in 1995–97 in South Australia, Western Australia and the Northern Territory, there were about four times more deaths from mental disorders than expected among Indigenous people, based on all-Australian rates (table 9.5).

MENTAL HEALTH *continued*

Intentional injuries, whether self-inflicted or caused by another person, are also an indicator of mental health. In 1996–97, there were about twice as many hospital separations as expected from self-inflicted injury among people identified as Indigenous. In the same year, people identified as Indigenous were about 6–20 times more likely than expected to be hospitalised because of injuries intentionally done to them by others (table 7.24). In 1995–97, in Western Australia, South Australia and the Northern Territory combined, there were about eight times more deaths than expected from homicide among Indigenous males and six times more deaths than expected among Indigenous females. Deaths classified as suicide occurred 1.7 times more than expected among Indigenous males and 1.4 times more than expected among Indigenous females, based on all-Australian rates.

Raphael and Swan (1997, p. 15), in a review of studies of mental illness and psychosocial morbidity among Aboriginal people, wrote, ‘Throughout all these studies, and identified in the reports of Aboriginal people themselves, separations (especially through the taking away of children and its ongoing effects), trauma, grief, loss of culture, and ongoing effects of poverty, discrimination and racism are central’. The authors also note that, despite high levels of stress experienced by Aboriginal people for the reasons mentioned above, this must be balanced by ‘the resilience, survival and achievements of Aboriginal people in the face of such odds’ (Raphael & Swan 1997, p. 11).

More information about the separation of children from their families is presented in inset 7.15.

7.15 ‘BRINGING THEM HOME’, REPORT OF THE NATIONAL INQUIRY INTO THE SEPARATION OF ABORIGINAL AND TORRES STRAIT ISLANDER CHILDREN FROM THEIR FAMILIES

The National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families was conducted by the Human Rights and Equal Opportunity Commission beginning in 1995. Hearings were held in a number of cities and towns across Australia and both written and oral submissions were received. The final report, released in 1997, includes an extensive history of the ‘laws, practices and policies of forcible removal of Indigenous children’ (Human Rights and Equal Opportunity Commission 1997, p. 27), as well as first-hand accounts from people who were affected by them and statements from experts in mental health and other relevant fields.

The report describes a devastating legacy of trauma, grief, loss of family and community, loss of language, culture and land, loss of identity, and, in many cases, physical, emotional and sexual abuse. It discusses the consequent risks of self-harm, depression and other mental illness, reduced parenting skills and domestic violence, as well as behavioural problems in the next generation, which may lead to the removal of these children from their families, thus continuing the cycle.

According to expert submissions made to the Inquiry, Indigenous people in general are already more vulnerable than non-Indigenous people to mental ill-health because of greater exposure to poverty, racism, discrimination, poor physical health and other factors, but the ‘(e)vidence to the Inquiry established clearly that the childhood experience of forcible removal and institutionalisation or multiple fostering makes those people much more likely to suffer emotional distress than others in the Indigenous community’ (Human Rights and Equal Opportunity Commission 1997, p. 193).

The Inquiry found that the common law rights of children forcibly removed had been denied, that their human rights had been breached, and that some children were victims of other criminal or civil wrongdoing (such as abuse).

The final report contains over 50 recommendations covering areas such as access to and preservation of records; the facilitation of family reunions; appropriate means of reparation and the identification of legitimate claimants; the design and implementation of educational programs; the provision of mental health and other services; and measures to reduce contemporary separations of Indigenous children from their families.

Source: Human Rights and Equal Opportunity Commission 1997.

CANCER

Cancer is an important cause of illness and death for Indigenous and non-Indigenous people alike. There were over 40% more deaths than expected from cancer among Indigenous people in Western Australia, South Australia and the Northern Territory combined in 1995–97 (see chapter 9). Information on the incidence of cancer (i.e. new cases) among Indigenous people is severely limited by lack of identification in many jurisdictions’ cancer registries. In this section, data from Western Australia, South Australia and the Northern Territory are presented. Although data on cancer among Indigenous people have been published for these jurisdictions, it is likely that there is still some underestimation of cancer incidence and death among Indigenous people in those areas. Because of differences in circumstances from region to region, it is not clear whether these data are indicative of the experience of Indigenous people in other parts of Australia.

There is evidence that the recorded incidence of cancer is generally lower among Indigenous people than would be expected based on non-Indigenous rates (table 7.16). Some of this is likely to be due to under-identification of Indigenous people in cancer registrations. However, as can be seen in table 7.16 (and in table 9.5), death rates from all cancers combined were generally higher for Indigenous people than for non-Indigenous people.

Under-identification does not appear to explain all of the difference between lower apparent relative incidence and higher apparent relative mortality, however. In a recent study in South Australia, data on hospital separations and data from death files were used to update Indigenous identification as recorded in the cancer registry. Even with more complete identification, survival was still found to be poorer among Aboriginal cancer patients than among non-Aboriginal patients. The authors of the report found that some of this difference was explained by the later stage at diagnosis and the higher rates of typically fatal cancers (such as lung, liver and pancreas) among Aboriginal patients, but they concluded that there may also be differences in treatment outcomes which warrant further investigation (South Australian Cancer Registry 1997).

In both South Australia and the Northern Territory, a higher than expected incidence of lung, liver, and cervical cancer was observed among Indigenous people, with lower than expected incidence of female breast, colorectal and skin (melanoma) cancers. There were too few cancer cases among Indigenous people in Western Australia to assess this, as only a single year's data have been included.

7.16 INCIDENCE AND MORTALITY FROM CANCER, SELECTED YEARS

	Incidence		*Mortality*	
	no.	*mean annual rate(a)*	*no.*	*mean annual rate(a)*
South Australia(b)				
Aboriginal males	58	284	43	218
Aboriginal females	81	259	47	152
Total males	22 732	324	10 925	150
Total females	19 039	251	8 571	98
Western Australia(c)				
Aboriginal males	24	214	18	188
Aboriginal females	32	209	19	156
Total males	3 674	344	1 697	152
Total females	2 882	246	1 234	93
Northern Territory(d)				
Aboriginal males	317	283	199	251
Aboriginal females	322	215	171	179
Non-Aboriginal males	1 563	331	467	145
Non-Aboriginal females	1 168	256	260	90
All Australian(d)				
Total males	—	**328**	—	**116**
Total females	—	**264**	—	**74**

(a) Rate per 100,000. Directly age-standardised using the World Standard Population.
(b) Data from 1988–94.
(c) Data from 1996.
(d) Data from 1987–97 for incidence and 1987–95 for mortality.

Source: South Australian Cancer Registry 1997; Territory Health Services, unpublished data, Northern Territory Cancer Registry; Threfall and Thompson 1998.

HOSPITALISATION

Information on hospitalisation can be a useful indicator of the state of health of a population (see inset 7.17). Of interest are both the overall rate at which people are admitted to hospital and the diseases and conditions responsible for those admissions. The number and types of procedures that people undergo while in hospital may also be useful information.

7.17 HOSPITAL SEPARATIONS

Hospitals collect both clinical and administrative information about people who are admitted. Although most people think in terms of admissions to hospital, statistics about hospitalisation are generally based on hospital separations. A hospital separation occurs when a patient is discharged, is transferred to another facility or dies. Much more information is available at the end of a patient's stay in hospital than at the beginning, such as information about diagnosis, length of stay, procedures and operations, etc.

Data are collected by all hospitals, but the availability of such data has been varied. For example, it was difficult to obtain information about private hospitals until recent years. Information on public and private hospital separations is collected by State and Territory health departments and then provided to the Australian Institute of Health and Welfare, which maintains a national collection.

The Indigenous status of patients in private hospitals was not available until recently. Although this information has been available for public hospitals for several years, the quality of identification is variable for both public and private hospitals (see chapter 11).

Hospital separation data also include the age and sex of the patient as well as the principal diagnosis and any other diagnoses, and the principal procedure and any other procedures. All diagnoses and procedures are coded according to the International Classification of Diseases (ICD) (WHO 1977). The clinical modification of the ninth revision of this system (referred to as ICD-9-CM) is currently in use in Australia, but the tenth revision is currently being introduced.

While hospital statistics can provide an indicator of health, they are not a measure of the prevalence of disease. The figures represent episodes of hospitalisation rather than numbers of people. An individual may have been admitted to hospital on more than one occasion during the year, and each separate hospital admission would be included in the figures presented here. For example, some patients with kidney disease may have three recorded separations each week just for their routine dialysis treatment (see chapter 8). In addition, each hospital admission represents a mixture of need, access and demand. Low rates of hospitalisation may represent lower levels of need (i.e. a healthier population), or they may mean existing needs are not being met (e.g. a sick population with poor access). A rising rate of hospitalisation could mean a worsening of health status, an improvement in access, or both.

Furthermore, hospital admission policies vary from hospital to hospital and State to State, as does the availability of outpatient care services. A person with a particular condition may be admitted to hospital in one area but treated as an outpatient or at a doctor's surgery in another area.

Assessments of Indigenous health based on hospital statistics are further complicated by the lack of complete identification of Indigenous people in hospital records, which results in an underestimate of hospitalisation of Indigenous people, the extent of which is likely to vary from hospital to hospital, State to State and perhaps from disease to disease, as well as over time. As with hospitalisation in general, changes in the apparent rate of hospitalisation among Indigenous people may indicate changes in need, access, and/or demand, but they may also indicate changes in the quality of identification of Indigenous people in hospital records.

The quality of Indigenous identification in hospital separation data has not yet been formally assessed nationally, but studies in selected hospitals suggest that there is a wide range in the completeness of recording (see chapter 11). In the Northern Territory, the only jurisdiction to have assessed the completeness of recording of Indigenous people in all its public hospitals, 93% of Indigenous patients (94% of all patients) had their Indigenous status correctly recorded (Condon et al. 1998). In a recent study of 11 hospitals in five jurisdictions, the proportion of Indigenous patients correctly identified in hospital records ranged from 55–100%, with better agreement in hospitals in which the catchment area's population had a high proportion of Indigenous people (Aboriginal and Torres Strait Islander Health and Welfare Information Unit 1999). As most hospitals are not located in areas where a high proportion of the population is Indigenous, it is unlikely that other jurisdictions will match the level of completeness found in the Northern Territory.

Although it is certain that there is under-identification of Indigenous people in hospital records in all jurisdictions (and the observed rates of hospital separations therefore represent an underestimate of the true rate among Indigenous people), the extent of the under-identification is unknown for jurisdictions other than the Northern Territory. In some jurisdictions (Victoria, Tasmania, and the Australian Capital Territory), the proportion of separations identified as Indigenous in 1996–97 is lower than the proportion of the population which was Indigenous in 1996. If it is assumed that Indigenous people experience a level of hospital use that is at least equal to their share of the population, then this suggests that many Indigenous people were not being identified as such in hospital records. For example, in Tasmania, it is estimated that about 3% of the State's population was Indigenous in 1996, but less than 1% of the hospital separations in 1996–97 were identified as Indigenous (table 7.18). Although there is undoubtedly under-identification of Indigenous people in Western Australia, the Northern Territory, South Australia, Queensland and New South Wales, in these jurisdictions the proportion of separations identified as Indigenous was greater than the proportion of people in that State or Territory who were Indigenous. For example, in Western Australia, about 3% of the population was Indigenous, but about 6% of the hospital separations were identified as Indigenous. This may suggest a higher level of completeness with respect to recording of Indigenous status in such jurisdictions, but it may also be an indicator of differences in the use of hospital services by Indigenous people in different jurisdictions. The extent to which these and other factors contribute to the observed differences among jurisdictions is unknown.

7.18 HOSPITAL SEPARATIONS(a) IDENTIFIED AS INDIGENOUS—1996–97

State and Territory	Separations identified as Indigenous		Other separations(b)			Proportion of separations identified as Indigenous	Proportion of the population identified as Indigenous
	no.	rate per 1 000(c)	no.	rate per 1 000(c)	rate ratio(d)	%	%
			MALES				
New South Wales	15 783	489.5	798 098	260.1	1.9	1.9	1.8
Victoria	2 724	312.1	607 175	269.3	1.2	0.4	0.5
Queensland	15 873	452.2	447 805	279.0	1.6	3.4	3.1
South Australia	4 622	644.0	209 496	281.1	2.3	2.2	1.5
Western Australia	12 802	637.7	203 932	246.9	2.6	5.9	3.1
Tasmania	152	32.5	60 515	262.7	0.1	0.3	3.3
Northern Territory(e)	10 416	587.8	11 065	195.2	3.0	48.5	27.0
Australian Capital Territory	284	412.7	25 815	194.9	2.1	1.1	1.0
Australia(f)	**62 838**	**488.6**	**2 373 512**	**266.0**	**1.8**	**2.6**	**2.1**
			FEMALES				
New South Wales	18 927	493.6	947 413	290.7	1.7	2.0	1.8
Victoria	3 084	331.6	738 727	303.1	1.1	0.4	0.5
Queensland	20 384	524.4	510 300	305.8	1.7	3.8	3.2
South Australia	6 553	825.8	247 372	314.2	2.6	2.6	1.5
Western Australia	17 014	773.1	239 899	275.9	2.8	6.6	3.2
Tasmania	181	32.3	72 285	300.6	0.1	0.2	3.2
Northern Territory(e)	15 158	797.4	11 933	228.7	3.5	56.0	30.2
Australian Capital Territory	223	444.5	32 633	220.6	2.0	0.7	1.0
Australia(f)	**81 626**	**572.8**	**2 808 076**	**296.5**	**1.9**	**2.8**	**2.1**

(a) Based on place of usual residence. Excludes separations for which age was not stated.

(b) Includes separations identified as non-Indigenous and those for whom Indigenous status was recorded as unknown.

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

(d) Rate ratio is equal to rate of separations identified as Indigenous divided by the rate of other separations.

(e) Public hospitals only.

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

Source: Hospital Separations Database, AIHW.

The most recent hospital separation data available at the national level at the time of this report are from the financial year 1996–97. Data from all jurisdictions have been combined to present a national picture. Comparisons are made with all-Australian figures, which are not affected by the quality of identification of Indigenous people. Despite problems in data quality such as those described above, the results are still useful. The figures should be interpreted with caution and the focus should be on general patterns rather than on specific numbers. The age-standardised hospital separation ratios give an indication of the types of illnesses and conditions for which Indigenous people are more likely than all Australians to be hospitalised, but they do not provide a very precise measure of the differences between the two populations. The figures presented in this section are conservative; that is, they underestimate the true differences between the Indigenous and non-Indigenous populations.

The figures reported in this section are based on data from all States and Territories from both public and private hospitals (except in the Northern Territory, for which only public hospital data were available). The results presented here are not directly comparable with those for earlier years.

In the previous edition of this publication (ABS & AIHW 1997a), only a few jurisdictions (those judged at the time to have the best quality identification of Indigenous people) were included and only public hospital data were available. Further work (discussed above and in chapter 11) has indicated that the quality of identification in hospitals may have been over-estimated. In the absence of any jurisdiction-wide assessments of data quality (with the exception of the Northern Territory), it is not possible to determine which jurisdictions should be excluded from analysis on the basis of poor data quality, so data for all of Australia have been included in this section. If the level of under-recording of Indigenous people were known, then a correction factor could be applied to increase the number of Indigenous separations and thus provide a more accurate estimation. Based on studies to date, this correction factor would range from about 5% in the Northern Territory to 50–100% or more in some hospitals and jurisdictions.

Reasons for hospitalisation

Among males identified as Indigenous, the most common reasons for hospitalisation were injury, respiratory disease, digestive disease and 'other reasons for contact with health services' (82% of which were visits for dialysis), which together accounted for almost 60% of all hospital separations for this group in 1996–97 (table 7.19). These same four categories were important among females identified as Indigenous, but hospital separations related to pregnancy and childbirth were also common. Together, injuries, respiratory diseases, digestive diseases, pregnancy and childbirth and 'other reasons for contact' (of which 83% were for dialysis) accounted for about 66% of hospital separations among females identified as Indigenous.

The age-standardised hospital separation ratios in table 7.19 compare the number of hospital separations recorded as Indigenous (that is, 'observed' separations) with the number which would have been expected if the all-Australian age-, sex- and cause-specific hospital separation rates had applied to the Indigenous population (that is, the 'expected' separations; see inset 9.1). As can be seen in table 7.19, many of the figures are between 1.5 and 3. That is, for many categories of diseases or conditions, actual separations (those identified as Indigenous) were 1.5–3 times higher than the number of hospital separations expected, based on all-Australian rates. For all causes combined, there were almost twice as many separations as expected for both males and females identified as Indigenous. Despite the data quality concerns discussed above (and the resulting underestimation of Indigenous separations), it is clear that Indigenous people suffer a greater burden of illnesses and conditions which result in hospitalisation than do Australians overall.

7.19 HOSPITAL SEPARATIONS IDENTIFIED AS INDIGENOUS, BY CAUSE(a)—1996–97

	Separations identified as Indigenous		*Age-standardised hospital separation ratio(b)*		*Proportion of total separations*	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*
	no.	*no.*	*ratio*	*ratio*	*%*	*%*
Infectious and parasitic diseases	2 286	2 253	2.0	2.2	3.6	2.8
Neoplasms	1 040	1 396	0.7	0.7	1.7	1.7
Endocrine, nutritional and metabolic diseases and immunity disorders	1 259	1 531	2.8	2.8	2.0	1.9
Diseases of the blood and blood-forming organs	269	455	0.6	1.1	0.4	0.6
Mental disorders	4 045	2 867	2.5	1.6	6.4	3.5
Diseases of the nervous system	3 197	2 695	1.4	1.3	5.1	3.3
Diseases of the circulatory system	3 143	2 742	1.7	2.0	5.0	3.4
Diseases of the respiratory system	7 665	7 073	2.0	2.3	12.2	8.7
Diseases of the digestive system	5 052	4 943	1.1	1.0	8.0	6.1
Diseases of the genitourinary system	1 558	4 548	1.1	1.2	2.5	5.6
Complications of pregnancy, childbirth and the puerperium	. .	13 937	. .	1.4	. .	17.1
Diseases of the skin and subcutaneous tissue	2 382	2 303	2.8	3.2	3.8	2.8
Diseases of the musculoskeletal system and connective tissue	1 721	1 649	0.8	0.9	2.7	2.0
Congential anomalies	338	300	0.5	0.6	0.5	0.4
Certain conditions originating in the perinatal period	980	850	0.8	0.9	1.6	1.0
Symptoms, signs and ill-defined conditions	3 459	3 879	1.5	1.5	5.5	4.8
Injury and poisoning	7 888	6 211	1.7	2.2	12.6	7.6
Other reasons for contact						
Dialysis	13 545	18 172	6.1	10.2	21.6	22.3
Other	2 876	3 755	0.8	0.9	4.6	4.6
Total	*16 421*	*21 927*	*2.9*	*3.7*	*26.1*	*26.9*
All causes (excluding dialysis)	**49 293**	**63 454**	**1.4**	**1.4**	**78.4**	**77.7**
All causes (including dialysis)	**62 838**	**81 626**	**1.7**	**1.7**	**100.0**	**100.0**

(a) Includes data from public and private hospitals except in the Northern Territory (public hospitals only). Categories are based on the International Classification of Diseases, 9th Revision (ICD-9) (WHO 1977).

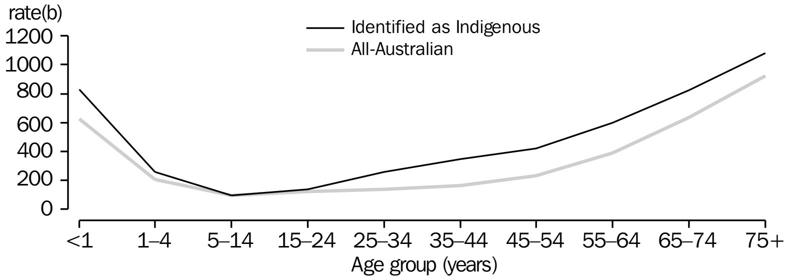
(b) Age-standardised hospital separation ratio is equal to hospital separations identified as Indigenous divided by expected separations, based on all-Australian rates.

Source: Hospital Separations Database, AIHW.

Age-specific hospital separation rates

Hospital separation rates for Indigenous males and females exceeded those for their non-Indigenous counterparts at all ages (graphs 7.20 and 7.21). For both males and females, the differences were smallest among children aged one to 14 years.

7.20 HOSPITAL SEPARATIONS, ALL CAUSES EXCLUDING DIALYSIS: MALES(a)—1996–97

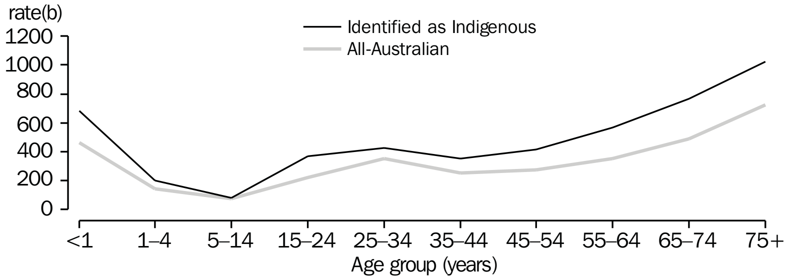


(a) Data from public and private hospitals except in the Northern Territory (public hospitals only) for 1996–97.

(b) Per 1,000 population.

Source: Hospital Separations Database, AIHW.

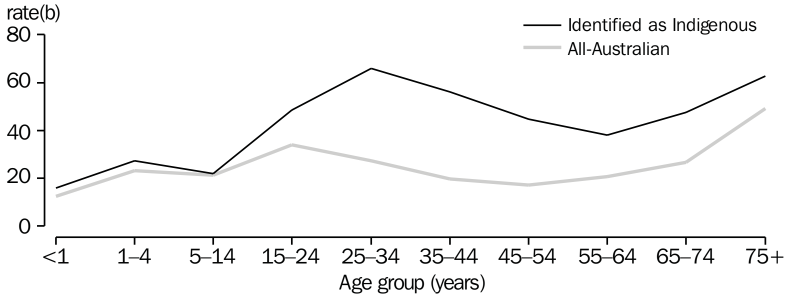
7.21 HOSPITAL SEPARATIONS, ALL CAUSES EXCLUDING DIALYSIS: FEMALES(a)—1996–97



(a) Data from public and private hospitals except in the Northern Territory (public hospitals only) for 1996–97.
(b) Per 1,000 population.
Source: Hospital Separations Database, AIHW.

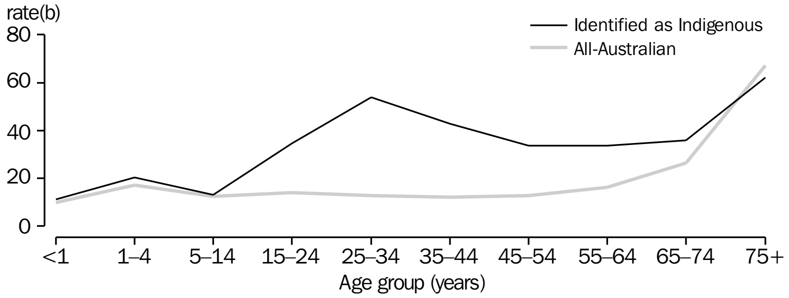
Injury In 1996–97, over 14,000 hospital separations with a primary diagnosis of injury were recorded as Indigenous (table 7.19). Injury accounted for almost 13% of separations among males identified as Indigenous and almost 8% of separations among females identified as Indigenous. Overall, there were about twice as many separations as expected among males and females identified as Indigenous, given all-Australian rates (table 7.19). However, there were marked differences by age group (graphs 7.22 and 7.23) and by cause of injury (table 7.24).

7.22 HOSPITAL SEPARATIONS, INJURY: MALES(a)—1996–97



(a) Data from public and private hospitals except in the Northern Territory (public hospitals only) for 1996–97.
(b) Per 1,000 population.
Source: Hospital Separations Database AIHW.

7.23 HOSPITAL SEPARATIONS, INJURY: FEMALES(a)—1996–97



(a) Data from public and private hospitals except in the Northern Territory (public hospitals only) for 1996–97.
(b) Per 1,000 population.
Source: Hospital Separations Database, AIHW.

7.24 HOSPITAL SEPARATIONS(a), BY CAUSE OF INJURY—1996–97

	Separations identified as Indigenous		*Age-standardised hospital separation ratio(b)*		*Proportion of all injury separations*	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*
External cause (ICD–9 Ecodes)	*no.*	*no.*	*ratio*	*ratio*	*%*	*%*
Transport accidents (E800–E849)	907	401	1.2	1.1	11.5	6.5
Accidental poisoning (E850–869)	243	305	1.3	1.6	3.1	4.9
Misadventure during or due to medical care (E870–E879)	566	644	1.3	1.6	7.2	10.4
Accidental falls (E880–E888)	1 362	976	1.2	1.3	17.3	15.7
Accidents caused by fire or flames (E890–899)	141	65	3.6	5.7	1.8	1.0
Other accidents(c), late effects of accidental injury (E900–E929)	2 124	1 131	1.4	1.8	26.9	18.2
Adverse effects of therapeutic drugs, biologicals (E930–E949)	45	40	2.1	1.5	0.6	0.6
Self-inflicted injury, suicide (E950–E959)	319	434	2.1	1.8	4.0	7.0
Injury purposely inflicted by others, homicide (E960–E969)	1 980	2 119	6.5	(d)20.1	25.1	34.1
Other injuries (E970–E999)	63	61	6.6	8.2	0.8	1.0
Total injury	**7 888**	**6 211**	**1.7**	**2.2**	**100.0**	**100.0**

(a) Data from public and private hospitals except in the Northern Territory (public hospitals only).

(b) Age-standardised hospital separation ratio is equal to hospital separations identified as Indigenous divided by expected separations, based on all-Australian rates.

(c) Includes accidental injuries due to natural and environmental factors (such as plants, animals, heat, cold, pressure, storms and lightning); submersion, suffocation and foreign bodies; and other accidents (such as those due to cutting or piercing instruments or objects, machinery, electricity, radiation and overexertion).

(d) This figure should be interpreted with caution, as injuries purposely inflicted by others may be seriously under-reported, especially among non-Indigenous women.

Source: Hospital Separations Database, AIHW.

Injury purposely inflicted by others (that is, intentional injury) was the most commonly recorded type of injury among people identified as Indigenous, accounting for more hospital separations than transport accidents and accidental falls combined. There were almost seven times more hospital separations for intentional injury than expected (based on all-Australian rates) among males recorded as Indigenous, and about 20 times more separations than expected among females recorded as Indigenous. Almost half (46%) of all separations among females for intentional injury in Australia in 1996–97 were of women identified as Indigenous.

It should be noted that some injuries of this type (especially those related to domestic violence) may be seriously under-reported. It is also possible that there are differences in the place in which treatment for certain injuries is received (for example, a hospital versus a doctor's surgery). In cases where hospitalisation can not be avoided, the injury may be recorded as another type of injury, such as an accidental fall or an unintentional injury. If this occurred more frequently among people recorded as non-Indigenous than among those recorded as Indigenous (especially females), it could explain some of the apparent excess in the category of intentional injury. It should be noted, however, that there were more than the expected number of hospital separations for every category of injury among males and females identified as Indigenous.

Injury *continued*

Intentional injury accounted for about 4% of all non-dialysis hospital separations among males identified as Indigenous and 3% of non-dialysis separations among females identified as Indigenous. There were more separations for intentional injury than for diabetes or cancer, and almost as many as for infectious and parasitic diseases. Although the exact figures should be treated with caution for the reasons discussed above, it is clear that violence is an important cause of ill health among Indigenous people. As was discussed earlier in this chapter, violence has implications not only for physical health, but for mental and emotional wellbeing as well.

PROCEDURES PERFORMED IN HOSPITAL

A procedure is defined in the National Health Data Dictionary (National Health Data Committee 1997, p. 4–95) as an intervention that: 'is surgical in nature; carries a procedural risk; carries an anaesthetic risk; requires special training; or requires special facilities or equipment only available in an acute care setting'. Not every episode of hospitalisation includes a procedure, but many episodes include more than one procedure. The information in this section is based on the principal procedure, as recorded in the hospital separation dataset.

Operations on the cardiovascular system were the most commonly performed principal procedure (table 7.25) for people recorded as Indigenous. Haemodialysis accounted for over 95% of operations on the cardiovascular system and almost 40% of procedures overall (more information on kidney disease and dialysis is presented in chapter 8). Other categories accounting for a large proportion of procedures among males and/or females identified as Indigenous included 'miscellaneous diagnostic and therapeutic procedures' (which includes a wide range of procedures such as X-rays, alcohol/drug rehabilitation, physical therapy and blood transfusions), operations on the digestive system, obstetrical procedures and operations on the female genital organs.

Overall, males and females identified as Indigenous were more likely than their all-Australian counterparts to have a principal procedure recorded, but this was due entirely to dialysis. Once dialysis was excluded, males and females identified as Indigenous were no more likely than other hospital patients to have a principal procedure recorded. It should be noted that differences in the patterns of procedures by age may not have been completely accounted for by age standardisation. More work is needed to explore any such patterns by age, as well as patterns by primary diagnosis.

7.25 HOSPITAL PROCEDURES FOR PEOPLE IDENTIFIED AS INDIGENOUS(a)—1996–97

	Procedures for people identified as Indigenous		*Age-standardised hospital procedure ratio(b)*		*Proportion of total procedures*	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*
	no.	*no.*	*ratio*	*ratio*	*%*	*%*
Operations on the nervous system	543	543	1.0	0.8	1.6	1.1
Operations on the endocrine system	13	45	0.5	0.5	0.0	0.1
Operations on the eye	633	728	1.0	1.1	1.8	1.5
Operations on the ear	513	542	0.5	0.7	1.5	1.1
Operations on the nose, mouth, pharynx	1 026	1 043	0.5	0.4	2.9	2.2
Operations on the respiratory system	339	211	1.4	1.3	1.0	0.4
Operations on the cardiovascular system						
Haemodialysis	13 696	18 315	6.1	10.3	39.3	38.5
Other	767	769	1.0	1.3	2.2	1.6
Total	*14 463*	*19 084*	*4.8*	*8.0*	*41.5*	*40.1*
Operations on the haemic and lymphatic system	101	95	0.8	0.7	0.3	0.2
Operations on the digestive system	3 573	4 423	1.0	1.1	10.3	9.3
Operations on the urinary system	510	394	0.8	0.8	1.5	0.8
Operations on the male genital organs	829	. .	0.6	. .	2.4	. .
Operations on the female genital organs	. .	4 329	. .	0.8	. .	9.1
Obstetrical procedures	. .	5 285	. .	1.0	. .	11.1
Operations on the musculoskeletal system	2 904	1 850	0.8	0.8	8.3	3.9
Operations on the integumentary system	2 410	2 244	1.6	1.3	6.9	4.7
Miscellaneous diagnostic and therapeutic procedures	6 984	6 741	1.2	1.2	20.0	14.2
Total (excluding dialysis)	**21 145**	**29 242**	**1.0**	**1.0**	**60.7**	**61.5**
Total (including dialysis)	**34 841**	**47 557**	**1.4**	**1.5**	**100.0**	**100.0**

(a) Includes data from public and private hospitals except in the Northern Territory (public hospitals only). Categories are based on the International Classification of Diseases, 9th Revision (ICD-9) (WHO 1977).

(b) Age-standardised hospital procedure ratio is equal to procedures on people identified as being Indigenous divided by expected procedures, based on all-Australian rates.

Source: Hospital Separations Database, AIHW.

SELF-ASSESSED HEALTH STATUS

The data presented in this chapter provide evidence of the high burden of ill health among Indigenous people, one which starts at an earlier age than among their non-Indigenous counterparts and which helps to explain the reduced life expectancy of Indigenous people, as discussed in chapter 9.

A recognition of this higher burden of illness is reflected in the responses given by Indigenous people in the NHS, when asked to rate their own health. After adjusting for age, Indigenous males and females in non-remote areas were about twice as likely as their non-Indigenous counterparts to report their health as ‘poor’ or ‘fair’ (ABS 1999a). A third (33%) of Indigenous males and females aged 45–54 years and 49% of those aged 55 years or more described their health as poor or fair, compared with about 16% of non-Indigenous people aged 45–54 and 32% of those aged 55 or more (ABS 1999a).

The factors associated with reporting of poor or fair health among Indigenous people have been examined using data from the 1994 National Aboriginal and Torres Strait Islander Survey. Among the factors most strongly associated with self-assessed health status were reported health conditions and recent health actions, age, main language spoken and labour force status (Cunningham, Sibthorpe & Anderson 1997).

SUMMARY

Despite limitations in the data, which are likely to result in underestimation of the rates of illness and hospitalisation, there is clear evidence that Indigenous people suffer from a much greater burden of ill health than other Australians. There also appears to be a large burden of co-morbidity, with many Indigenous people having multiple health problems (as well as being exposed to a number of risk factors, as discussed in chapter 4), although this is difficult to quantify. The high rates of illness are reflected in higher death rates, as can be seen in chapter 9. Technical issues, such as the uncertain and probably changing quality of identification of Indigenous people in administrative data collections and changes in Indigenous population estimates as a result of the 1996 Census (see chapters 1 and 11), make it difficult to assess trends in the health status of Indigenous people at the present time.

CHAPTER 8

KIDNEY DISEASE

INTRODUCTION

Each edition of this publication includes a special feature chapter in order to highlight a topic of particular relevance to the health and/or welfare of Indigenous people. In the first edition (ABS & AIHW 1997a), the topic of the feature chapter was smoking, which is much more common among Indigenous people than other Australians. Smoking is associated with a number of well-documented health risks, yet awareness of such risks appeared to be low among Indigenous people.

Kidney disease, the topic of this special feature chapter, is also more common among Indigenous people than non-Indigenous people. Although it is much less common than smoking (and smoking-related diseases) and affects relatively few people in Australia, it is important to Indigenous health for a number of reasons. First, kidney disease has a marked impact on the quality of life of those who have it as well as those who care for them. Second, it is expensive to treat. Third, the rates of kidney disease are already known to be high in some Indigenous communities and appear to be increasing at a rapid rate in others (see, for example, Catford et al. 1997; Hoy 1996; Spencer et al. 1998).

Perhaps most important, however, is the relationship between kidney disease and other aspects of the health of Indigenous people. Important diseases and conditions such as diabetes, high blood pressure, infections, low birthweight and obesity are risk factors for kidney disease (Catford et al. 1997), and all are more common among Indigenous people than non-Indigenous people (see chapters 4, 6 and 7). Diabetes and high blood pressure can in turn be made worse by kidney disease (Daugirdas & Ing (eds) 1994; Vander, Sherman & Luciano 1990). Kidney disease should therefore not be seen in isolation. Efforts to reduce the burden of kidney disease would necessarily have to address such risk factors as those mentioned. If successful, such actions would thereby serve not only to reduce the burden of kidney disease but also to improve the overall health of Indigenous Australians.

Data presented in this chapter are from the Australia and New Zealand Dialysis and Transplant Registry, from hospital separations data (for the financial year 1996–97) and from death registrations (for Western Australia, South Australia and the Northern Territory for calendar years 1995–97).

More information about the kidneys is presented in inset 8.1. More information about the Australia and New Zealand Dialysis and Transplant Registry is presented in inset 8.3.

8.1 THE KIDNEYS

The kidneys are essential for life. Their major function is 'to regulate the water content, mineral composition and acidity of the body' (Vander, Sherman & Luciano 1990, p. 472). They are also involved in the excretion of metabolic waste products and of various chemicals. The kidneys also produce hormones which are involved in the production of blood cells, in the absorption of calcium from food, and in the control of blood pressure.

The kidneys can be affected by a variety of factors, including infection, toxic substances, high blood pressure, diabetes, kidney stones, etc. Problems can be sudden (and possibly reversible) or they can build up gradually.

The body can compensate for damage to the kidneys up to a certain point, as there is plenty of spare capacity. When the damage is extensive enough, however, the kidneys begin to fail. The symptoms of kidney failure include reduced urine output, back pain, puffiness, and blood or pus in the urine. High blood pressure and anaemia can also result. When about 95% of kidney function has been lost, the condition known as End-Stage Renal Disease (ESRD) results (Catford et al. 1997).

It appears that the progression to ESRD can be delayed through early identification of kidney disease; proper nutrition; control of blood pressure, diabetes and infections; and through treatment with drugs such as ACE (angiotensin-converting enzyme) inhibitors (Catford et al. 1997). Information about treatment options for ESRD is presented in inset 8.6.

Source: Catford et al. 1997; Thomas (ed.) 1989; Vander, Sherman and Luciano 1990.

THE INCIDENCE AND PREVALENCE OF KIDNEY FAILURE

In 1996, there were 1,405 new dialysis patients registered in Australia, of whom 100 (7%) were identified as Aboriginal or Torres Strait Islander (table 8.2) (Disney et al. (eds) 1997). The Northern Territory accounted for the largest number of new Indigenous dialysis patients in 1996 (40), followed by Queensland (27) and Western Australia (18). Over the last several years, these three jurisdictions have accounted for 75–85% of all newly registered dialysis patients identified as Indigenous.

8.2 NEW DIALYSIS PATIENTS IDENTIFIED AS INDIGENOUS(a)

	NSW(b)	*Vic.*	*Qld*	*SA*	*WA*	*NT*	***Aust.(c)***
1992							
Total (no.)	420	255	179	84	97	23	**1 086**
Indigenous (no.)	12	1	15	3	12	21	**64**
Indigenous (%)	2.9	0.4	8.4	3.6	12.4	91.3	**5.9**
1993							
Total (no.)	431	273	203	75	113	35	**1 159**
Indigenous (no.)	10	3	28	3	18	29	**91**
Indigenous (%)	2.3	1.1	13.8	4.0	15.9	82.9	**7.9**
1994							
Total (no.)	466	322	229	101	130	41	**1 314**
Indigenous (no.)	11	1	25	7	28	39	**111**
Indigenous (%)	2.4	0.3	10.9	6.9	21.5	95.1	**8.4**
1995							
Total (no.)	500	329	239	94	141	39	**1 383**
Indigenous (no.)	13	2	36	8	30	37	**126**
Indigenous (%)	2.6	0.6	15.1	8.5	21.3	94.9	**9.1**
1996							
Total (no.)	535	344	227	105	117	47	**1 405**
Indigenous (no.)	8	4	27	3	18	40	**100**
Indigenous (%)	1.5	1.2	11.9	2.9	15.4	85.1	**7.1**

(a) Includes Aboriginal and Torres Strait Islander patients.
(b) Includes Australian Capital Territory.
(c) Includes Tasmania.

Source: Disney et al. (eds) 1997.

8.3 THE AUSTRALIA AND NEW ZEALAND DIALYSIS AND TRANSPLANT REGISTRY (ANZDATA)

The current ANZDATA Registry began in 1977 and is coordinated by the Queen Elizabeth Hospital in Adelaide. Previously there were separate registries for dialysis and transplants. Virtually all relevant hospitals and related satellite units in Australia and New Zealand participate. Funding is provided by the Australian Health Ministers' Advisory Council, the Australian Kidney Foundation, the New Zealand Ministry of Health and other organisations. More information, including the latest annual report and other data, is available at the ANZDATA web site (http://www.anzdata.org.au).

Patients in the registry are identified according to 'racial origin'. Aboriginal people and Torres Strait Islanders are identified separately, but separate results are not always published for Torres Strait Islanders due to small numbers of patients. The completeness of identification of Indigenous people in the registry is not known, but the nature of the illness means that treatment centres would have prolonged contact with patients and therefore have a considerable opportunity to collect accurate information.

The registry allows the use of data from its publications and web site providing they are correctly referenced and the following disclaimer is used: The data reported here have been supplied by the Australia and New Zealand Dialysis and Transplant Registry. The interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official policy or interpretation of the Australia and New Zealand Dialysis and Transplant Registry.

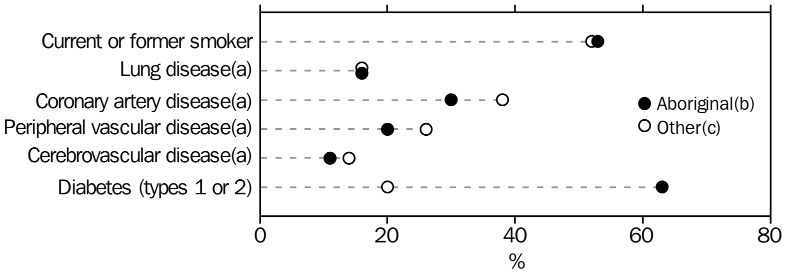
Source: Disney et al. (eds) 1997.

Co-morbidities

A number of health conditions (co-morbidities) are reported to the registry for all new patients beginning treatment (graph 8.4). Most of these conditions were reported for similar proportions of Aboriginal and other patients, except for diabetes, which was about three times more likely to be reported for Aboriginal patients than for other patients (Disney et al. (eds) 1997).

The presence of co-morbidities may predict worse treatment outcomes. For example, diabetes can be made worse by dialysis (Daugirdas & Ing (eds) 1994), and this may result in ineligibility for transplant.

8.4 CONDITIONS PRESENT IN NEWLY REGISTERED PATIENTS—1 JAN 1993 TO 31 DEC 1996

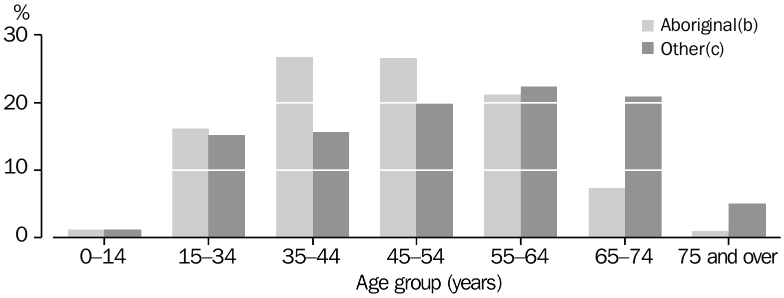


(a) Suspected or reported.
(b) Includes 403 patients. Data not available for Torres Strait Islanders.
(c) Includes 4,345 patients. Excludes patients identified as Asian or Pacific Islander.
Source: Disney et al. (eds) 1997.

Age

Kidney failure patients identified as Aboriginal (both new and continuing patients) tend to be younger than other patients (graph 8.5). About 70% of Aboriginal patients were less than 55 years of age in 1997, while this was true for only about half (52%) of other patients (Disney et al. (eds) 1997).

8.5 AGE DISTRIBUTIONS OF KIDNEY FAILURE PATIENTS(a)—31 MARCH 1997



(a) Includes all types of dialysis, plus functioning transplants.
(b) Data not available for Torres Strait Islanders.
(c) Excludes patients identified as Asian or Pacific Islander.
Source: Disney et al. (eds) 1997.

TREATMENT FOR END-STAGE RENAL DISEASE (ESRD)

A limited number of treatment options is available for ESRD (inset 8.6).

8.6 TREATMENT OPTIONS FOR END-STAGE RENAL DISEASE (ESRD)

In ESRD, the kidneys can no longer excrete water, ions and waste products at a rate sufficient to sustain a proper balance in the body. When this occurs, the work of the kidneys must be done artificially using dialysis (either haemodialysis or peritoneal dialysis), until either a kidney from a donor is found and successfully transplanted, or until the person dies. Haemodialysis, peritoneal dialysis and transplantation are described below.

In haemodialysis, the person's blood is passed through a semi-permeable tube that is surrounded by fluid. Excess substances (such as waste products) flow from inside the tube to outside the tube (into the fluid), while the blood stays inside the tube and is pumped back into the person's body. Haemodialysis is performed a few times a week for several hours at a time, either at a centre (hospital, clinic, etc.) or in the person's home. If haemodialysis is performed at a hospital or clinic, the patient must live near enough to the facility to be able to get there 2–3 times a week. This often requires the patient to move to a larger city, away from his or her community, and sometimes away from family as well. Centre-based haemodialysis is quite expensive, costing an estimated $50,000 per patient per year (not including transport costs) (Catford et al. 1997).

In peritoneal dialysis, the abdominal cavity, with the dialysis fluid sitting inside it, is used in place of the tube. In continuous ambulatory peritoneal dialysis, the most common form, dialysis solution is always present in the abdomen. A semi-permanent catheter is inserted into the person's abdomen and the solution is put into the abdominal cavity through this catheter. The solution is exchanged (drained then refilled) 4–5 times daily using gravity to move the fluid in and out. The patient can do other things while this is happening, which makes it more attractive to many people than haemodialysis. However, peritoneal dialysis carries a relatively high risk of infection (peritonitis), and vigorous personal hygiene is required to reduce the incidence of such infections (Daugirdas & Ing (eds)1994). Peritoneal dialysis is considerably less expensive than haemodialysis, but it is still not cheap, at an estimated $30,000 per patient per year (Catford et al. 1997).

Transplantation can take place using a kidney from a living person (since only one functioning kidney is required to sustain life), or from someone who has recently died. Although a living relative often provides the best match (thus reducing the chance of rejection of the new kidney), the high rates of kidney disease in some communities make it more likely that a potential donor would eventually need the kidney him or herself, thus raising serious ethical issues. Kidneys from those who have recently died are in short supply, and there is a long waiting list. Once people get too sick, however, they are no longer considered eligible for a transplant. For those who are able to get a new kidney, transplantation is followed by immuno-suppression treatment to reduce the chances of rejection. This increases the person's risk of other diseases, such as cancer.

Sources: Bennett et al. 1995; Catford et al. 1997; Daugirdas and Ing (eds) 1994; Hoy 1996; NHMRC Australian Health Technology Advisory Committee 1992; Thomas (ed) 1989; Vander, Sherman and Luciano 1990; Willis 1995.

Overall, kidney failure patients identified as Aboriginal were less likely than all Australian patients to have a functioning transplant (table 8.7). As at 31 December 1996, 85 Indigenous Australians (80 Aboriginal people and 5 Torres Strait Islanders) had functioning transplants. The proportion of patients living with a functioning transplant decreased for both Aboriginal patients and all Australian patients between 1992 and 1996, because the number of transplants remained stable each year while the number of new kidney failure patients increased (Disney et al. (eds) 1997).

8.7 TREATMENTS OF PATIENTS IN AUSTRALIA(a)—31 DECEMBER

	1992	*1993*	*1994*	*1995*	*1996*
Aboriginal patients(b) (%)					
Dialysis	69	76	78	81	81
Functioning transplant	31	24	22	19	19
Total	*100*	*100*	*100*	*100*	*100*
Number	242	282	339	406	425
Total patients (%)					
Dialysis	48	49	50	52	59
Functioning transplant	52	51	50	48	41
Total	*100*	*100*	*100*	*100*	*100*
Number	7 074	7 555	8 140	8 733	8 180

(a) Excludes patients lost to followup.
(b) Data not available for Torres Strait Islanders.

Source: Disney et al. (eds.) 1997.

Treatment of ESRD differed by jurisdiction (table 8.8). In the Northern Territory and South Australia, centre-based haemodialysis was the most commonly used treatment (76% and 78% of Aboriginal patients, respectively), while in Western Australia, continuous ambulatory peritoneal dialysis was the most common (46%) (Catford et al. 1997).

8.8 TREATMENT OF ABORIGINAL END-STAGE RENAL DISEASE PATIENTS—1996(a)

	Centre-based haemodialysis	*Home-based haemodialysis*	*Continuous ambulatory peritoneal dialysis*	*Transplant*
State and Territory	*%*	*%*	*%*	*%*
Aboriginal patients(b)				
New South Wales	43	12	15	30
Queensland	48	0	31	21
South Australia	78	0	2	20
Western Australia	29	8	46	17
Northern Territory	76	0	11	13
All patients				
Australia	29	7	16	48

(a) Average of patients at 31 December 1995 and 31 December 1996. Data not available for Torres Strait Islanders.
(b) States and Territories with sufficient numbers of patients.

Source: Catford et al. 1997; Disney et al. (eds) 1997.

HOSPITAL VISITS FOR KIDNEY DISEASE

Kidney disease is represented in hospital statistics in two different ways. Hospital visits for routine haemodialysis are recorded separately from other kidney disease-related visits. Not all haemodialysis is recorded in hospital records, however, as visits to some free-standing haemodialysis centres may not be included in hospital statistics, and some haemodialysis is performed in patients' homes. It should be noted that the figures provided in this section underestimate the actual number of separations and procedures for Indigenous people because not all Indigenous people are identified as such in hospital records (see chapter 11 for more details).

Nephritis, nephrotic syndrome and nephrosis

In 1996–97, there were over 15,000 hospital separations for 'nephritis, nephrotic syndrome, and nephrosis' (International Classification of Diseases, ninth revision, (ICD-9) codes 580–589), the category which primarily covers various causes of kidney failure. This category does not include routine visits for haemodialysis, which are discussed below. About 5% of the separations for this category of disease among males and 7% of the separations among females were identified as Indigenous. After adjusting for age, there were nearly five times more hospitalisations than expected from these causes among Indigenous males and about six times more than expected among Indigenous females (table 8.9).

8.9 HOSPITAL SEPARATIONS FOR NEPHRITIS, NEPHROTIC SYNDROME AND NEPHROSIS(a)—1996–97

	Indigenous males	*Indigenous females*
Number of separations		
Observed	427	505
Expected(b)	91	85
Excess(c)	336	420
Age-standardised separation ratio(d)	4.7	5.9

(a) ICD-9-CM codes 580–589. Includes data from public and private hospitals except in the Northern Territory (public hospitals only).

(b) Based on all-Australian age- and sex-specific rates.

(c) Excess separations is equal to observed minus expected.

(d) Age-standardised separation ratio is equal to hospital separations identified as Indigenous divided by expected separations.

Source: Hospital Separations Database, AIHW.

Haemodialysis

There were almost 32,000 separations for haemodialysis (ICD-9 code V56) identified as being of Indigenous people in 1996–97. This represented 8% of the almost 386,000 separations for routine haemodialysis treatment in Australia. After adjusting for age, there were about six times more separations for haemodialysis than expected among Indigenous males, and 10 times more among Indigenous females.

Haemodialysis accounted for 39% of all hospital procedures performed in 1996–97 on people identified as Indigenous, compared with less than 10% of procedures among non-Indigenous patients. (This includes both routine visits solely for dialysis treatment and dialysis performed while a kidney failure patient was hospitalised for another reason.) After adjusting for age, the number of haemodialysis procedures performed was much higher than expected among Indigenous males (6 times higher) and Indigenous females (10 times higher) (table 8.10).

8.10 HAEMODIALYSIS PROCEDURES PERFORMED(a)—1996–97

	Indigenous males	*Indigenous females*
Number of procedures		
Observed	13 696	18 315
Expected(b)	2 232	1 781
Excess(c)	11 464	16 534
Age-standardised procedure ratio(d)	6.1	10.3

(a) ICD-9-CM procedure code 39.95.

(b) Based on all-Australian age-and sex-specific rates.

(c) Excess procedures is equal to observed minus expected.

(d) Age-standardised procedure ratio is equal to procedures on patients identified as Indigenous divided by expected procedures.

Source: Hospital Separations Database, AIHW.

The number of haemodialysis procedures performed each year has increased markedly in the last few years. Some of this increase is due to changes in the recording of such procedures (e.g. including data from satellite centres in the hospital separations dataset), but much of the increase is due to a rise in the number of patients who require dialysis.

QUALITY OF LIFE

Quality of life, as reported by patients, is generally worse for those on hospital-based haemodialysis and best for those with a functioning transplant (table 8.11) (Disney et al. (eds) 1997). Aboriginal patients on home haemodialysis were the most likely to report that they were 'capable of normal activity with little or no effort', but this group was relatively small.

8.11 SELF-REPORTED QUALITY OF LIFE, BY FORM OF TREATMENT(a)—1997

	Hospital haemodialysis	*Home haemodialysis*	*Satellite haemodialysis*	*Continuous ambulatory peritoneal dialysis*	*Functioning transplant*
Aboriginal(b)					
Number	94	17	151	84	87
Proportion capable of normal activity(c) (%)	38	88	50	62	83
Other(d)					
Number	1 132	549	1 067	1 155	4 082
Proportion capable of normal activity(c) (%)	33	69	52	46	86

(a) Excludes 110 patients undergoing other forms of treatment.
(b) Data not available for Torres Strait Islanders.
(c) With little or no effort.
(d) Excludes patients identified as Asian or Pacific Islander.

Source: Disney et al. (eds) 1997.

Recent attempts to reduce the impact of kidney disease in one Aboriginal community are discussed in inset 8.12.

8.12 TRYING TO REDUCE THE IMPACT OF KIDNEY DISEASE IN AN ABORIGINAL COMMUNITY

In one small island community in the Northern Territory, kidney disease has had a particularly profound impact. In March of 1995, 16 of the 51 haemodialysis patients in Darwin were from this community, with about 3–4 new patients expected each year from that community alone. About 100 people (patients and their families) had moved from the community to Darwin to be near the dialysis unit. This is a considerable proportion of the community's population, which is estimated to be about 2,000 people (Mahony, unpublished).

As a result of a 1996 agreement involving the then Commonwealth Department of Health and Family Services, Territory Health Services and the community's Health Board, a self-care dialysis unit was built in the community. The first six patients and their families moved back to the community and began treatment in February of 1999. More patients are expected to move back from Darwin later in the year. Initial reports are encouraging, but important challenges remain. Finding housing for the returning patients and their families has been difficult given the already existing shortage of accommodation in the community, and there are not yet enough local Health Workers who have undergone the training necessary for them to be able to take over the management of the unit (Gorham, G., Territory Health Services, 1999, personal communication).

The dialysis unit addresses the treatment needs of people who already have end-stage renal failure, thus allowing many patients to live in their home community rather than in Darwin. In order to reduce the future impact of kidney disease in this community, however, preventative programs are also required. In addition to the people who already require dialysis, about half of the adults in this community have proteinuria, a sign of kidney disease (Menzies School of Health Research 1998). ACE-inhibitors have been used to try to slow the progression of kidney disease among those with early signs of the disease, and this appears to have been successful so far (Menzies School of Health Research 1998). In addition, educational, health promotional and other activities have been implemented in the community to try to increase awareness and understanding of the disease and to encourage healthy behaviours in order to prevent kidney disease from occurring in the first place (http://www.menzies.su.edu.au/projects/kidney.html).

DEATHS FROM KIDNEY FAILURE

In 1995–97, 62 deaths from kidney failure (i.e. nephritis, nephrotic syndrome and nephrosis) in Western Australia, South Australia and the Northern Territory were recorded as being of Indigenous people (31 males, 31 females). (Identification of Indigenous people in death records in other jurisdictions is not of sufficient quality to allow for reporting; see chapter 11 for more details.) This figure was about eight times higher than expected (based on all-Australian rates) for Indigenous males and females. Deaths from kidney failure were responsible for 2.0% of deaths among Indigenous males and 2.8% of deaths among Indigenous females.

Deaths from kidney failure occurred at younger ages among Indigenous people than among non-Indigenous people. About 23% of Indigenous males and 29% of Indigenous females who died of kidney failure died before the age of 50 years. This was true for only about 1% of non-Indigenous deaths from kidney failure. Some 48% of deaths from kidney failure among Indigenous males and 68% of such deaths among Indigenous females occurred in people under age 65 years, compared with about 5–6% of deaths from kidney failure among non-Indigenous males and females.

Deaths from kidney failure in 1995–97 resulted in about 560 years of potential life lost before age 65 among Indigenous people in Western Australia, South Australia and the Northern Territory. This figure does not take into account losses in quality of life, such as those resulting from long-term reliance on dialysis.

SUMMARY

Kidney disease is more common among Indigenous people than non-Indigenous people and can have a marked impact on the quality of life of those who have it as well as those who care for them. Indigenous people with kidney disease are much less likely than other kidney failure patients to be living with a successful transplant, which means they are more likely to remain dependent on dialysis until death. Haemodialysis occurs at much higher than expected rates among Indigenous people and accounts for a high proportion of all procedures performed in hospital on Indigenous people. Deaths from kidney failure occur at much earlier ages for Indigenous people than for non-Indigenous people.

Other diseases cause greater levels of morbidity and mortality among the Indigenous population as a whole (see chapters 7 and 9), and kidney disease is important in large part because of its relationship with more common diseases and conditions such as diabetes, high blood pressure, infections, low birthweight and obesity.

CHAPTER 9 MORTALITY

AVAILABILITY OF DATA

Truly national statistics on deaths of Indigenous people are not available because of incomplete recording of Indigenous status in the death records of some jurisdictions. That is, some Indigenous people are not identified as such on their death records, and the proportion of people affected varies from place to place (see chapter 11). This means that the number of deaths observed is an underestimate of the number of deaths which actually occurred among Indigenous people. Although the total number of deaths in Australia (or in a particular State or Territory) is not changed, the categorisation of these deaths as 'Indigenous' or 'non-Indigenous' is affected. Changes in mortality statistics resulting from improved categorisation of deaths can dramatically alter our understanding of the mortality experience of Indigenous people.

As of 1997, Western Australia, South Australia and the Northern Territory were deemed to have adequate identification of Indigenous people to allow for reporting of death statistics (ABS 1998i). (See chapter 11 for more details.) In the following pages, data from these three jurisdictions have been combined to present a quasi-national picture. About 64% of all deaths recorded as Indigenous in calendar years 1995–97 were of people from Western Australia, South Australia or the Northern Territory, but only 34% of Australia's Indigenous people lived in these three jurisdictions in 1996 (table 2.3). Although it is not certain how well the experience of these areas represents what occurred elsewhere, the patterns of death by age and cause for deaths recorded as Indigenous in other jurisdictions were much more similar to Indigenous deaths in Western Australia, South Australia and the Northern Territory than they were to deaths recorded as non-Indigenous in New South Wales, Victoria, Queensland, Tasmania and the Australian Capital Territory.

More information about quantifying the mortality experience of a population is presented in inset 9.1.

9.1 WAYS OF LOOKING AT DEATHS

There are a number of ways to quantify the mortality experience of a population. The simplest way is to count the number of deaths, but this does not take into account the size of the population. The Indigenous population is very small compared with the non-Indigenous population. Dividing the number of deaths by the population gives us a 'crude death rate', which is often expressed as deaths per 1,000 or per 100,000 population. Death is strongly related to age, however, and as discussed in chapter 2, the age structure of the Indigenous population is very different to that of the non-Indigenous population. For most purposes, it is important to take this difference into account.

A death rate which has been adjusted for differences in age distributions is called an 'age-standardised death rate'. This represents the theoretical death rate which would have been observed if the population of interest had the same age structure as a particular reference population (for example, the 1991 mid-year Australian population, which is used in graph 9.7). By using the same reference population, we can compare the age-standardised death rates for different populations, such as Indigenous and non-Indigenous populations. A ratio of the age-standardised death rates in two populations is a 'standardised rate ratio'.

Another way of adjusting for differences in age is to calculate the number of deaths expected in a population, based on its age structure, if it had the same mortality experience (i.e. the same age-, sex- and cause-specific death rates) as a particular reference population. The number of deaths actually recorded, or 'observed', is then divided by the number of deaths expected, resulting in a 'standardised mortality ratio', which is often abbreviated as SMR. If the ratio is greater than one, then there were more deaths than would have been expected; if the ratio is less than one, then there were fewer than the expected number of deaths. For example, an SMR of 3.5 indicates that there were 3.5 times as many deaths as would have been expected, based on the death rates observed in the reference population and the age and sex structure of the population of interest. In the following pages, the age-and sex-specific death rates for the 1995–97 all-Australian population have been used as the reference.

The same rates and ratios can be calculated for hospitalisation by using separations rather than deaths (see chapter 7).

DEATHS 1995–97

In the three-year period 1995–97, some 69,142 deaths were registered in Western Australia, South Australia and the Northern Territory. Of these, 2,649 (3.8%) were recorded as Indigenous, with 1,549 deaths of Indigenous males and 1,100 deaths of Indigenous females.

Some of the deaths registered in 1995–97 actually occurred in previous years. Similarly, some deaths which occurred during this period were not yet registered by the end of 1997. Deaths which occur at the very end of a year are quite likely to be registered in the following year. Delays in registration are also likely for coronial cases. The vast majority of deaths are registered either in the same year they occurred or in the following year. However, the use of registration data can result in apparent increases or decreases in the number of deaths in a particular year. For example, in the Northern Territory there was a noticeable drop in the number of deaths registered in 1996. Many of these 'missing' deaths appeared in the registrations for 1997. In this chapter, data for three years have been combined to smooth out any such artificial variation. The years 1995–97 represent the latest available data. In addition, this period is centred around a census year, which means that Indigenous population estimates would be at their most accurate and therefore the rates are likely to be at their most reliable.

DEATHS 1995–97 *continued*

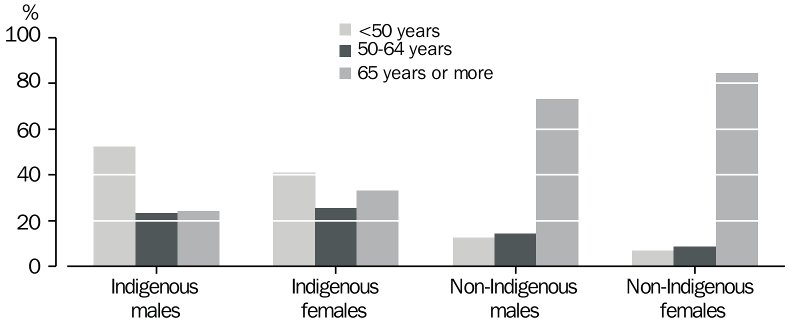
It should be noted that the figures presented here, which are based on year of registration and 1996 Census-based population estimates, are not directly comparable with figures published in the previous edition of this publication (ABS & AIHW 1997a), which were based on year of occurrence and 1991 Census-based population estimates. The 1996 Census-based figures have been used because they provide more accurate estimates of the Indigenous population for the period 1995–97. Deaths by year of registration rather than year of occurrence have been used in order to provide the latest available data. In addition, the comparison group used to calculate standardised mortality ratios in this edition is the Australian population as a whole, whereas that used in the previous edition was the non-Indigenous population of Western Australia, South Australia and the Northern Territory combined.

Age distribution

A higher proportion of Indigenous deaths than non-Indigenous deaths occurred at younger ages. As can be seen in graph 9.2, over half of the deaths among Indigenous males and about four in ten deaths of Indigenous females occurred before age 50. About 76% of deaths among Indigenous males and 67% of deaths among Indigenous females occurred before age 65. Among non-Indigenous people, by contrast, the vast majority (73% of male deaths and 84% of female deaths) occurred among people aged 65 or over.

Some 7% of all Indigenous deaths occurred among infants less than one year old. Almost one in four (23%) infant deaths in Western Australia, South Australia and the Northern Territory were recorded as Indigenous, as were 36% of deaths from Sudden Infant Death Syndrome.

9.2 AGE DISTRIBUTION OF DEATHS(a)—1995–97



(a) Data for Western Australia, South Australia and Northern Territory combined. Based on year of registration.

Source: Unpublished data, ABS deaths registration database.

Years of potential life lost

One measure that provides an indication of the force of premature mortality is years of potential life lost (YPLL). This measure gives weight both to the number of deaths occurring before a certain age (for example, before age 65), as well as to the age at which those deaths occurred. For example, a death occurring in a 20 year old would result in 45 years of potential life lost before age 65 ($YPLL_{65}$), while a death in a 60 year old would result in 5 $YPLL_{65}$.

Years of potential life lost *continued*

In 1995–97, there were over 51,000 YPLL before age 65 among Indigenous people in Western Australia, South Australia and the Northern Territory (table 9.3). This represents a rate of about 168 YPLL for every 1,000 Indigenous males and 97 YPLL for every 1,000 Indigenous females. By contrast, the rates of YPLL among non-Indigenous males and females were 38 per 1,000 and 19 per 1,000, respectively.

9.3 YEARS OF POTENTIAL LIFE LOST BEFORE AGE 65 YEARS ($YPLL_{65}$)—1995–97(a)

	Deaths aged under 65 years		*$YPLL_{65}$*		
	no.	*% of deaths*	*no.*	*rate per 1 000*	*no. per death*
Indigenous					
Males	1 172	75.7	32 357	167.5	27.6
Females	736	66.9	19 187	97.4	26.1
Non-Indigenous					
Males	9 501	26.9	187 330	37.9	19.7
Females	4 903	15.7	92 998	18.9	19.0

(a) Data for Western Australia, South Australia and Northern Territory combined. Based on year of registration.

Source: Deaths Registration Database, ABS.

Among Indigenous males, 39% of deaths from ischaemic heart disease, 32% of deaths from diabetes and 20% of deaths from cerebrovascular disease (stroke) occurred before the age of 50 years. This was true for only 3–5% of deaths from these causes among non-Indigenous males. Similarly, among females, 21–22% of deaths from ischaemic heart disease, diabetes and cerebrovascular disease among Indigenous females were among people under 50, but only 1% of deaths from these causes among non-Indigenous females occurred among people in this age range. Similar disparities were observed for a wide range of other causes of death, such as lung cancer, chronic liver disease, kidney disease and pneumonia.

Age-specific death rates

The age-specific death rates for Indigenous males and females exceeded those of their non-Indigenous counterparts in every age group, but the differences were greatest in relative terms among those aged 35–54 years (table 9.4). The death rates in this age group were 6–8 times higher for Indigenous males and females than for their non-Indigenous counterparts.

9.4 AGE-SPECIFIC DEATH RATES—1995–97(a)

	Males			Females		
Age group (years)	*Indigenous rate(b)*	*Non-Indigenous rate(b)*	*Rate ratio(c)*	*Indigenous rate(b)*	*Non-Indigenous rate(b)*	*Rate ratio(c)*
Under 1	1 818	592	3.1	1 750	392	4.5
1–4	133	37	3.6	107	25	4.3
5–14	61	16	3.9	29	12	2.4
15–24	278	100	2.8	69	35	2.0
25–34	577	123	4.7	223	49	4.6
35–44	1 107	161	6.9	640	82	7.8
45–54	1 923	321	6.0	1 273	191	6.7
55–64	3 869	919	4.2	2 540	506	5.0
65–74	6 298	2 744	2.3	4 704	1 494	3.1
75 and over	11 723	9 049	1.3	9 040	6 920	1.3

(a) Data for Western Australia, South Australia and the Northern Territory combined. Based on year of registration.

(b) Per 100,000.

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

Source: Deaths Registration Database, ABS.

LEADING CAUSES OF DEATH

In 1995–97, about three out of every four deaths among Indigenous people were caused by one of the following: diseases of the circulatory system (e.g. heart attacks and strokes); injury and poisoning (e.g. road crashes, suicide and murder); respiratory diseases (e.g. pneumonia, asthma and emphysema); neoplasms (i.e. cancers); and endocrine, nutritional and metabolic disorders (e.g. diabetes). There were more deaths than expected (based on all-Australian rates) for each of these causes (table 9.5). For all causes of death combined, there were about three times more deaths than expected among Indigenous males and females.

9.5 DEATHS FROM SELECTED CAUSES—1995–97(a)

	Indigenous males		Indigenous females	
	no.	*SMR(b)*	*no.*	*SMR(b)*
Circulatory	447	3.0	289	2.5
Injury	294	3.2	114	3.6
Neoplasms	181	1.5	145	1.4
Respiratory	173	5.2	150	6.0
Endocrine/metabolic	91	6.1	128	11.3
Digestive	69	5.0	57	5.6
Mental disorders	61	4.2	33	3.6
Genitourinary	37	7.1	43	7.8
Infectious/parasitic	35	4.0	24	6.2
Nervous system	32	2.6	11	1.1
Ill-defined	47	7.0	32	7.0
All causes	**1 548**	**3.1**	**1 099**	**3.0**

(a) Data from Western Australia, South Australia and the Northern Territory combined. Based on year of registration.

(b) Standardised mortality ratio is equal to observed deaths divided by expected deaths, based on all Australian age-, sex-, and cause-specific rates.

Source: Deaths Registration Database, ABS.

LEADING CAUSES OF DEATH *continued*

Age-standardised death rates for Indigenous people exceeded those for non-Indigenous people for virtually all causes. In 1995–97, there were fewer than expected numbers of deaths among Indigenous people only for a few types of cancer (including breast cancer, prostate cancer and lymphatic/haematopoietic cancers) and for complications of pregnancy and childbirth (for which none of the six deaths during the period were recorded as Indigenous).

Diseases of the circulatory system accounted for the highest proportion of excess deaths (table 9.6). Injury, respiratory diseases and endocrine diseases were also important causes of excess deaths. Together, these causes were responsible for over two-thirds of the excess deaths among Indigenous males and females.

9.6 MAIN CAUSES OF EXCESS DEATHS(a)(b)—1995–97

	Indigenous males	*Indigenous females*
	Proportion of excess	*Proportion of excess*
Disease category	*%*	*%*
Circulatory	28.7	23.2
Injury	19.3	16.9
Respiratory	13.4	15.8
Endocrine/metabolic	7.3	11.1

(a) Excess deaths is equal to observed deaths minus expected deaths (based on all-Australian age-, sex-, and cause-specific rates).

(b) Data from Western Australia, South Australia and the Northern Territory combined. Based on year of registration.

Source: Deaths Registration Database, ABS.

URBAN/RURAL/REMOTE COMPARISONS

There is some evidence that death rates among Indigenous people may be higher on average in remote areas than in urban areas, at least in Western Australia, South Australia and the Northern Territory combined (graph 9.7). However, this pattern has not been observed in all areas. In Western Australia, for example, the East Metropolitan Health Authority (Perth) had the second-highest (out of seven districts) age-standardised death rates for Indigenous males and females in 1989–93 (Somerford et al. 1995). The data should be interpreted with caution, as differences in data quality (such as the identification of Indigenous people in death registrations and in population estimates) may explain some of the variation by region.

9.7 AGE-STANDARDISED DEATH RATES, BY AREA OF RESIDENCE(a)(b)(c)—1992–96

(a) Rates are per 100,000 population. Age-standardised to the 1991 Australian population.
(b) Classifications are based on the Rural, Remote and Metropolitan Areas Classification (Department of Primary Industries and Energy & Department of Human Services and Health 1994).
(c) Data from Western Australia, South Australia and the Northern Territory combined. Based on year of occurence.
Source: AIHW 1998d.

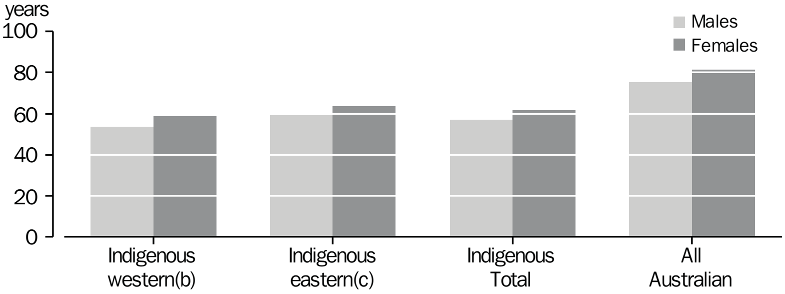
LIFE EXPECTANCY AT BIRTH

Life expectancy at birth represents the average number of years a newborn baby could expect to live if the mortality rates of today were to continue throughout that baby's life. In the period 1991–96, life expectancy at birth for all Australians was 75.2 years for males and 81.1 years for females (graph 9.8). By contrast, life expectancy at birth was estimated to be 56.9 years for Indigenous males and 61.7 years for Indigenous females. The figure for Indigenous males is similar to 1990–95 estimates for males in Lesotho (56.4 years), Western Sahara (57.3) and Bolivia (57.7). The figure for Indigenous females is similar to 1990–95 estimates for females in Iraq (60.0 years), Western Sahara (60.6), Bolivia (61.0) and Pakistan (62.6) (United Nations Department of Economic and Social Affairs 1998).

Although there were differences in estimated life expectancy between Indigenous people living in eastern and western parts of Australia, the gap between Indigenous people and non-Indigenous people was much larger than the gap within the Indigenous population (graph 9.8).

It should be noted that these figures are based on changes in age structure between successive censuses, rather than on the actual numbers of deaths recorded, and assume a common underlying life-table. These estimates are subject to greater variability than estimates based on actual counts of deaths and are only accurate to within about four years (AIHW 1998b). However, they do allow estimates of Indigenous life expectancy to be calculated for those parts of Australia in which incomplete identification of Indigenous deaths prevents the accurate estimation of life expectancy based on actual deaths.

9.8 LIFE EXPECTANCY AT BIRTH(a)—1991–96



(a) Based on changes in age structure between successive censuses.
(b) Western Australia, South Australia and Northern Territory.
(c) New South Wales, Victoria, Queensland, Tasmania and Australian Capital Territory.
Source: ABS 1998e, unpublished data, Indigenous Experimental Life Tables; AIHW 1998b.

SUMMARY

Indigenous people in Western Australia, South Australia and the Northern Territory die at a greater rate and at younger ages than Australians as a whole. The quality of Indigenous identification in the death records of other States has not been sufficient to allow for reporting. After adjusting for age, death rates are higher for Indigenous people than for all Australians for almost all causes of death, but circulatory diseases, respiratory disease, injury, endocrine diseases and cancer are responsible for the greatest number of deaths. Although it appears that there may be differences within the Indigenous population by region, these differences are small compared to the differences between the Indigenous and non-Indigenous populations. The life expectancy at birth for Indigenous males and females is estimated to be about 18–19 years less than for their all-Australian counterparts.

CHAPTER 10 HEALTH AND WELFARE OF TORRES STRAIT ISLANDERS

INTRODUCTION

This chapter presents information about the demographic, social and economic circumstances and the health status of the Torres Strait Islander population. The information presented in this chapter is based largely on the 1996 Census, on health data collections from Queensland, and on the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS). Little information is available about the health and welfare of Torres Strait Islanders, as identification of Torres Strait Islanders separately from Aboriginal people is not common in health- and welfare-related data sets, with the exception of some Queensland collections. As can be seen in table 10.1, however, almost half of the people who indicated they were of Torres Strait Islander origin in the Census lived outside of Queensland, and so would not be represented in these collections.

In this chapter, comparisons are made, where possible, between Torres Strait Islanders living in the Torres Strait and those living on the Australian mainland. These groups are also compared with people of Aboriginal origin and with the total Australian population.

The 1996 Census was the first to allow people to indicate that they were of both Aboriginal and Torres Strait Islander origin (rather than only allowing them to choose one). Due to this change, comparisons with previous census figures should be made with care. People who previously identified themselves as Aboriginal or as Torres Strait Islander may, in 1996, have been included in the group indicating both Aboriginal and Torres Strait Islander origin, thus not only creating a new group, but also changing the size of the groups in which they were previously counted. In the presentation of census data in this chapter, people who indicated that they were of both Aboriginal and Torres Strait Islander origin are treated as a separate group where possible. When this is not possible due to small numbers, they have been included with the appropriate Torres Strait Islander group (that is, Torres Strait Islanders living in the Torres Strait or Torres Strait Islanders living on the mainland).

DEMOGRAPHY

In the absence of estimated resident population figures (see inset 2.1), which are not yet available for Torres Strait Islanders (see chapter 11 for further details), the best information on the size and distribution of the Torres Strait Islander population in Australia comes from census counts by place of usual residence. Because the figures are census counts rather than population estimates, they have not been adjusted for net census undercount, birthplace of parents, or non-response to the question on Indigenous status (see inset 2.1).

In the 1996 Census, almost 39,000 people said they were of Torres Strait Islander origin (table 10.1). Just over a quarter of these people (26%, or about 10,100 people) said they were also of Aboriginal origin. The majority (54%) of Torres Strait Islanders lived in Queensland, with the remainder spread across Australia. About one in four Torres Strait Islanders in Queensland lived in the Torres Strait area.

10.1 CENSUS COUNTS BY PLACE OF USUAL RESIDENCE(a)(b), PERSONS OF TORRES STRAIT ISLANDER ORIGIN—1996

Place of usual residence	*no.*	*%*
New South Wales	7 501	19.3
Victoria	3 102	8.0
Queensland(b)	21 132	54.4
South Australia	1 508	3.9
Western Australia	1 788	4.6
Tasmania	1 850	4.8
Northern Territory	1 769	4.6
Australian Capital Territory	180	0.5
Australia	**38 850**	**100.0**

(a) Includes the categories 'Torres Strait Islander only' and 'Both Aboriginal and Torres Strait Islander'.

(b) Due to errors in data collection and processing, no data are available for Yam Island. It is estimated that at the time of the 1996 Census there were 150 Indigenous people on Yam Island, the majority of whom would be expected to be of Torres Strait Islander origin.

Source: ABS 1998c.

As with the Indigenous population as a whole, the Torres Strait Islander population had a considerably younger age distribution than the total Australian population in 1996 (table 10.2). There were only small differences in the age distributions for different groups of Torres Strait Islanders and for Aboriginal people.

10.2 AGE DISTRIBUTION—1996

	Torres Strait Islander only, living in the Torres Strait area	*Torres Strait Islander only, not living in the Torres Strait area*	*Both Torres Strait Islander and Aboriginal*	*Aboriginal only*	*All Australia*
	%	%	%	%	%
0–14 years	41	37	44	40	22
15–34 years	31	34	32	36	30
35–54 years	18	20	17	18	28
55 years and over	10	9	7	6	20
Total	**100**	**100**	**100**	**100**	**100**
	no.	no.	no.	no.	no.
Total	5 396	23 350	10 106	314 120	17 752 829

Source: ABS, unpublished data, 1996 Census.

SOCIAL AND ECONOMIC CHARACTERISTICS

The social and economic conditions experienced by Torres Strait Islanders were more similar to those experienced by Aboriginal people than those of the total Australian population, but there were some notable differences between Torres Strait Islanders living in the Torres Strait area and those living elsewhere, as the following sections describe.

Indigenous languages

Just over three-quarters (77%) of Torres Strait Islanders living in the Torres Strait area said they spoke a language other than English at home (table 10.3). This was true for only 14–20% of other Indigenous people, and for 15% of the total Australian population. Although speaking an Indigenous language is a positive indicator of the maintenance of culture, it may also be a marker for reduced access to services (see chapter 5).

Indigenous languages *continued*

Some 23% of Torres Strait Islanders in the Torres Strait were reported to speak English 'not well' or 'not at all', compared with 3–4% of people in other groups.

10.3 PROFICIENCY IN ENGLISH—1996

	Torres Strait Islander only, living in the Torres Strait area	*Torres Strait Islander only, not living in the Torres Strait area*	*Both Torres Strait Islander and Aboriginal*	*Aboriginal only*	*All Australia*
	%	%	%	%	%
Speaks English only	*18*	*75*	*84*	*81*	*82*
Speaks another language at home					
And speaks English well or very well	54	16	10	12	12
And speaks English not well or not at all	23	4	4	4	3
Total	77	*20*	*14*	*16*	*15*
Not stated	*5*	*4*	*2*	*3*	*3*
Total	**100**	**100**	**100**	**100**	**100**

Source: ABS, unpublished data, 1996 Census.

Education

Among adults aged 15 years or more, Torres Strait Islanders living in the Torres Strait area were less likely to report having left school before age 16 years than any other group (table 10.4). Torres Strait Islanders living in other areas were generally similar to the total Australian population in the age at which they left school.

10.4 AGE LEFT SCHOOL(a)(b)—1996

	Torres Strait Islander only, living in the Torres Strait area	*Torres Strait Islander only, not living in the Torres Strait area*	*Both Torres Strait Islander and Aboriginal*	*Aboriginal only*	*All Australia*
	%	%	%	%	%
14 years or under	14	14	14	16	14
15 years	14	22	23	25	20
16 years	21	19	19	21	19
17 years	20	15	15	12	19
18 years or more	15	11	10	8	16
Still attending	6	7	7	6	5
Never attended	1	1	3	3	1
Not stated	10	11	10	10	7
Total	**100**	**100**	**100**	**100**	**100**

(a) Persons aged 15 years and over.
(b) Based on the question 'How old was the person when he or she left primary or secondary school?'

Source: ABS, unpublished data, 1996 Census.

Although the majority of Torres Strait Islanders left school at age 16 years or later regardless of where they lived, they were much less likely than the total Australian population to have a post-school educational qualification (table 10.5). Torres Strait Islanders living in the Torres Strait area were the least likely to report having a qualification.

10.5 HIGHEST POST-SCHOOL EDUCATIONAL QUALIFICATION(a)—1996

	Torres Strait Islander only, living in the Torres Strait area	*Torres Strait Islander only, not living in the Torres Strait area*	*Both Torres Strait Islander and Aboriginal*	*Aboriginal only*	*All Australia*
	%	%	%	%	%
Has qualification					
Tertiary qualification(b)	3.0	4.5	4.1	4.2	16.5
Skilled vocational qualification	2.5	6.6	5.1	4.4	10.7
Basic vocational qualification	1.8	2.4	2.2	1.9	2.9
Total	*7.3*	*13.6*	*11.4*	*10.5*	*30.0*
No post-school qualification(c)	*80.4*	*71.6*	*75.1*	*76.6*	*58.1*
Inadequately described or not stated	*12.3*	*14.8*	*13.5*	*12.9*	*11.9*
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Persons aged 15 years and over.

(b) Includes associate diploma, undergraduate diploma, Bachelor degree, post-graduate diploma and higher degree.

(c) Includes persons with a qualification outside the scope of the Australian Bureau of Statistics Classification of Qualifications.

Source: ABS, unpublished data, 1996 Census.

Individual weekly income

Among those who provided sufficient information in the 1996 Census, the median income for Torres Strait Islander adults living in the Torres Strait area was $195 per week, which was similar to that of the Aboriginal population ($188) but lower than that of Torres Strait Islanders living in other areas ($229) and the total Australian population ($292) (table 10.6). Some 60–70% of Torres Strait Islander and Aboriginal adults had weekly incomes of less than $300, compared with 51% of the total Australian adult population.

10.6 PERSONAL INCOME(a)—1996

	Torres Strait Islander only, living in the Torres Strait area	*Torres Strait Islander only, not living in the Torres Strait area*	*Both Torres Strait Islander and Aboriginal*	*Aboriginal only*	*All Australia*
Median weekly income ($)	195	229	195	188	292
Proportion with income less than $300 per week (%)	68	60	65	68	51

(a) Persons aged 15 years and over.

Source: ABS, unpublished data, 1996 Census.

Labour force status

Just over half (51%) of Torres Strait Islander adults living in the Torres Strait area were reported to be employed at the time of the 1996 Census (table 10.7), with employment in the Community Development Employment Project (CDEP) scheme being mentioned by a substantial proportion (21%) of all adults. CDEP scheme employment is believed to have been underestimated in the Census because there was not a specific question on CDEP employment except in areas in which a Special Indigenous Form was used. In other areas, CDEP employment was only coded as such if it was written in by the person filling out the census form (Working Group to Establish Guidelines for Interpreting Indigenous Census Data 1998). As noted in chapter 3, the Torres Strait Regional Authority reported that 1,655 people were participating in CDEP in the Torres Strait area as at June 1998 (Torres Strait Regional Authority 1998).

Torres Strait Islanders living outside the Torres Strait area were more likely than those living in the Torres Strait area to be categorised as employed in non-CDEP scheme jobs, but all Indigenous groups were less likely than the total Australian population to be employed, even when CDEP scheme employment is taken into consideration.

Torres Strait Islanders (and Aboriginal people) were less likely than the total Australian population to be in the labour force, but CDEP scheme employment played a large role in minimising this difference for Torres Strait Islanders living in the Torres Strait area. CDEP scheme employment also had a dramatic effect on the unemployment rate for those living in the Torres Strait area, which was similar to the all-Australian figure. If all the people who were reported to be working in CDEP scheme jobs at the time of the Census had instead been classified as unemployed, the unemployment rate for Torres Strait Islander adults living in the Torres Strait area would have been 47%, rather than 9%.

10.7 LABOUR FORCE STATUS(a)—1996

Section of State	*Torres Strait Islander only, living in the Torres Strait area*	*Torres Strait Islander only, not living in the Torres Strait area*	*Both Torres Strait Islander and Aboriginal*	*Aboriginal only*	*All Australia*
	%	%	%	%	%
Employed					
CDEP(b)	21	1	4	6	<1
Other	30	42	36	32	55
Total	*51*	*44*	*40*	*38*	*55*
Unemployed	5	10	12	12	6
Not in the labour force	41	43	45	45	37
Not stated	3	4	3	5	2
Total	**100**	**100**	**100**	**100**	**100**
Unemployment rate(c)	9	19	23	23	9
Participation rate(d)	56	54	51	50	60

(a) Persons aged 15 years and over.

(b) Community Development Employment Project scheme.

(c) Unemployed persons as a proportion of all persons in the labour force (that is, employed plus unemployed).

(d) Persons in the labour force (employed plus unemployed) as a proportion of all persons.

Source: ABS, unpublished data, 1996 Census.

Torres Strait Islander households

It is difficult to define what constitutes a Torres Strait Islander household. For the purposes of this section, the following groups have been compared:

- households in the Torres Strait area in which at least one reference person or spouse in at least one family in the household (or the lone person in a household with only one person) was identified as being of Torres Strait Islander origin (either Torres Strait Islander only or both Torres Strait Islander and Aboriginal);
- households as above, but not in the Torres Strait area;
- households in which at least one reference person or spouse in at least one family in the household (or a lone person) was of Aboriginal origin, excluding households in either of the first two groups;
- all other households; and
- total Australian households.

Group households have been excluded.

Torres Strait Islander households in the Torres Strait area were considerably larger than other Torres Strait Islander households (table 10.8), with almost five people per household on average. Among those with information on the number of bedrooms in their dwelling, almost one in four (24%) Torres Strait Islander households in the Torres Strait area recorded having more than two people per bedroom.

Torres Strait Islander households *continued*

About 5% of other Torres Strait Islander households and almost 8% of Aboriginal households had more than two people per bedroom, compared with less than 1% of other Australian households.

The median household income of Torres Strait Islander households in the Torres Strait ($618) was higher than that of other Indigenous households, and only $14 less than the median income of non-Indigenous households (table 10.8). However, the income of non-Indigenous households had to support only about half as many people on average.

10.8 CHARACTERISTICS OF TORRES STRAIT ISLANDER AND OTHER HOUSEHOLDS(a)—1996

	Torres Strait Islander, in the Torres Strait area	*Torres Strait Islander, not in the Torres Strait area*	*Aboriginal*	*Other*	*Total Australian*
Average number of people per household	4.7	3.4	3.7	2.7	2.7
Households with more than two people per bedroom(b) (%)	24.0	5.2	7.6	0.8	1.0
Median weekly income ($)	618	538	539	632	630
Housing tenure (%)					
Owned/being purchased	*13.6*	*38.2*	*30.2*	*70.7*	*70.0*
Rented					
Private landlord	2.6	26.9	23.4	17.6	17.7
Government agency	14.3	19.4	23.9	5.1	5.4
Community/cooperative housing	31.0	5.6	10.3	0.4	0.5
Other	15.9	5.5	7.0	3.4	3.5
Total	*63.8*	*57.3*	*64.6*	*26.5*	*27.0*
Other/not stated	*22.7*	*4.4*	*5.3*	*2.9*	*2.9*
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*

(a) See Glossary for definitions. See text for explanations of categories.

(b) Excludes dwellings where number of bedrooms was not stated. Bedsitters and dwellings with no bedrooms were treated as equivalent to one bedroom.

Source: ABS, unpublished data, 1996 Census.

Home ownership was much more common among Torres Strait Islander households outside the Torres Strait area (38%) than among those in the Torres Strait area (14%) (table 10.8), but still fell far short of the level of home ownership among non-Indigenous households (71%). Almost one in three Torres Strait Islander households in the Torres Strait area rented their dwellings from a community or cooperative housing group.

Mothers and babies

Information on the health of Torres Strait Islander mothers and their babies is only available for Queensland. Of all mothers delivering babies in Queensland in 1996, 1.2% (556) were of Torres Strait Islander origin. About 11.4% of the 568 babies born to Torres Strait Islander mothers in that year were of low birthweight (less than 2,500 grams at birth). This was similar to the proportion of low birthweight babies born to Aboriginal mothers (12.0%), but almost twice as high as the proportion for all Queensland births in 1996 (6.7%). Very low birthweight (less than 1,500 grams) was more common among babies born to Torres Strait Islander mothers (4.4%) than among babies born to Aboriginal mothers (2.6%) or all Queensland babies (1.6%) (Queensland Health 1998).

Stillbirths and neonatal deaths accounted for the deaths of 14 babies born to Torres Strait Islander mothers in 1996, a rate of 24.6 perinatal deaths per 1,000 births. This rate was similar to the rate for babies born to Aboriginal mothers (22.2) but over double the rate for all Queensland babies (11.7). About 65% of all perinatal deaths in Queensland in 1996 were of very low birthweight babies, which may partly explain the higher perinatal mortality rate in babies born to Torres Strait Islander mothers (Queensland Health 1998).

Health risk factors

The most recent information about the prevalence of health risk factors among Torres Strait Islanders remains the 1994 NATSIS. Torres Strait Islander adults living in the Torres Strait were less likely to report that they drank alcohol (44%) than those living on the Queensland mainland (60%) and Indigenous people in general (62%). Cigarette smoking was reported by 41% of Torres Strait Islander adults in the Torres Strait and 42% of those on the mainland, compared with 50% of Indigenous people overall (ABS 1997d). Among those whose height and weight measurements were recorded in the NATSIS, about 43% of Torres Strait Islander males and 50% of Torres Strait Islander females could be classified as obese (body mass index of 30 or more). This was the case for 25% of Indigenous males and 29% of Indigenous females and 19% of all-Australian males and females overall (see graphs 4.8 and 4.9) (Cunningham & Mackerras 1998).

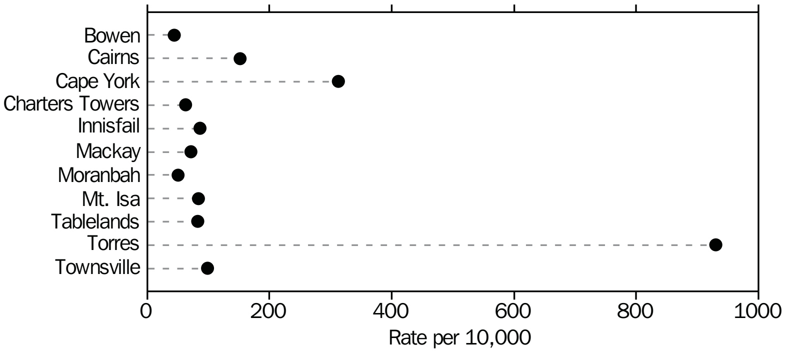
Notifiable communicable diseases

Information on communicable disease among Torres Strait Islanders is only available for Queensland, and then only indirectly. Indigenous people are currently not identified as such in the communicable disease notification system in Queensland, but crude rates of notifications have been estimated for eleven districts in the North Queensland zone for 1996 (McDermott et al. 1998). One of these districts, the Torres Health District, includes the Torres Strait islands and the northern tip of mainland Queensland and its population consists mainly of Torres Strait Islanders. Although this district does not include all Torres Strait Islanders in Queensland, the data do provide some insight into the health of Torres Strait Islanders living in the Torres Strait region.

Notifiable communicable diseases *continued*

The Torres Health District recorded a crude rate of 930 infectious disease notifications per 10,000 population, which far exceeded all other North Queensland Health Districts (graph 10.9). The Cape York (313 per 10,000) and Cairns (152 per 10,000) districts recorded the next highest notification rates. Of the 812 infectious disease notifications in the Torres Health District in 1996, the vast majority were sexually transmitted diseases (61%), mosquito-borne diseases (20%) and blood-borne infections (13%) (McDermott et al. 1998).

10.9 TOTAL INFECTIOUS DISEASES, BY QUEENSLAND HEALTH DISTRICT—1996



Source: McDermott et al. 1998.

Notification rates for sexually transmitted diseases (not including HIV/AIDS) were more than twice as high in 1996 in the Torres Health District (572 per 10,000 people) as in the next highest district (225 per 10,000). In the same year the rate for mosquito-borne diseases (such as dengue fever, malaria and Ross River fever) was about six times higher in the Torres District (182 per 10,000) than in the second highest district (30 per 10,000). The notification rate of blood-borne diseases, such as hepatitis B and C, was also much higher in the Torres District than in other North Queensland districts. By contrast, the notification rate for vaccine preventable diseases (such as measles, pertussis, rubella, and haemophilus influenza meningitis) was only about 1 per 10,000, which was lower than the rate for North Queensland as a whole (4 per 10,000) in 1996 (McDermott et al. 1998).

More information about the response to an outbreak of one mosquito-borne disease in the Torres Strait is presented in inset 10.10.

10.10 RESPONDING SUCCESSFULLY TO AN OUTBREAK OF JAPANESE ENCEPHALITIS IN THE TORRES STRAIT

The mosquito-borne virus Japanese Encephalitis had already been responsible for three deaths in the Torres Strait Islands in 1995, when a new outbreak occurred on Badu Island. The source of the outbreak was unknown, but was believed to be due to infected migratory birds, windblown mosquitoes and/or illegally imported pigs from Papua New Guinea.

In order to prevent further serious illness and death, a number of strategies were implemented, involving extensive collaboration among a number of people and organisations in the Torres Strait and elsewhere. Among the organisations which provided advice and/or financial support were the Queensland Health Department's Tropical Public Health Unit, the Commonwealth Department of Health and Family Services, the Department of Primary Industries, the Torres Strait Regional Authority, Australian Quarantine Inspection Service and the Centers for Disease Control in the United States.

The main elements of the program were community consultation and education, mass vaccination and mosquito control. Local health workers played a key role in its success.

Health workers were informed about the disease and its risks and then consulted with community members to discuss the problem and possible solutions. Among the barriers the health workers had to overcome were an initial lack of understanding on the part of local people about the disease and its transmission, and a tendency for people to blame the problem on black magic.

Following an extensive information campaign by health workers and through the media, a mass vaccination program was implemented. Teams consisting of health workers, doctors and registered nurses administered the vaccine to a high proportion of the people aged over one year of age in every community. (Vaccination is now routine for new residents and for children turning one year old.) Community managers and volunteers also provided valuable assistance to the program.

Mosquito control measures included cleaning up drains and septics, treating mosquito breeding swamps, monitoring breeding cycles and putting screens on houses. Funding for additional environmental health workers was also sought.

The program achieved its aims, as no deaths occurred as a result of the Badu Island outbreak and there were no notifications of Japanese Encephalitis in the Torres Strait in 1996 (McDermott et al. 1998).

Source: NHMRC 1996.

Mortality

No information about the mortality of Torres Strait Islanders living outside the Torres Strait has been available to date due to the lack of separate identification of Torres Strait Islanders and Aboriginal people in death registrations. Reliable information about deaths of Torres Strait Islanders in the Torres Strait has not been available for the last several years due to under-registration of deaths in the Torres Strait region (Firman, D., Queensland Health, 1998, personal communication). Therefore a summary of the information presented in the first edition of this publication (ABS & AIHW 1997a) for earlier years has been included here.

Over the period 1976–94, the estimated mortality rates for Torres Strait Islanders living in the Torres Strait area were about two and a half to three times higher than those for all Queenslanders after adjusting for age. The main causes of excess deaths in the Torres Strait area for the period 1989–94 were diabetes (33% of the excess) and heart disease (19%), followed by perinatal conditions (13%), pneumonia (12%), bronchitis, emphysema and asthma (12%), and cancer (11%) (ABS & AIHW 1997a).

SUMMARY

The socioeconomic conditions experienced by Torres Strait Islanders differ according to their location, but they are disadvantaged relative to Australians overall regardless of where they live. The health status of Torres Strait Islanders remains difficult to assess due to a lack of adequate data, but where data are available (generally for the Torres Strait area), they suggest a greater burden of ill health for Torres Strait Islanders than for Australians as a whole.

CHAPTER 11

RECENT DEVELOPMENTS IN THE COLLECTION OF INDIGENOUS STATISTICS

INTRODUCTION

This chapter presents information about the quality and availability of data about the health and welfare of Indigenous Australians. As the other chapters in this publication attest, the range of available information is not as large for the Indigenous population as for the Australian population as a whole, in part because of concerns about the quality of data relating to Indigenous people. As discussed in chapter 1, among the most important issues relating to data quality are: the estimation of the size and composition of the Indigenous population; the identification of Indigenous people in administrative data collections; and issues related to the collection of survey data about Indigenous people. The availability of data is also affected by the number of Indigenous people included in surveys and the regularity with which the surveys are conducted. In recent years, there have been a number of important strategic initiatives to improve data quality and availability, and these are discussed in the last part of this chapter.

ESTIMATING THE INDIGENOUS POPULATION

Identifying Indigenous people

One of the major issues in the quality of data in relation to Aboriginal and Torres Strait Islander people is the definition and membership of the Indigenous population. According to Nettheim (1993), ‘No uniform definition of “Aborigine” or of “Aboriginal descent” has been adopted by legislatures throughout Australia’. Similarly, there appears to be no uniform legislative definition of Torres Strait Islanders (Ross 1999).

One widely, but not universally (see *Gibbs v. Capewell* (1995) 128 ALR 577), accepted definition of an Indigenous Australian is that endorsed by the Commonwealth Cabinet in 1978 (Department of Aboriginal Affairs Constitutional Section 1981) and by the High Court in 1983 in its judgment in the case of *The Commonwealth v. Tasmania* (46 ALR 625). This definition, generally referred to as 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 lives’ (Department of Aboriginal Affairs Constitutional Section 1981).

Although this definition is commonly cited, it is often not practical to collect information on all three aspects (that is, descent, self-identification and community acceptance) in administrative collections and surveys. Collecting good quality information about community acceptance would be difficult in most circumstances, for example.

In most cases, a single question to identify Indigenous people is desired or necessary, and the choice is generally one of descent versus self-identification (although it is recognised that answering a question about descent may also involve elements of self-identification). The results from these two types of questions are not identical, however, as the experience of New Zealand shows. For example, in the New Zealand

Identifying Indigenous people *continued*

Census of 1996, some 579,714 people said that they had ancestors who were New Zealand Maori (i.e. of Maori descent). By contrast, 523,371 people indicated that they belonged to the Maori ethnic group (i.e. identified as Maori), of whom 273,438 (52%) reported only Maori ethnicity. Not all of the people who reported Maori ancestry reported Maori ethnicity and not all of those who reported Maori ethnicity also reported Maori ancestry (Statistics New Zealand, unpublished data, 1996 Census).

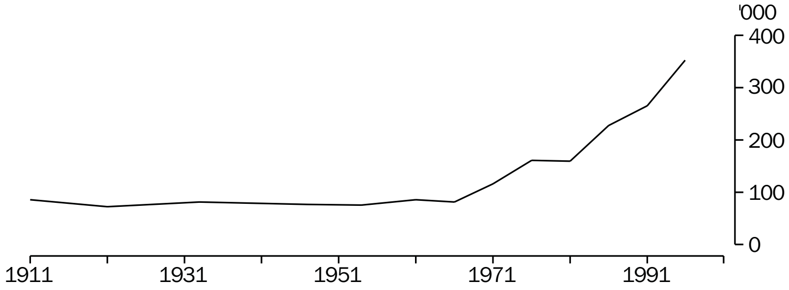
In Australian Censuses of Population and Housing, a single question has generally been used, but the type of question differed markedly before and after the 1967 Constitutional Referendum. According to Ross (1999), questions before 1967 were exclusive in nature, while those after 1967 were inclusive. Prior to 1967, Aboriginal people were identified in the Census in order to exclude them from official population figures, as required by the Constitution. The definition of an Aboriginal person was therefore narrow, with only those of more than 50% Aboriginal descent counted as Aboriginal (and therefore to be excluded from official figures).

As a result of the 1967 Referendum, the requirement to exclude Aboriginal people from the official population figures was removed from the Constitution, and the Commonwealth was given the power to make laws for Aboriginal people. One consequence of the changes was the need for a new, broader definition of an Aboriginal person, which ultimately resulted in the development of the 'Commonwealth working definition', discussed earlier in this chapter.

The categorisation of Torres Strait Islanders changed from Census to Census prior to 1967. In some Censuses, Torres Strait Islanders were classified as Aboriginal (and therefore excluded if they were of more than 50% Torres Strait Islander descent); in others they were classified as 'Polynesian' or 'Pacific Islander' (and therefore not excluded from official population figures). Since 1971, Torres Strait Islanders have been classified as a separate Indigenous group (Ross 1999).

The change from a 'race'-based, exclusionary definition to a broader, more inclusive definition was mirrored in the questions used in the Census. In years prior to 1967, the word 'race' was used in census questions. In 1971 and 1976, 'racial origin' was used. From 1981 to the present, the question has asked about 'Aboriginal or Torres Strait Islander origin'. In 1981, 1986 and 1991, people who were of both Aboriginal and Torres Strait Islander origin were instructed to choose one or the other, but in 1996, people of both origins were instructed to mark both 'yes' responses. (See Ross (1999) for a more complete history of census questions and definitions.) Graph 11.1 presents estimated and actual counts of the Indigenous population from 1911 to 1996. These figures are based on a range of different census questions and are included to provide an historical context.

11.1 INDIGENOUS ESTIMATED AND ACTUAL COUNTS(a)(b)



(a) Censuses were held in 1911, 1921, 1933, 1947, 1954, 1961, 1966, 1971, 1976, 1981, 1986, 1991 and 1996. Pre-1966 figures are official estimates of the Indigenous population. Figures for 1966–96 are actual census counts. Torres Strait Islanders are excluded from 1947 and 1966 figures .
(b) Prior to the exclusion of some Aboriginal people from official population figures (as required by the Australian Constitution from 1901–1967), Coghlan (1900) estimated the Indigenous population to be around 200,000. For more discussion, see Barnes, Cunningham and Madden (1997).

Source: Ross 1999, using data from ABS 1997a; Choi & Gray 1985; Commonwealth Bureau of Census and Statistics 1969, and Smith 1980.

The same origin-based question is also used in Australian Bureau of Statistics (ABS) surveys. Thus the ABS defines and measures membership of the Indigenous population using the following question, which was formally adopted by the ABS as the standard in 1995:

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

This same standard approach for identifying Indigenous people has been adopted by Registrars-General throughout Australia, and is included in the National Health Data Dictionary and the National Community Services Data Dictionary. This means that data collectors are moving towards a common approach to identifying Indigenous people in census collections (which provide the basis for population estimates), in ABS surveys, in birth and death registrations (which come from State and Territory Registrars), in recording other health and welfare events and in recording service use in administrative data sets (in which definitions are generally based on the National Health and National Community Services Data Dictionaries). As is discussed later in this chapter, there remain differences from collection to collection with respect to the actual question used, whether the appropriate person is actually asked, and the quality of the resulting data.

Identifying Indigenous people *continued*

Despite using the same question in the Census from 1981 to the present (with the exception of the change in instructions to people of both Aboriginal and Torres Strait Islander origin introduced in 1996), there have often been large intercensal changes in the counts of Indigenous people which can not be fully explained by natural increase, a pattern which has also been observed in other developed countries with minority indigenous populations (Ross 1999). Between 1991 and 1996, for example, the number of people counted in the Census as Indigenous increased by 33%, just under half of which was attributable to a combination of natural increase and changes in census editing procedures. In the same period, the increase for the total population was only 5% (ABS 1997f, 1999b; Ross 1999). The large intercensal increases between 1991 and 1996 occurred primarily in urban areas of south-eastern Australia (ABS 1999b; Ross 1999).

One explanation for the increase over and above natural increase is that a number of people answered the question on Indigenous status differently from one Census to the next. This could reflect changing self-identification among some people of Aboriginal and/or Torres Strait Islander descent, or a change in the willingness of people who already identify as Indigenous to indicate this on the census form, or a combination of the two (Ross 1999).

As a result of the large increases, there is uncertainty about people's interpretation of the standard question and the stability of their responses both over time and in different settings. The ABS is planning a series of studies to explore these important issues further. As is discussed later in this chapter, the uncertainty leads to difficulty in estimating and projecting the Indigenous population, which in turn results in uncertainty about the accuracy of rate and ratio statistics which use census-based population estimates as their denominators. The problem is magnified in the case of time series data because the uncertainty relating to the population estimates is compounded by the possibility of changes in the quality of identification over time in the numerator collection (Cunningham 1998).

Indigenous population estimates and projections

As indicated above, the quality of health and welfare statistics about Indigenous people depends as much on the accuracy of Indigenous population estimates as it does on the accuracy of the number of Indigenous people who use a service or have a certain condition or characteristic.

Population estimates and projections for the total Australian population are derived from the most recently available census counts using well-established methods (see inset 2.1). 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 'grown' backward or forward to the date for which the estimate is required. For the total Australian population, this entails adjustments for the numbers of births and deaths, and for estimated migration into and out of Australia (or a State or Territory for population estimates at this level). Projections are derived using assumptions about future rates of fertility, mortality and migration.

Indigenous population estimates and projections *continued*

Estimating the size and demographic structure of the Indigenous population is more problematic and prone to uncertainty (ABS 1998e, 1998f). In addition to the increases between Censuses over and above what is attributable to demographic changes, satisfactory data about Indigenous births, deaths and migration (which are required in the standard approach to population estimation) are often not available. For this reason, the ABS estimates and projections of the Indigenous population are referred to as 'experimental'. Experimental estimates of the Indigenous population have been derived for 1996 and earlier years (ABS 1998e), and experimental projections have been calculated for the years 1996–2006 (ABS 1998f).

An additional source of uncertainty with respect to the estimation of the Indigenous population is that many people do not provide information about their Indigenous status in the Census. This can occur when a person does not fill out a census form at all (in which case a 'dummy' form, indicating only the age, sex and State of usual residence of the person, is filled out by a census collector) or when a census form is completed but the question on Indigenous status is not answered. In 1996, for example, over 525,000 people were missing information on Indigenous status, which is considerably more than the almost 353,000 people who indicated they were of Aboriginal and/or Torres Strait Islander origin (ABS 1998c). In order to calculate population estimates, it is necessary to assign these people to either the Indigenous or non-Indigenous population, using probabilities based on their age, sex and place of residence.

Despite the difficulties described above, the best currently available estimates and projections of the Indigenous population by age and sex for each State and Territory and for Australia as a whole are the experimental estimates for 1991–96 and the experimental projections for 1996–2006 produced by the ABS after the 1996 Census. They are based on 1996 Census counts adjusted for net census undercount, non-response to the question on Indigenous status, birthplace of parents, and registered births, with adjustments for earlier and later years based on assumptions about fertility, mortality, migration and changes in the propensity of people to identify as Indigenous (ABS 1998e, 1998f). These population estimates and projections, described in more detail in the following paragraphs, are presented in table 11.2.

The estimates most recently published for 1991–96 (ABS 1998e) are presented in table 11.2 as the 'low series' Estimated Resident Population (ERP) figures. They are based on the propensity of people to identify as Indigenous at the time of the 1996 Census. They start with the estimated population in 1996. Estimates for prior years are calculated by making adjustments only for assumed demographic changes (including births and deaths, but assuming no net migration). The 'high series' ERP figures in table 11.2 represent new and previously unpublished estimates for 1991–96 which, in addition to demographic factors, incorporate assumptions about changes in the propensity of people to identify as Indigenous over the period from 1991 to 1996. These high series

Indigenous population estimates and projections *continued*

estimates are calculated by taking a time-weighted average of 1991 Census-based estimates and 1996 Census-based estimates for the intervening years.

Two series of projections based on the 1996 Census have been produced and published for the years 1996–2006 (ABS 1998f). These series are presented in table 11.2. These two series use different assumptions about future changes in the propensity of people to identify as Indigenous on the census form. In both series, it is assumed that the fertility rates of Indigenous females will decline by 1% per year, that Indigenous paternity rates, mortality and net interstate movements will remain constant, and that there will be zero net overseas migration over the period of the projections. The low series projections assume there will be no change over time in people’s propensity to identify as Indigenous and that the Indigenous population will only change as a result of natural increase. This series is an extension of the previously published 1991–96 estimates (ABS 1998e), which are presented in table 11.2 as the low series ERP. The high series projections assume that there will be an increase over time in people’s propensity to identify, with the rate of change estimated to be the same as that which occurred between the 1991 and 1996 Censuses. This series may be viewed as an extension of the high series estimates for 1991–96 described above and presented in table 11.2. The terms ‘low series’ and ‘high series’ refer to the assumed change in the propensity of people to identify as Indigenous, rather than to the size of the estimated population in a given year. The high series estimates are actually smaller than the low series estimates for the years prior to 1996 because they assume a lower figure for 1991 and a higher rate of increase between 1991 and 1996 than the low series. The two series are identical in 1996, but the high series projections exceed the low series projections from 1997 on.

The impact of the assumption about changes in the propensity of people to identify as Indigenous can be seen in the projections. For 2006, the low series projection of the Indigenous population is 469,000, which represents an annual increase of 2.0% over the period. The high series projection for the same year is 649,000, with an annual average rate of increase of 5.3% (ABS 1998f). The projected distribution of the Indigenous population by State and Territory also varies between the low and high series. For example, New South Wales' share of the Indigenous population would go from 28.5% in 1996 to 28.3% (low series) or 33.3% (high series) in 2006. The Northern Territory's share would decline from 13.4% in 1996 to 12.9% (low series) or 9.9% (high series) in 2006.

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. There is no certainty that the assumptions will be realised, and no assessment of their accuracy can be made until the results of the 2001 Census are available. Care must be taken when

Indigenous population estimates and projections *continued*

comparing 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.

11.2 ESTIMATES AND PROJECTIONS OF THE INDIGENOUS POPULATION

Year	*New South Wales*	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*	*Northern Territory*	*Australian Capital Territory*	***Australia(a)***
LOW SERIES(b)									
Estimated resident population									
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**
Projected population									
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**
HIGH SERIES(b)									
Estimated resident population									
1991	75 020	17 890	74 214	17 239	44 182	9 461	43 754	1 616	**283 560**
1992	81 335	18 837	79 916	18 186	46 651	10 563	45 348	1 900	**302 925**
1993	87 952	19 777	85 807	19 134	49 076	11 694	46 947	2 186	**322 765**
1994	94 895	20 706	91 885	20 089	51 452	12 858	48 548	2 472	**343 100**
1995	102 181	21 639	98 178	21 058	53 826	14 062	50 185	2 763	**364 089**
1996	109 925	22 598	104 817	22 051	56 205	15 322	51 876	3 058	**386 049**
Projected population									
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) Details about low series and high series estimates and projections are referred to previously in this chapter.

Source: ABS 1998e, 1998f, unpublished data, Experimental Estimates and Experimental Projections of the Aboriginal and Torres Strait Islander Population (high series projections for 1991–96).

Indigenous population estimates and projections *continued*

Table 11.3 presents the 1996 Census-based low series projections for 1999 by State and Territory, sex and age group.

11.3 PROJECTIONS OF THE INDIGENOUS POPULATION, BY AGE AND SEX—30 JUNE 1999(a)

Age group (years)	*New South Wales*	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*	*Northern Territory*	*Australian Capital Territory*	***Australia(b)***
MALES									
0–4	8 471	1 732	8 249	1 543	4 000	1 112	3 657	258	**29 028**
5–9	8 060	1 587	7 884	1 593	4 033	1 058	3 665	183	**28 076**
10–14	7 186	1 371	6 817	1 474	3 704	1 036	3 184	208	**24 987**
15–19	6 335	1 176	6 021	1 187	3 119	977	2 933	194	**21 959**
20–24	4 848	1 025	5 075	948	2 643	677	2 711	154	**18 093**
25–29	4 678	1 063	4 666	1 001	2 555	554	2 651	188	**17 365**
30–34	3 805	884	3 987	840	2 209	508	2 177	112	**14 530**
35–39	3 553	795	3 382	750	1 968	535	1 680	120	**12 788**
40–44	2 917	632	2 812	608	1 519	438	1 348	112	**10 396**
45–49	2 383	488	2 108	471	1 116	401	1 016	45	**8 033**
50–54	1 830	392	1 600	321	819	293	752	42	**6 057**
55–59	1 307	269	1 007	253	608	159	564	11	**4 183**
60–64	878	168	733	162	373	104	413	7	**2 840**
65–69	599	114	566	102	320	88	234	8	**2 033**
70–74	342	84	298	59	172	33	165	3	**1 156**
75+	292	88	376	85	212	33	192	1	**1 279**
Total	57 484	11 868	55 581	11 397	29 370	8 006	27 342	1 646	**202 803**
FEMALES									
0–4	8 198	1 634	7 999	1 549	3 765	1 069	3 365	218	**27 800**
5–9	7 790	1 539	7 688	1 547	3 775	964	3 311	209	**26 835**
10–14	6 904	1 317	6 620	1 372	3 790	984	2 912	195	**24 100**
15–19	5 965	1 130	5 846	1 263	3 045	936	2 903	183	**21 280**
20–24	4 832	967	5 000	1 039	2 632	774	2 665	170	**18 085**
25–29	5 118	1 000	5 145	1 111	2 637	653	2 625	184	**18 483**
30–34	4 456	1 018	4 420	1 009	2 450	554	2 190	149	**16 255**
35–39	4 069	863	3 844	853	2 107	571	1 790	148	**14 249**
40–44	3 270	714	2 996	624	1 699	507	1 499	105	**11 422**
45–49	2 634	507	2 496	475	1 235	362	1 137	83	**8 936**
50–54	1 885	360	1 760	361	906	243	927	34	**6 482**
55–59	1 423	257	1 194	269	594	156	592	26	**4 514**
60–64	943	192	882	194	454	124	530	4	**3 323**
65–69	721	178	675	140	394	78	334	4	**2 526**
70–74	433	103	429	94	232	50	220	9	**1 571**
75+	527	154	536	108	297	75	245	5	**1 951**
Total	59 168	11 933	57 530	12 008	30 012	8 100	27 245	1 726	**207 812**

(a) Low series projections.

(b) Includes Jervis Bay Territory.

Source: ABS, unpublished data, Experimental Estimates and Experimental Projections of the Aboriginal and Torres Strait Islander Population.

Torres Strait Islander estimates

A separate ERP figure for the Torres Strait Islander population is not currently available. In order to calculate population estimates, there must be agreement about who should be included. For example, an ERP for Torres Strait Islanders could refer to all people who are of Torres Strait Islander origin, whether they are also of Aboriginal origin or not, or it could be limited to those who are of Torres Strait Islander origin only. An ERP could be calculated for particular areas (e.g. the Torres Strait Region) or jurisdictions (such as Queensland), or for Australia as a whole. Extensive consultation will be required to determine the group(s) for which estimates would be most useful, and this is expected to take place in the near future.

Once a group of interest has been defined, the estimation process should be relatively straightforward, with no technical problems expected for census years. However, smaller population groups such as the Torres Strait Islander population (however defined) are affected to a greater extent than larger groups by factors such as respondent error, editing procedures, and missing responses. The small number of Torres Strait Islanders in the Census Post-Enumeration Survey will not be sufficient to produce reliable estimates of the net census undercount for this group, and information about births and deaths will not be available for jurisdictions without separate identification of Torres Strait Islanders. All of these factors will introduce added uncertainty to whatever estimates are calculated.

QUALITY AND AVAILABILITY OF DATA FROM CENSUSES AND SURVEYS

Table 11.4 presents summary information about a range of Census and survey collections of relevance to Indigenous health and welfare. Among the most important collections to date are the five-yearly Census of Population and Housing, the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS), the 1995 National Health Survey (NHS) and the 1992 Housing and Community Infrastructure Needs Survey (HCINS), as well as the Community Housing and Infrastructure Needs Survey (CHINS), which is currently under development.

11.4 NATIONAL CENSUS AND SURVEY COLLECTIONS RELEVANT TO INDIGENOUS HEALTH AND WELFARE

Collection (sponsoring agency), year	*Status*	*Approximate intended sampling fraction*	*Comment*	*Coverage*
Census (ABS), 1996	Results reported	100%	Conducted every 5 years. Limited content including population, housing, income, education, employment. Complete coverage of the population is an advantage.	All Indigenous & non-Indigenous persons
National Aboriginal & Torres Strait Islander Survey (ABS), 1994	Results reported	5%	Wide range of topics in the areas of: family & culture; health; housing; education & training; employment & income; & law & justice	All Indigenous persons
Housing & Community Infrastructure Needs Survey (ATSIC), 1992	Results reported. Second survey to be conducted in 1999 (see below).	100% of selected communities	Housing, environmental & health service infrastructure	Discrete Indigenous communities. All remote & rural communities. Variable in major urban centres.
Community Housing & Infrastructure Needs Survey (ATSIC & ABS), 1999	Proposed	100% of selected communities	As above	Discrete Indigenous communities
National Drug Strategy Household Survey(a) (DHSH), 1994	Results reported	6%	Drug use & exposure, knowledge, attitudes & policy preferences, law enforcement indicators, campaign awareness & impact	Indigenous persons 14 years or more in urban & metropolitan areas
Disability, Ageing & Carers Survey (ABS), 1993 & 1998	Indigenous results not sufficiently reliable for reporting	0.2%	Insufficient Indigenous sample	All Indigenous & non-Indigenous persons except remote areas
Survey of Training & Education (ABS), 1993 & 1997	Some Indigenous results reported	0.2%	Education & training with focus on training	All Indigenous & non-Indigenous persons 15–64 years (except in remote & sparsely settled areas in 1997)
Labour Force Survey (ABS), 1994 to 1999	Currently being analysed	0.4%	Labour force status. A question on Indigenous status was included in the survey in February 1994 & in March 1995–99.	All Indigenous & non-Indigenous persons 15 years & over
National Health Survey (ABS), 1989	Indigenous results not sufficiently reliable for reporting	0.2%	Wide range of information about health conditions, actions, behaviours etc.	All Indigenous & non-Indigenous persons
National Health Survey (ABS), 1995	Results reported for non-remote areas	0.7%	As above. Included enhanced sample of Indigenous persons.	All Indigenous and non-Indigenous persons
Australian Housing Survey (ABS), 1994	Results for Indigenous people not reported, reliability not assessed	0.2%	Dwelling types, nature of occupancy, landlords, housing costs, bedrooms, characteristics, affordability, utilisation, access to work & services	All dwellings of Indigenous & non-Indigenous persons except remote areas
Australian Housing Survey (ABS), 1999	Survey to be conducted	0.8%	As above. Will include an enhanced sample of Indigenous dwellings.	As above
BEACH, (General Practice Statistics & Classifications Unit, University of Sydney & AIHW), 1998 & on	Data collection commenced in April 1998	1 000 active GPs randomly selected per year. 100 consecutive consultations each.	A survey of general practice activity. GP consultations including characteristics of GP, patient, reason, treatment, risk factors.	GPs in private practice on a fee-for-service basis

(a) Urban Aboriginal and Torres Strait Islander Peoples' Supplement.

The Census of Population and Housing

The Census is perhaps the most useful statistical collection in Australia with respect to providing data about Indigenous people. It provides the basis for estimation of the Indigenous population, which is essential for the calculation of a wide range of statistics about Indigenous people. It also provides information on a range of topics, such as housing, employment, education, income and language.

The large intercensal increases in the counts of Indigenous people mean that comparisons of the characteristics of Indigenous people over time must be made with great caution, however. This is because it is not known whether people who were counted as Indigenous for the first time in 1996 are different in their characteristics from those who were previously counted as Indigenous. If the characteristics of the group counted as Indigenous in 1991 and the group counted as Indigenous in 1996 were different, this could be due in part to changes in the composition of the group, rather than to real changes in characteristics over time.

In order to assist users to interpret Indigenous census data appropriately, a working group comprised of experts from inside and outside the ABS developed a series of guiding principles. These principles are summarised in inset 11.5. More detailed information, including an account of known Indigenous data quality concerns from the 1996 Census, has been published elsewhere (Ross 1999), and is available from the National Centre for Aboriginal and Torres Strait Islander Statistics (for contact details, see the reverse title page at the beginning of this publication). Recent work undertaken by a member of the working group has suggested that, for at least some variables, changes over time between 1991 and 1996 may be able to be reliably assessed by comparing data from the two Censuses (Hunter & Gray 1998).

11.5 GUIDING PRINCIPLES FOR INTERPRETING INDIGENOUS CENSUS DATA

Following a workshop in early 1998, an expert working group developed a series of guiding principles for the interpretation of Indigenous census data. These are summarised below:

1. User beware—Users may draw incorrect conclusions if they fail to take into account the possibility that differences between Censuses may be due in large part to non-demographic increases in census counts, rather than changes in characteristics or social conditions.

2. Use percentages—Although not problem-free, the use of percentages rather than counts or numbers is advised, as percentages are prone to smaller biases resulting from changing propensity of people to identify as Indigenous in census collections.

3. Use specific geography—The size of the increase not explainable by demographic factors varied from place to place. If the variable of interest differs in a pattern similar to that of the increase in counts, this could produce misleading results.

4. Consider household size and composition—Of all census variables, those dealing with household size and composition (i.e. the mix of Indigenous and non-Indigenous people) may be prone to greater changes in value associated with changing propensity of people to identify as Indigenous between Censuses and should therefore be treated with extra caution when interpreting trends over time.

5. Consider your population—As noted in inset 2.1, there are a variety of population-related figures available, including census counts, population estimates and population projections. Users should ensure they use the appropriate figures for their purposes. For example, if the numerator represents data from the Census, then the appropriate denominator is a census count. If the numerator is from an administrative collection, then the appropriate denominator is either the experimental Indigenous estimated resident population (ERP) or an experimental Indigenous population projection for the appropriate year. The choice of ERP or projection depends on whether the year in question is before or after the date of the most recent Census. In either case, estimates or projections based on the closest census year should be used.

Source: Working Group to Establish Guidelines for Interpreting Indigenous Census Data 1998.

Data from the 1996 Census are available in a variety of forms. For example, a publication detailing the characteristics of people who reported they were of Indigenous origin in the Census has been produced for each State and Territory and for Australia. Community profiles, which include a series of up to 26 tables, are available for a variety of geographic areas, as specified in the new Australian Indigenous Geographical Classification developed for use with the 1996 Census. This classification divides all of Australia into a series of levels, from ‘Indigenous locations’ (containing at least 80 Indigenous people) to ‘Indigenous areas’ (containing at least 280 Indigenous people) to Aboriginal and Torres Strait Islander Commission (ATSIC) Regions. The classification is available in text form (ABS 1997g) or as a series of maps on CD-ROM (ABS 1998a). Community profiles are available for each location, area and region, as well as for user-specified combinations.

The Census of Population and Housing *continued*

Planning for the 2001 Census is now underway. As with previous Censuses, there will be a special Indigenous Enumeration Strategy (IES) to encourage Indigenous people to be counted in the Census. Among the components of the IES are promotional work to increase awareness of the Census, relationship-building with community leaders, the availability of Indigenous collectors to help people fill out their forms, and the option for communities to use a simplified census form which is administered by an interviewer rather than self-administered. For the 2001 Census, the ABS is exploring the possibility of collecting additional community level data in conjunction with the preparatory work for the Census in discrete Indigenous communities. This would include, but not be confined to, data to be collected in the planned 1999 CHINS.

ABS surveys

The ABS surveys of most relevance to Indigenous health and welfare are the 1994 NATSIS and the 1995 NHS. Data from these two household interview surveys have been used extensively throughout this publication. The value of these and other surveys depends on the number of Indigenous people sampled as well as on the quality of the data collected (which is often difficult to confirm). The number of Indigenous people included in standard national surveys is usually insufficient to provide reliable estimates due to the relatively small size of the Indigenous population.

In the 1995 NHS, the sample of Indigenous people was enhanced and as a result there were over 2,000 Indigenous participants from across Australia. A variety of stakeholders expressed concern about the appropriateness of the standard NHS questionnaires for some Indigenous people, particularly those in remote areas. Survey interviewers reported difficulty in administering the questionnaires to some Indigenous people in remote communities but they did not have the same problems in urban settings. As a result of these concerns, an extensive investigation of the quality of the data was conducted. The analysis indicated that Indigenous people in remote areas were less likely to complete questionnaires than Indigenous people in other areas or non-Indigenous people. There was also evidence of poor data quality for some key data items for Indigenous people in remote areas (Gray 1998).

It was not possible to assess adequately the responses to many of the questions due to a lack of alternative information. However, there were sufficient issues identified to raise concerns that data from some Indigenous people could be biased and/or misleading. As a result, the ABS has excluded data from all people (both Indigenous and non-Indigenous) from remote areas in the publication of results comparing Indigenous and non-Indigenous people in the NHS (ABS 1999a). The NHS data included in this publication (in chapters 4, 5 and 7) thus refer only to people living in non-remote areas.

ABS surveys *continued*

The quality of data from some Indigenous people in interview-based surveys is a major concern and more work is needed in a range of different areas. This was one of a number of conclusions of a workshop held in early 1999 to investigate data quality. Further work is needed to develop improved and cost-effective data collection methods, especially for remote area Indigenous people. More analysis of existing data sets is also needed to explore aspects of data quality with the aim of better informing users and assisting the development of better methods. Increased attention is being paid to data quality and validation issues at the planning stages of surveys as well as at later stages. While greater attention to the quality of data from Indigenous people is certainly needed, it is important to address this issue within the context of the quality of survey data in general, rather than as a problem unique to Indigenous data.

The ABS has recently completed a review of its household survey program and has also developed an Indigenous statistics strategy, both of which are relevant to the future availability of data about Indigenous Australians. More information about the review and the strategy are provided later in this chapter.

Community Housing and Infrastructure Needs Survey

The ABS is currently developing a CHINS under an agreement with ATSIC. This collection, which is expected to take place in late 1999, will provide up-to-date information on housing and infrastructure in all discrete Indigenous communities. A similar survey, the HCINS, was conducted for ATSIC by a variety of contractors in 1992.

It is expected that data collected in the CHINS will provide information on such topics as the supply and condition of housing; the adequacy and quality of water supplies; the supply of electricity; sewerage, solid waste and drainage systems; communication and transport infrastructure; and aspects of health services, education and other services. The results are expected to be released from early 2000.

The CHINS will be conducted in discrete Indigenous communities (that is, locations with distinct boundaries with majority or near majority Indigenous populations), and consequently no data on Indigenous housing and infrastructure needs in other areas will be available from the collection. In order to help fill this gap, the ABS, with funding from the Commonwealth Department of Family and Community Services, will enhance the Indigenous sample in the 1999 Australian Housing Survey. Indigenous data from this survey are expected to be available in early 2001. The aim is to allow Indigenous statistics of adequate quality to be produced for non-remote areas and, together with the CHINS data, make it possible to produce some national level Indigenous housing data.

Community Housing and Infrastructure Needs Survey *continued*

To improve efficiency, the ABS is assessing the feasibility of conducting future CHINS-type data collections, with some modifications to data items to be collected, with the preparatory phases of the remote area Indigenous enumeration in the five-yearly Census. The availability of a combined remote area Census/CHINS community-level dataset would also increase the utility of statistics derived from this approach.

The Bettering the Evaluation and Care of Health (BEACH) Survey

The BEACH Survey is a new collection which began in April 1998. It is designed to provide information about general practice activity and to increase our understanding of the use of general medical practitioners (GPs) in Australia. It consists of a national random sample of active GPs selected from Medicare lists. Participating GPs are asked to provide information about 100 consecutive patient consultations, including face-to-face, telephone and other contacts. Some 1,000 GPs will be included in the sample each year, for a total of 100,000 consultations. Data are being collected on characteristics of the practitioner, the patient (including Indigenous status), the consultation and the management of the problem(s) (including medication, management and other treatment) (AIHW 1998g). In the first six months of the study, over 600 consultations involved patients identified as Aboriginal or Torres Strait Islander (Britt et al. 1999). Results from the first full year were not yet available at the time of writing, but in the future these data should provide useful information about Indigenous people who use GPs.

QUALITY AND AVAILABILITY OF ADMINISTRATIVE DATA

Data generated as by-products of the administrative processes of government are potentially of great use in monitoring the health and wellbeing of the Indigenous population. The usefulness of administrative data collections is currently limited, however, by the quality of identification of Indigenous people. The completeness with which Indigenous people are recorded is likely to vary from collection to collection and place to place and is often unknown. Although most collections are moving toward the use of the ABS standard question on Indigenous status, there are still differences in the questions used and the way in which the question is applied (for example, whether the relevant person is actually asked the question).

Information about the identification of Indigenous people in administrative data sets of most relevance to health is presented in tables 11.6–11.12. Similar information from community services-related collections is presented in table 11.13.

The year in which information about Indigenous status was first collected varies by jurisdiction and by collection (table 11.6), as does the actual wording of the questions used (see tables 11.7, 11.10 and 11.12–11.13). All States and Territories now collect information about Indigenous status on their birth and death notification forms, perinatal data collection forms, hospital separation data collections and cancer registration forms. As is discussed later in this chapter, the quality of the identification of Indigenous people in these and other collections is not always adequate to allow for reporting.

11.6 YEAR OF FIRST COLLECTION OF INDIGENOUS STATUS(a)

	New South Wales	*Victoria*	*Queensland*	*South Australia*	*Western Australia*	*Tasmania*	*Northern Territory*	*Australian Capital Territory*
Birth notification form	Before 1990	1987	1996	1986	1991	1988	1988	1984
Death notification form	1980	1987	1996	1986	1985	1988	1988	1984
Medical certificate								
Cause of death	(b)Not asked	1987	1996	In place	1983	(c)1999	1988	1998
Cause of perinatal death	In place	1995	1996	In place	1983	(c)(d)1999	1988	1999
Hospital separation	1979	1986	1993	1984	1981	1997	1976	1981
Perinatal collection	1986	1982	1987	1981	1980	1996	1986	1989
Cancer registration	1992	1982	1988	1977	1981	1991	1981	1992
Communicable disease notification form	1991	Not asked	In place	In place	1988	In place	Before 1980	1991

(a) If date of first collection is unknown, current status is shown.

(b) Information on Indigenous status may be available by linking with the death notification form.

(c) Expected.

(d) The new medical certificate cause of death form appears to apply to neonatal deaths. Detailed information about perinatal deaths is obtained as part of the perinatal data collection form.

Source: ABS & AIHW 1997b; Information provided by State and Territory Health Departments and Registrars-General.

Births

Table 11.7 indicates the form of the question used to identify Indigenous people on birth registrations and in perinatal collections in the States and Territories. The majority of questions are based on the ABS standard but there are variations according to jurisdiction and form type.

11.7 INDIGENOUS IDENTIFIER, BIRTH AND PERINATAL COLLECTIONS

			Question asked about		
State and Territory	*Question wording*	*Possible responses*	*Mother*	*Father*	*Child*
		BIRTH NOTIFICATION 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? (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
Queensland	Is the mother/father of Aboriginal or Torres Strait Islander origin? (If of both Aborginal 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	Aboriginal or Torres Strait Islander?	Yes No	Y	Y	N
Tasmania(a)	Is the mother/father of Aboriginal or Torres Strait Islander origin? (If of both Aborginal 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?(b)	No Yes, Aboriginal origin Yes, Torres Strait Islander origin	Y	Y	Y
Australian Capital Territory	Are the parents of Aboriginal or Torres Strait Islander origin? (if both tick both 'yes' boxes)(c)	No Yes, Aboriginal origin Yes, Torres Strait Islander	Y	Y	N
		PERINATAL COLLECTION			
New South Wales	Indigenous status	Aboriginal Torres Strait Islander Aboriginal and Torres Strait Islander None of the above	Y	N	N
Victoria	Aboriginal (mother)	Yes No	Y	N	N
Queensland	Ethnic origin	Caucasian/European Australian Aboriginal Torres Str. Islander Asian Other (specify)	Y	N	N
South Australia	Race	Caucasian Aboriginal Asian Other	Y	N	N
Western Australia	Ethnic origin	Caucasian Aboriginal/TSI Other (blank line)	Y	N	N
Tasmania	No actual question. A series of tick boxes is provided without explanation.	Aboriginal Aboriginal/Torres St. Islander Torres St. Islander Other	Y	N	N
Northern Territory	Aboriginality	Aboriginal Non-Aboriginal	Y	N	N
Australian Capital Territory	Ethnic origin (mother)	Aboriginal Non-Aboriginal	Y	N	N

(a) New form to be implemented in 1999.

(b) Three separate questions.

(c) Separate responses for mother and father.

Source: Information provided by State and Territory Health Departments and Registrars-General.

Births *continued*

There were 9,999 births registered in Australia in 1997 in which at least one of the parents was identified as being of Indigenous origin (ABS 1998b). This is 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 identified as Indigenous) with the number projected based on census figures. Table 11.8 shows the number of births registered in calendar years 1995–97 as a proportion of projected births based on both the 1991 Census and the 1996 Census. These two sets of projections were based on the best available information at the time they were generated. The table illustrates how the large increases in the Indigenous population between 1991 and 1996 have affected the assessment of completeness of recording, by changing the number of births expected, while the number registered remains the same for a given year.

11.8 RATIO OF REGISTERED TO EXPECTED BIRTHS

	1991-based projections			*1996-based projections*		
State and Territory	*1995*	*1996*	*1997*	*1995*	*1996*	*1997*
New South Wales	0.96	0.99	1.13	0.70	0.72	0.82
Victoria	0.89	0.76	0.72	0.82	0.71	0.67
Queensland	0.01	1.01	1.19	0.01	0.79	0.93
South Australia	1.02	1.01	1.06	0.90	0.89	0.93
Western Australia	0.93	0.94	0.89	0.97	0.98	0.93
Tasmania	0.88	0.79	0.97	0.63	0.56	0.70
Northern Territory	0.98	0.96	0.89	0.97	0.95	0.88
Australian Capital Territory	0.91	1.12	0.87	0.60	0.73	0.57
Australia	**0.70**	**0.96**	**1.03**	**0.59**	**0.81**	**0.87**

Source: ABS 1998b.

On the basis of the ratios in table 11.8 as well as other available information about collection processes, detailed data on births registered as Indigenous in 1997 were published for Queensland, South Australia, Western Australia and the Northern Territory (ABS 1998b). For other jurisdictions, only summary data were released.

Table 11.8 illustrates the difficulty of estimating expected numbers of births (and therefore the level of completeness) when there are changes in the propensity of people to identify as Indigenous over time.

Another way of assessing the completeness of birth registration data is to compare registrations with data collected by midwives and others as part of the perinatal statistics collections (see chapter 6 for a comparison of these two types of collections). As indicated in table 11.7, the perinatal collections only include information about the Indigenous status of the mother, while birth registration forms ask about both the mother and the father. Table 11.9 presents data for 1996 for birth registrations, perinatal collections and 1996 Census-based projections. Information from the perinatal collections is not yet available for 1997.

11.9 INDIGENOUS BIRTHS(a)

				1996 birth registrations(b)			
State and Territory	*1996 Projected Indigenous births(c)(d)*	*1996–97 Projected births to Indigenous mothers(c)(e)*	*1996 Perinatal collection(f)*	*Mother and father both Indigenous*	*Mother Indigenous, father non-Indigenous or paternity not stated*	*Mother non-Indigenous, father Indigenous*	*Total Indigenous*
New South Wales	3 392	2 335	1 712	641	1 033	770	2 444
Victoria	669	460	448	100	233	141	474
Queensland	3 224	2 473	2 606	859	1 064	611	2 534
South Australia	626	481	348	214	209	134	557
Western Australia	1 564	1 309	1 411	719	553	266	1 538
Tasmania	432	256	(g)5	21	118	105	244
Northern Territory	1 411	1 344	1 210	558	693	92	1 343
Australian Capital Territory	90	57	80	13	25	28	66
Australia	**11 409**	**8 862**	**7 820**	**3 128**	**3 929**	**2 147**	**9 204**

(a) Refers to calendar year 1996, unless otherwise stated.

(b) In 1997, only data for Queensland, South Australia, Western Australia and the Northern Territory were considered by the ABS to be of publishable quality. See births section and ABS 1998b for more details.

(c) 1996 Census-based.

(d) Includes children of Indigenous mothers and/or Indigenous fathers.

(e) Refers to financial year 1996–97.

(f) Refers to babies of Indigenous mothers.

(g) Data from the perinatal data collection were not available for 1996 for Tasmania. Data from 1995 have been used as an estimate.

Source: ABS 1997c, 1998b, unpublished data, Experimental Estimates and Experimental Projections of the Aboriginal and Torres Strait Islander population; Day, Sullivan and Lancaster 1999a.

The information in table 11.9 can be used to highlight discrepancies among the various data sources. For example, in Queensland in 1996, there were 2,534 birth registrations for which at least one parent was identified as Indigenous. This is considerably lower than the 3,224 births projected for Queensland for that year, based on census data from 1996. Similarly, the number of births to Indigenous mothers, as identified through birth registrations (1,923, or 1,064 plus 859), was lower than the number recorded in the perinatal collection (2,606) or projected based on census data (2,473 for 1996–97). The lower number of birth registrations identified as Indigenous is not surprising, as 1996 was the first year in which birth registration forms in Queensland included Indigenous status. The relationships among the data sources vary according to State and Territory, as can be seen in table 11.9.

Deaths

Table 11.10 indicates the form of the question used to identify Indigenous people on death notification and cause of death forms in the States and Territories. As with birth registration and perinatal forms, many death-related forms use the ABS standard question, although sometimes with variations.

11.10 INDIGENOUS IDENTIFIER, DEATH REGISTRATION AND MEDICAL CAUSE OF DEATH FORMS

State and Territory	*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?	(blank line)
Queenland	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, Aboriginal origin Yes, Torres Strait Islander origin
Western Australia	Aboriginal	Yes No
Tasmania(a)	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 Australian Aboriginal or Torres Strait Islander origin?	No Yes, Australian Aboriginal or 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	No question asked	. .
Victoria	Was the deceased of Aboriginal or Torres Strait Islander origin?	(blank line)
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	Of Aboriginal or Torres Strait Islander origin?	No Yes — Aboriginal T.S.I.
Western Australia	Aboriginal	Yes No
Tasmania(a)	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 Australian Aboriginal origin? Was the deceased of Torres Strait Islander origin?	Yes No(b)
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

(a) New form to be implemented in 1999.
(b) Two sets of possible responses are provided.

Source: Information provided by State and Territory Health Departments and Registrars-General.

In 1997, there were 1,662 deaths registered as being of an Indigenous person (ABS 1998d). This figure underestimates the actual number of deaths of Indigenous people, as not all Indigenous people who died were identified as Indigenous on their death notification forms. An estimate of the level of such under-reporting can be made by comparing the number of registered deaths recorded as Indigenous with the number expected based on experimental life tables derived by the ABS from census results.

Deaths *continued*

Table 11.11 shows the number of deaths registered as Indigenous in 1995–97 as a proportion of Indigenous deaths expected in those years, as derived from two sets of experimental life tables. The first set of estimates of the completeness of registration is based on 1991 Census figures and experimental life tables for 1986–91. The second set of estimates is based on 1996 Census results and experimental life tables for 1991–96. (Both sets of estimates are based on Indigenous life tables for all of Australia, as State-specific life tables are not currently available for the Indigenous population.) The variation between the estimated completeness using 1991-based projections of deaths and 1996-based projections is due to the large increase in the Indigenous population between 1991 and 1996. In addition, there is some uncertainty about the reliability of the estimated Indigenous life tables which are used to estimate numbers of Indigenous deaths. For these reasons, the projected death figures must be considered very sensitive to the inputs used and the resulting projections very volatile. They should be used only as indicative guides to the completeness with which Indigenous deaths are correctly registered.

As in previous years, South Australia, Western Australia and the Northern Territory had the smallest discrepancies between registered and expected deaths. While further investigation of these methods may lead to changes in these expected values, alternative methods of validating the quality of Indigenous death registrations should be explored.

11.11 RATIO OF REGISTERED TO EXPECTED DEATHS

	New South Wales	*Victoria*	*Queensland(a)*	*South Australia*	*Western Australia*	*Tasmania(b)*	*Northern Territory*	*Australian Capital Territory*	***Australia(c)***
				NUMBER					
Registered deaths									
1995	224	50	—	121	384	3	387	9	**1 182**
1996	177	49	258	118	370	—	328	5	**1 306**
1997	(d)88	93	531	132	351	5	(e)458	4	**1 662**
				RATIO					
Registered to expected deaths, 1991 Census-based projections									
1995	0.43	0.44	—	0.96	1.00	0.06	1.03	0.90	**0.54**
1996	0.34	0.43	0.42	0.92	0.95	—	0.87	0.50	**0.59**
1997	0.16	0.80	0.85	1.01	0.89	0.09	1.19	0.36	**0.74**
Registered to expected deaths, 1996 Census-based projections									
1995	0.24	0.24	—	0.65	0.79	0.03	0.87	0.50	**0.36**
1996	0.19	0.23	0.29	0.63	0.75	0.01	0.73	0.28	**0.39**
1997	0.09	0.43	0.58	0.68	0.70	0.04	1.00	0.20	**0.49**

(a) Queensland introduced an improved Death Information Form in 1996 to capture Indigenous origin. Although the penetration of this new form increased from 1996 to 1997, it was only used for around 80% of deaths throughout the State in 1997.

(b) Tasmanian data sourced from other States and Territories, i.e. these are deaths of Indigenous people who usually resided in Tasmania but whose deaths occurred and were registered elsewhere in Australia.

(c) Includes ‘Other Territories’.

(d) The decline in the number of Indigenous deaths registered in New South Wales in 1997 is the result of a technical issue.

(e) A relatively high number of Indigenous deaths were registered in the Northern Territory in 1997, following a relatively low number in 1996. This reflects the clearing of a backlog of death registrations.

Source: ABS 1998d.

Hospitals The form of the question used in hospital data collections varies by jurisdiction, as can be seen in table 11.12. Little is known about the accuracy of recording of Indigenous status in hospitals, and there are currently no national estimates of the level of completeness. A jurisdiction-wide estimate is currently available only for the Northern Territory, which, in a 1997 data quality audit of all its public hospitals, showed a 94% agreement between hospital records and patient reports with respect to Indigenous status. Agreement was over 90% in each of the five hospitals audited (Condon et al. 1998). The level of agreement in the Northern Territory was much higher than was previously found in small studies conducted in a few hospitals in other jurisdictions (e.g. Lynch & Lewis 1997; Shannon, Brough & Haswell-Elkins 1997).

11.12 INDIGENOUS IDENTIFIER, PUBLIC HOSPITAL ADMISSIONS(a)

State and Territory	*Question wording*	*Possible responses*
New South Wales	Indigenous status	Aborigine Torres Strait Is. Both A & TSI Neither A or TSI
Victoria	Are you of Aboriginal or Torres Strait Islander origin?	Not Indigenous—Not Aboriginal or Torres Strait Islander origin Indigenous—Aboriginal but not Torres Strait Islander origin Indigenous—Torres Strait Islander but not Aboriginal origin Indigenous—Aboriginal and Torres Strait Islander origin
Queensland	(b)	. .
South Australia	Race	Caucasian Aboriginal Asian Other TSI Both A & TSI Unknown
Western Australia	Indigenous status	Abor not TSI TSI not Abor Abor and TSI Other
Tasmania	Ethnic origin(c)	Aboriginal Torres Strait Islander Aboriginal/Torres Strait Not applicable Not stated
Northern Territory	Race: please circle one of the following categories	Aboriginal but not Torres Strait Islander Torres Strait Islander but not Aboriginal Aboriginal and Torres Strait Islander Not Aboriginal or Torres Strait Islander Not stated
Australian Capital Territory	Origin	Australian Non-Aboriginal Australian Aboriginal European Asian Other

(a) Different forms or computer entry screens may be in use in different hospitals within a State or Territory.

(b) No standard hospital inpatient admission form is in place in Queensland hospitals, but Queensland Health has instructed hospitals to use the ABS standard question.

(c) Staff training information indicates that staff should ask 'Are you Aboriginal and/or Torres Strait Islander?', but this is not specified in the computer entry screen.

Source: Information provided by State and Territory Health Departments.

Hospitals *continued*

In 1998, at the request of the Australian Health Ministers' Advisory Council (AHMAC), the Aboriginal and Torres Strait Islander Health and Welfare Information Unit coordinated a project to develop, pilot and evaluate a methodology for assessing the completeness of Indigenous identification in hospital separation data. Eleven hospitals in five States and Territories were involved in the project. Data about a range of demographic characteristics (including Indigenous status) were collected by personal interview and compared with the corresponding data in hospital records. This enabled estimation of the accuracy of recording of Indigenous status in hospital records and a comparison of this with the accuracy of recording of other demographic variables in the same hospital. (It was assumed for the purposes of estimating accuracy that the information collected at interview was correct.) The pilot project demonstrated that it was possible to assess data quality by using a simple set of procedures and local staff after brief training.

The accuracy with which a person's Indigenous status was recorded varied greatly from hospital to hospital, ranging from 55–100% of people interviewed. The hospital records were less accurate for Indigenous status than for other items, and there was more variability in accuracy from hospital to hospital. The proportion of people living in a hospital's catchment area was a major factor associated with the accuracy of recording of Indigenous status. Hospitals in areas where a high proportion of the population was Indigenous had records which were more accurate in their recording of a patient's Indigenous status than were those in areas in which a lower proportion of the catchment area population was Indigenous (Aboriginal and Torres Strait Islander Health and Welfare Information Unit 1999).

As a result of this project, a set of procedures has been developed, detailing the steps that a hospital, group of hospitals or State and Territory health department could follow to enable them to implement a data quality assessment exercise within their collection(s). Details on the estimation of a correction factor for the recording of Indigenous status in hospital separations data are also included, as are approaches to sample selection and a training package for interviewers who undertake the data collection (Aboriginal and Torres Strait Islander Health and Welfare Information Unit 1999). For more information about this project, contact the National Centre for Aboriginal and Torres Strait Islander Statistics (for contact details, see the reverse title page at the beginning of this publication).

At its April 1999 meeting, AHMAC allocated additional resources to promote improved Indigenous identification in hospitals in all States and Territories. As part of this process all jurisdictions will be asked to assess the completeness of recording of Indigenous status in their hospital data collections by the end of 2001.

Community services collections

The range of community service-related administrative data collections is quite large and the identification of Indigenous people is highly variable from collection to collection. In some collections, all data are collected using a single standard form. In others, there is a different form (often with a different question about Indigenous status) for every State and Territory. Table 11.13 presents the form of the question used to identify Indigenous people in selected collections in the area of community services. Little is known about the quality of data on Indigenous status in most of these collections, although in some cases there is a high level of 'not stated' or 'not known' responses recorded.

11.13 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	Cultural issues	(blank line)
Victoria	Cultural background information and language issues: Aboriginal/Torres Strait?	Yes No Unknown
Queensland	Officers are instructed to ask about Indigenous status using the ABS standard question, but only the variable name 'Abl-TSI' appears on the computer entry screen	Aboriginal Non-Aboriginal Torres Strait Islander Unknown
South Australia	Cultural group	'Aboriginal or Torres Strait Islander' is one of ten options
Western Australia	About child(a)	Indigenous Non-Indigenous Unknown
Tasmania	Ethnicity	Aboriginal/TS Is. Other Australian Overseas Unknown
Northern Territory	Ethnicity	Aboriginal Aboriginal and Torres Strait Islander Neither Aboriginal or Torres Strait Islander Not stated Torres Strait Islander
Australian Capital Territory	Ethnicity of mother/father: Aboriginal/TSI?(b)	Yes No
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
Correctional services		
National Prisoner Census	Aboriginality: The racial origin group to which the person considers him/herself to belong	Aboriginal Torres Strait Islander(c) Non-Aboriginal Unknown/Not stated
Disability support services		
Commonwealth-State Disability Agreement (CSDA) Minimum Data Set Consumer Form 1999	Are you (the consumer) of Indigenous origin?	Yes, of Aboriginal origin Yes, of Torres Strait Islander origin No Not known
Aged care services		
Home and Community Care (HACC) Service Users Characteristics(d)	Does the person identify as an Aboriginal or Torres Strait Islander?	Yes No Not known
Aged Care Assessment Program Minimum Data Set (residential aged care)	Are you Aboriginal? Are you a Torres Strait Islander?	Yes No

(a) No specific question is asked. A field officer may indicate a child's Indigenous status (based on the field officer's own assessment) on an intake form.

(b) Two separate questions.

(c) Instructions specify that if Torres Strait Islanders are not separately identified, they should be coded as Aboriginal.

(d) A HACC Minimum Data Set, which will include the ABS standard question on Indigenous status, is due to be implemented by mid-2000.

Source: ABS 1998l; AIHW 1997b; information provided by State and Territory community service agencies and the Australian Institute of Health and Welfare.

Community services collections *continued*

Although the Commonwealth-State Disability Agreement (CSDA) Minimum Dataset has always included a question on Indigenous status (with a standard definition), a study of Indigenous identification practices in CSDA-funded disability support services in South Australia and Victoria revealed a wide variety of approaches and varying levels of understanding of and commitment to the collection of information about Indigenous status (see inset 3.16). Although a similar situation is likely to exist with respect to other collections, little information is currently available.

The ABS and the Australian Institute of Health and Welfare (AIHW) are working in conjunction with a number of community service agencies across jurisdictions to improve the quality of data from their data collections. As a result of recent interactions between the ABS and Centrelink, the latter agency has decided to adopt the ABS standard question on all 59 of the forms it uses in the administration of income support services.

RECENT NATIONAL STRATEGIC INITIATIVES AND FUTURE PLANS

The increasing demand for information

In recent years, Australian Governments have placed increasing emphasis on evidence-based approaches in the development, monitoring and evaluation of policies and programs which aim to address the social and economic disadvantage of Aboriginal and Torres Strait Islander Australians. This is particularly true in the areas of health and community services. However, as a result of issues related to data quality and availability such as those discussed above, the required level of statistical evidence to support such an approach is often not available.

Statements about deficiencies in Indigenous statistics and the need for improvement in the availability and quality of data have been made for many years in a number of comprehensive reports and proposals (see, for example, Aboriginal and Torres Strait Islander Health and Welfare Information Unit 1997; Australian Bureau of Statistics & Australian Institute of Health and Welfare 1997b; Australian Bureau of Statistics, Australian Institute of Health and Welfare & Commonwealth Department of Health and Family Services 1998; Australian Institute of Health and Welfare 1995b; Council of Australian Governments 1992; National Aboriginal Health Strategy Evaluation Committee 1994; Royal Commission into Aboriginal Deaths in Custody 1991; Smith 1978; Task Force on Aboriginal Statistics 1985; Thomson (ed.) 1986). Generally, the authors of these reports have agreed on the nature of the improvements that are needed and even on how the improvements should be made. Despite the common messages, however, progress to improve data quality and availability has been slow in past years, due in large part to a lack of sufficient national commitment and/or coordination (Aboriginal and Torres Strait Islander Health and Welfare Information Unit 1997).

The increasing demand for information *continued*

More recently, the need for high quality, regularly available statistics about Indigenous people has attracted the attention of the highest levels of government. In late 1996, the Prime Minister wrote to State Premiers and Territory Chief Ministers seeking their agreement to improved performance reporting on service delivery to Indigenous peoples. In the following year, the Prime Minister requested the Steering Committee of the Review of Commonwealth/State Service Provision to oversee monitoring of the performance of agencies in delivering services to Aboriginal and Torres Strait Islander peoples.

Another initiative in this area, which was promoted by the Council for Aboriginal Reconciliation and supported by the Office of Indigenous Affairs within the Department of Prime Minister and Cabinet, proposed the systematic benchmarking of service availability and delivery to Indigenous Australians (Council for Aboriginal Reconciliation & Centre for Aboriginal Economic Policy Research 1998). In recognition that this can only be done if adequate data are available, the Council and the Office have begun a campaign to promote improvements in the quality and availability of data.

At the same time, there have been important developments in the areas of information plans/agreements and performance indicators/performance reporting, most notably in health, community services and housing. While these initiatives have diverse origins, they are often mutually supporting. As they develop, they tend to contribute positively to the development of one another. Some of these are discussed in more detail below.

Strategic initiatives in health information: The National Aboriginal and Torres Strait Islander Health Information Plan

The National Health Information Development Plan (NHIDP) was developed in 1994 in recognition of the need for nationally agreed priorities for health information development in Australia. In it, the highest priority was given to information about the health of Aboriginal and Torres Strait Islander people (AIHW & AHMAC 1995). The AHMAC endorsed the NHIDP recommendation to '(w)ork with Aboriginal and Torres Strait Islander peoples to develop a plan to improve all aspects of information about their health and health services' (AIHW & AHMAC 1995, p. 5) and commissioned the development of a National Aboriginal and Torres Strait Islander Health Information Plan (usually referred to by the acronym NIHIP). This Plan, subtitled 'This time let's make it happen', was developed by the Aboriginal and Torres Strait Islander Health and Welfare Information Unit after extensive consultation with a broad range of stakeholders and was endorsed by AHMAC in October 1997 (Aboriginal and Torres Strait Islander Health and Welfare Information Unit 1997). Copies of the Plan are available from the National Centre for Aboriginal and Torres Strait Islander Statistics (for contact details, see the reverse title page at the beginning of this publication).

Strategic initiatives in health information: The National Aboriginal and Torres Strait Islander Health Information Plan *continued*

The NIHIP contains 42 recommendations for the collection and maintenance of quality statistics on the health of Indigenous Australians. Recommendations of the Plan fall into three main areas: the development of an appropriate infrastructure for the collection and maintenance of Indigenous data; technical improvements required to support the collection of high quality statistics on Indigenous health; and effective national leadership and coordination to progress issues and strategies across all jurisdictions (Aboriginal and Torres Strait Islander Health and Welfare Information Unit 1997).

The first area highlights the need to ensure that appropriate infrastructure is available to support the collection and maintenance of good quality data on Indigenous peoples. Strategies to achieve this include developing guidelines for the process of collecting, using and disseminating health information about Indigenous people; enhancing information management skills among community health service staff; disseminating locally relevant information and research findings to communities; promoting the need to collect information about Indigenous peoples; and supporting the role of the Indigenous health workforce in data collection and maintenance through ongoing training and other professional support (Aboriginal and Torres Strait Islander Health and Welfare Information Unit 1997).

The second group of recommendations deals with topics such as implementing strategies to improve the accuracy of recording of Indigenous identification in administrative records, ensuring the quality of population estimates and maintaining special purpose collections that, together with other sources of data, will provide a comprehensive national health information base. The third group of recommendations is concerned with the need to coordinate and promote intersectoral commitment to the Plan and its recommendations (Aboriginal and Torres Strait Islander Health and Welfare Information Unit 1997).

To facilitate and monitor the implementation of the Plan, a high-level working group consisting of representatives of Indigenous health organisations and other stakeholders, including ABS and AIHW, was set up by the National Health Information Management Group including ABS and AIHW. This Implementation Working Group's task is a major one. Implementing the recommendations of the Plan is the highest priority task for NHIMG and will remain so for the next few years. The Implementation Working Group has met a number of times since early 1998 and some progress has already been made in implementing some of the highest priority recommendations. Lead agencies have been assigned to each of the recommendations and proposed work plans have been developed for the implementation of most recommendations. These were endorsed by AHMAC in April 1999. The commitment of relevant agencies appears to be the key to significant progress, and this is what has often been lacking in previous attempts to improve Indigenous health information (Aboriginal

Strategic initiatives in health information: The National Aboriginal and Torres Strait Islander Health Information Plan *continued*

and Torres Strait Islander Health and Welfare Information Unit 1997). A helpful step in achieving this commitment has been the endorsement of the Plan's recommendations by a joint meeting of the Australian Health Ministers' Conference and the Ministerial Council for Aboriginal and Torres Strait Islander Affairs.

Strategic initiatives in health information: performance indicators

In parallel with the development of the NIHIP, the Heads of Aboriginal Health Units began in 1996 to develop a set of performance indicators for Aboriginal and Torres Strait Islander health. The development of the performance indicators, incorporating targets for selected indicators, involved consultation with organisations such as the National Aboriginal Community Controlled Health Organisations (NACCHO), ATSIC, ABS and the National Health and Medical Research Council. A technical working group was created to assist in the detailed development of the indicators. Interim performance indicators were endorsed by the Commonwealth, State and Territory Health Ministers in April 1997. They were first reported on by jurisdictions in October 1997, and subsequently in April 1999. More work is needed to refine the indicators and this is expected to occur in the coming months. This process represents the first formal joint commitment by all Australian Governments to bring about tangible and measurable improvements to the health of Aboriginal and Torres Strait Islander people.

In all, there are upwards of 50 indicators covering the following topics: mortality; morbidity; access to health services; health services impacts; workforce developments; risk factors; intersectoral issues; community development; and quality of service provision. For many jurisdictions, the data required to report on the indicators are not available or are of poor quality. In such cases, jurisdictions have agreed to report on what they are doing to improve data quality/availability. Improving data to facilitate reporting on health performance indicators is therefore a key driver of the implementation process for the NIHIP.

Strategic initiatives in health information: framework agreements

Another recent initiative which will require as well as facilitate improvements in health information is the development of Aboriginal and Torres Strait Islander Health Framework Agreements. These Agreements have been developed and signed in each State and Territory by State and Territory Health Ministers, the Commonwealth Health Minister, the Chairman of the Board of ATSIC and the local peak body representing community-controlled health services.

The Framework Agreements cover areas such as joint planning, access to mainstream services, resourcing, data collection, evaluation, and transparency of decision making. An integral part of these Agreements is the promotion of strategic work to improve the evidence base for policies and programs in Indigenous health. The Agreements indicate that the work should encompass strategies to 'improve the quality of heath data systems; improve the performance evaluation framework for Aboriginal and Torres Strait Islander health; and develop a strategic focus

Strategic initiatives in health information: framework agreements *continued*

in Aboriginal and Torres Strait Islander health research' (Office for Aboriginal and Torres Strait Islander Health, personal communication). The Agreements also highlight the need to develop an ethical framework for the collection of routine administrative health data and to ensure effective systems through which such data are collected and analysed and results provided back to the community.

In addition to the Framework Agreements, the Department of Health and Aged Care, in partnership with NACCHO, has developed a questionnaire for the Aboriginal community-controlled primary health care services funded by the Commonwealth. The questionnaire has been designed to gather information to meet the Government's accountability requirements, to assist health care services in their work to improve the quality of their services and to facilitate resource needs assessment. The first questionnaire was administered in the 1997–98 financial year, and the results are expected to be analysed before the questionnaire for 1998–99 is sent to the services in mid-1999. The partnership approach has been used to ensure that all the stakeholders will gain some benefits from the collection of the data. Some joint analysis of the data is planned, and each service will also receive a report on their activities in the context of the national data set. In addition to the flow of information from Aboriginal Health Services to the Commonwealth, it is recognised that feeding back local clinic information to local clinic staff is essential. This should ultimately enable clinic staff to make use of their local data in planning service delivery and in monitoring and evaluating the effectiveness of their efforts. In order to achieve this aim, however, substantial training and encouragement at the local level will be required.

Strategic initiatives in community services information

Formalised information processes are less well developed in the area of community services than they are for health and health services. The Standing Committee of Community Services and Income Security Administrators (SCCSISA) first requested the National Community Services Information Management Group to prepare a draft National Community Services Information Development Plan (NCSIDP) in October 1997. This Plan was developed after consultation with community services, government agencies and non-government peak organisations. It was formally endorsed by SCCSISA in 1998 and published in 1999 (Standing Committee of Community Services and Income Security Administrators 1999). Among the areas covered by the Plan are child care, child welfare, family support services, supported accommodation assistance, emergency relief and crisis services, disability services, and aged care services.

In the NCSIDP, information relating to the Indigenous population is given the highest priority of all community service topics for data development. The Plan notes that data on the wellbeing of Indigenous people are inadequate and that the incomplete identification of Indigenous people in administrative collections is a barrier to the availability of relevant data. High priority is therefore given to the introduction of a standard Indigenous identifier in administrative data collections.

Strategic initiatives in community services information *continued*

The NCSIDP is concerned with information needs for Australia as a whole, and is not specific to the Indigenous population. A proposal for the development of a more specific National Aboriginal and Torres Strait Islander Community Services Information Plan to address community services pertaining to Indigenous people (along the lines of the NIHIP) has recently been agreed to by SCCSISA, which has allocated some resources for this work.

No performance indicators have yet been developed in the area of community services specifically for Indigenous people. However, the AIHW reports regularly on a number of community services data collections, and information about the use of services by Indigenous people is included whenever the quality of identification permits (see chapter 3 for examples).

In the area of disability, recent efforts to improve information about Indigenous people include the convening of a workshop by the ABS, AIHW and Commonwealth Department of Health and Family Services in April 1998. The workshop brought together representatives from Government, Aboriginal and Torres Strait Islander organisations and the research community to explore the status of disability data relating to Indigenous people. The workshop participants agreed that improving Indigenous disability data was a priority and recommended that, if there was support among Indigenous people and organisations, a national Indigenous steering committee should be formed to progress work in this area, including the development of guiding principles and protocols, disability-related definitions appropriate to Indigenous people, and an Indigenous disability data information plan (Australian Bureau of Statistics, Australian Institute of Health and Welfare & Commonwealth Department of Health and Family Services 1998).

Strategic initiatives in housing information

Initiatives in Indigenous housing information have developed rapidly over the past two years and have largely been separate from, and indeed ahead of, information initiatives concerned with mainstream housing. Administrative arrangements in the housing sector are fragmented and sometimes complex, and administrative data collections related to housing are relatively under-developed. In addition, the housing sector does not have an overall information coordination structure, such as those which exist in health and community services, from which activities in Indigenous housing information could be initiated.

In April 1997, Commonwealth and State Housing Ministers established a Commonwealth/State Working Group on Indigenous Housing (CSWGIH) to develop an approach to improve the outcomes of housing assistance for Indigenous people. It was recognised that a key problem in assessing outcomes was inadequate coverage and quality of data. The CSWGIH subsequently set up a data group to develop a national Indigenous housing data management strategy. The two major aspects of the strategy to date have been the development of a draft agreement on the content and implementation of a National Minimum Data Set (NMDS) for Indigenous housing and the trialling of a performance indicator collection.

Strategic initiatives in housing information *continued*

In August 1998, members of the data group began work to specify the content of the NMDS. They also began to prepare a draft National Indigenous Housing Information Agreement (NIHIA), outlining a process to support the development, maintenance and review of the NMDS. Among the aims of the NIHIA are: to coordinate efforts and decrease duplication; to increase the comparability of data across jurisdictions and across sectors through the use of a national minimum dataset and uniform data definitions; to increase data quality and access while ensuring confidentiality; and to increase Indigenous involvement in the information process (Australian Institute of Health and Welfare, personal communication).

The draft NIHIA is modelled on the mainstream National Health Information Agreement and the National Community Services Information Agreement. The NIHIA is much narrower than these other National Agreements in that it deals specifically with Indigenous housing information rather than housing information in general. As such, the NIHIA is probably more closely related to the NIHIP. As with the NIHIP, the NIHIA calls for a national implementation group to oversee the process.

The draft NIHIA proposes an agreement involving Commonwealth, State and Territory housing departments and the ABS and AIHW as partners, as well as a more limited role for some other agencies. The roles and responsibilities of the various parties are specified in the draft Agreement, which is proposed to be for a period of five years in the first instance. The draft Agreement is currently under consideration by potential signatory bodies. The text of the Agreement is expected to be finalised by mid-1999 and then go to the CSWGIH members to take back to their respective agencies. When the Agreement is ratified, ministerial endorsement will be sought.

The second major aspect of the national Indigenous housing data management strategy set up by the CSWGIH data group has been the trialling of performance indicators for community-managed housing assistance for Indigenous people. The indicators were developed in response to the Housing Ministers' demands at their April 1997 meeting for improved performance reporting. They were reported on for 1996–97 in October 1997. This first data collection was a trial of the use of existing data for performance reporting. It identified a range of issues for future development and established the need for standards for data measurement. The prime focus was on data about Indigenous community-managed housing, but the collection also included data on activity across other government housing assistance programs relevant to Indigenous housing, such as public housing supplied under the Commonwealth/State Housing Agreement's mainstream and Aboriginal rental housing programs. The format of the 1998–99 data collection is currently in development, and a data manual is expected to be released by July 1999.

Another important development in Indigenous housing information is the planned 1999 CHINS. More information about this survey was provided earlier in this chapter.

Indigenous statistics from administrative collections

An additional area of strategic development is the work being undertaken by the ABS in conjunction with other agencies to improve the quality and availability of Indigenous statistics available as by-products from administrative collections. The ABS has committed about $1.5 million to a four-year program to provide leadership and coordination for this initiative. The project will tackle a wide range of collections over the next several years in a number of areas, including vital statistics (births and deaths), health, housing, community services, education and training, and law and justice, at both the national and State and Territory level. The approach adopted in each area will have a number of common elements. These include developing best practice methods for data collection, including defining and implementing a minimum set of standards for asking the question on Indigenous status (or otherwise ascertaining this information); identifying the relevant statistics that can be derived about Indigenous people from administrative data sets in the area of interest; defining and implementing regular data quality and process audits, including assessing the completeness with which Indigenous status is recorded in the data set; deriving priority statistics from the relevant data sets and adjusting these statistics for incomplete or inaccurate recording of Indigenous status (by estimating correction factors or by other means); and, by appropriate and effective means, making these statistics available to interested parties.

Review of ABS household survey program and the development of an Indigenous statistics strategy

The ABS has recently undertaken a comprehensive review of its household survey program, including an assessment of the priority given by users to Indigenous statistics. In parallel with this process, a draft strategy for Indigenous survey statistics has been developed which aims to meet clients' highest statistical priorities. The draft strategy has been the subject of extensive consultation. It was distributed to over 300 stakeholders from government and Indigenous organisations throughout the country with a request for written responses. In addition, seminars on the proposed strategy were presented in all States and Territories to audiences consisting of a range of people from government and Indigenous organisations. The draft strategy has been extensively revised in the light of stakeholder comments and the findings of the team reviewing the ABS household survey program. In respect of household surveys, the revised strategy proposes the conduct of a regular national/State general social survey of Aboriginal and Torres Strait Islander people; supplementation of the Aboriginal and Torres Strait Islander sample in selected national surveys; and regular identification of Aboriginal and Torres Strait Islander people in the labour force survey.

EXPLANATORY NOTES

INTRODUCTION

1 Information in this publication is drawn from many sources, including the Census of Population and Housing and a number of surveys conducted by the Australian Bureau of Statistics (ABS) and other organisations. A brief description of these is provided in the following paragraphs. Additional sources referred to are referenced within the publication and readers should refer to the reference list at the back of this publication for a complete listing. For explanations of terms used in each survey, refer to the Glossary.

CENSUS OF POPULATION AND HOUSING

2 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. A reliable basis for making future estimates of the population of each State, Territory and local government area can then be obtained. 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.

3 The Census is the largest statistical collection undertaken by the ABS and is conducted every five years. The thirteenth Census was carried out on 6 August 1996 and results from that Census are used in this publication.

NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER SURVEY

4 This survey 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 designed primarily to provide information at the national level on the social, demographic, economic and health status of Indigenous people. The survey was conducted by the ABS in 1994.

5 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.

6 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. For children under 13 years of age, information was provided by an adult responsible for the child, and children between 13 and 17 years old were interviewed with the parent's or guardian's consent. A subset of questions was asked of any non-Indigenous people in the household. A sample of prisoners was included in the survey to ensure that estimates would reflect the characteristics and attitudes of all Indigenous people including those in prison.

NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER SURVEY *continued*

7 The questionnaire covered the areas of family and culture, health, housing, education and training, employment and income, and law and justice.

8 More information on the survey is available in ABS (1995).

NATIONAL DRUG STRATEGY HOUSEHOLD SURVEY 1994 URBAN ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES SUPPLEMENT

9 This survey, which is part of the series of National Drug Strategy household surveys, was conducted for the Commonwealth Department of Human Services and Health by AGB McNair and involved interviews with nearly 3,000 Aboriginal and Torres Strait Islander people aged 14 years and over living in urban areas, defined as centres with a total population of 1,000 or more. It was designed to supplement information gathered by the 1993 household survey of the general population.

10 Persons were regarded as eligible to be included in the survey if they responded ‘yes’ to the question, ‘Are you of Aboriginal or Torres Strait Islander origin?’

11 The survey involved face-to-face household-based interviews. A sealable self-completion form was used for more sensitive questions such as those on illicit drugs.

12 More information is available in Commonwealth Department of Human Services and Health (1996).

NATIONAL HOUSING AND COMMUNITY INFRASTRUCTURE NEEDS SURVEY 1992 (HCINS)

13 The HCINS consisted of two stages. Stage 1 was a survey of Aboriginal and Torres Strait Islander communities, outstations and town camps in rural and remote Australia. In addition, some larger urban centres—where the Indigenous population was larger than 1,000 persons—were surveyed. Major urban and metropolitan centres were covered in Stage 2 of the project. A different methodology was used for Stage 2 which took the form of an analysis of ABS census housing data.

14 The aim of Stage 1 of the survey was to obtain nationally consistent data about existing housing and infrastructure. The survey included 108 questions covering topics such as the quality of housing stock, maintenance needs, population fluctuations, provision of and access to health and education services, water supply and sewerage facilities, garbage collection and electricity supply.

15 The information was collected from local Indigenous reference groups that were set up in each centre that was visited.

16 For further information about the HCINS, contact the National Centre for Aboriginal and Torres Strait Islander Statistics, ABS in Darwin, which manages the data on behalf of the Aboriginal and Torres Strait Islander Commission.

NATIONAL HEALTH SURVEY

17 The 1995 National Health Survey (NHS) was conducted throughout the 12-month period February 1995 to January 1996. The survey was designed to obtain national benchmark information on a range of health-related issues and to enable the monitoring of trends in health over time.

18 In the course of the survey, information about health status, health actions and health-related behaviours was obtained from a sample of nearly 55,000 residents of private dwellings and non-private dwellings. A private dwelling was defined as a house, flat, home unit, caravan, garage, tent and any other structure being used as a private place of residence at the time of the survey including improvised dwellings. Non-private dwellings included hotels and motels, hostels, boarding houses and caravan parks. Hospitals, nursing homes and convalescent homes were excluded from the survey as were prisons, reformatories and single quarters of military establishments.

19 Households were selected at random using a stratified multistage 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. At the request of health authorities in Victoria, South Australia, the Northern Territory and the Australian Capital Territory, the survey sample in those areas was increased to enhance the reliability of estimates.

20 To enhance the reliability of estimates for the Indigenous population and facilitate direct comparisons with the health characteristics of non-Indigenous Australians, a supplementary sample of around 1,000 Indigenous respondents was obtained for the survey, bringing the total sample of Indigenous persons responding to the survey to approximately 2,000. Indigenous results from the NHS reported in this publication include records from all Indigenous respondents with adequately completed forms, with the exception of those living in remote areas. This is in contrast to results from the NHS used in this publication for the non-Indigenous sample where records that did not form part of fully responding households were deleted.

21 Due to concerns about the data quality of some of the responses from Indigenous participants living in remote areas, and after an extensive investigation into the issue, the statistics in this publication exclude responses from all people, Indigenous and non-Indigenous, living in those areas identified by the ABS as being sparsely settled (see Glossary).

22 For more information, see ABS (1999a).

NATIONAL NUTRITION SURVEY

23 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.

24 More information on the survey is available in ABS (1997e).

ABBREVIATIONS

25 The following abbreviations used in tables or elsewhere mean:

ABS	Australian Bureau of Statistics
ACCHS	Aboriginal Community Controlled Health Services
ACE	Angiotensin-converting enzyme
AHL	Aboriginal Hostels Limited
AHMAC	Australian Health Ministers' Advisory Council
AIDS	Acquired Immune Deficiency Syndrome
AIHW	Australian Institute of Health and Welfare
ANZDATA	The Australian and New Zealand Dialysis and Transplant Registry
AP	Anangu Pitjantjatjara
ASCO	Australian Standard Classification of Occupations
ATSIC	Aboriginal and Torres Strait Islander Commission
AVGAS	Aviation Gasoline
BEACH	Bettering the Evaluation and Care of Health
BMI	Body mass index
CDEP	Community Development Employment Projects
CHINS	Community Housing and Infrastructure Needs Survey
CSDA	Commonwealth-State Disability Agreement
CSHA	Commonwealth-State Housing Agreement
CSP	Children's Services Program
CSWGIH	Commonwealth/State Working Group on Indigenous Housing
DFCS	Department of Family and Community Services
DHFS	Department of Health and Family Services
DHSH	Department of Human Services and Health
ERP	Estimated Resident Population
ESRD	End-stage renal disease
GP	General medical practicioner
HACC	Home and Community Care
HCINS	Housing and Community Infrastructure Needs Survey
HIC	Health Insurance Commission
HIV	Human Immunodeficiency Virus
ICD	International Classification of Diseases
ICD-9	International Classification of Diseases, ninth revision
ICD-9-CM	International Classification of Diseases, ninth revision, clinical modification
IES	Indigenous Enumeration Strategy
MACS	Multifunctional Aboriginal Children's Services

ABBREVIATIONS *continued*

NACCHO	National Aboriginal Community controlled Health Organisations
NATSIS	National Aboriginal and Torres Strait Islander Survey
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NCSIDP	National Community Services Information Development Plan
NDS	National Drug Strategy
NHIDP	National Health Information Development Plan
NHIMG	National Health Information Management Group
NHMRC	National Health and Medical Research Council
NHS	National Health Survey
NIHIA	National Indigenous Housing Information Agreement
NIHIP	National Indigenous Health Information Plan (also known as the National Aboriginal and Torres Strait Islander Health Information Plan)
NMDS	National Minimum Data Set
NNDSS	National Notifiable Diseases Surveillance System
NNS	National Nutrition Survey
OATSIH	Office for Aboriginal and Torres Strait Islander Health (Commonwealth Department of Health and Aged Care)
PBS	Pharmaceutical Benefits Scheme
SAAP	Supported Accommodation Assistance Program
SCCSISA	Standing Committee of Community Services and Income Security Administrators
SLA	Statistical Local Area
SMR	Standardised Mortality Ratio
TS	Torres Strait
TSI	Torres Strait Islander
VET	Vocational Education and Training
WHO	World Health Organization
YPLL	Years of Potential Life Lost
. .	Not applicable
—	Nil or rounded to zero

GLOSSARY

Where the definition is specific to a particular survey, the abbreviated survey name is included at the end of that definition. The abbreviations referred to include:

Census	Census of Population and Housing
NATSIS	National Aboriginal and Torres Strait Islander Survey
NDS	National Drug Strategy Household Survey
NHS	National Health Survey

Aboriginal A person who identifies himself or herself to be of Aboriginal origin. See also Indigenous.

Aboriginal Health Worker An Aboriginal member of the community who is a recognised health worker but does not have nursing or medical qualifications. He or she may or may not hold a health worker certificate. (NATSIS)

Aboriginal Medical Service An incorporated organisation which operates under direction of a board of Indigenous people. It may be based in one centre or provide services to a defined number of centres. People living in the Torres Strait Area were not asked questions about this service. (NATSIS)

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 1996 Census, there were 36 ATSIC Regions which together covered all of Australia.

Actions taken Specific actions persons reported they had taken in relation to their health in the two weeks prior to interview.

Actions covered in the National Health Survey were:

- inpatient episodes in hospital;
- visits to casualty/emergency units at hospitals;
- visits to outpatients units at hospitals;
- visits to day clinics;
- doctor consultations;
- dental consultations;
- consultations with other health professionals;
- other persons/organisations consulted;
- use of natural/herbal medications;
- use of vitamins/minerals;
- use of other medications;
- days away from work/school; and
- other days of reduced activity.

Actions taken *continued*

Actions covered in the National Aboriginal and Torres Strait Islander Survey were:

- visits to emergency/outpatients;
- admission to hospital;
- consultation with a doctor;
- consultation with an Aboriginal Health Worker;
- consultation with a nurse;
- use of medication;
- use of bush medicine; and
- reduction in daily activities.

Alcohol consumption

The definitions related to alcohol consumption vary from survey to survey.

In the National Aboriginal and Torres Strait Islander Survey, participants were asked: ‘How long ago was the last time you had a drink of alcohol?’ Possible answers ranged from ‘during the last week’ to ‘12 months ago or more’, or ‘never’. No information was collected about the amount of alcohol consumed.

In the National Health Survey, risk level was derived from the reported average daily consumption of alcohol during the week prior to interview and grouped into relative risk levels as defined by the National Health and Medical Research Council 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

Risk level as defined by the National Health and Medical Research Council is based on regular consumption levels of alcohol. Indicators derived in the National Health Survey do not take into account whether consumption in the reference week was more, less, or the same as usual, or whether consumption was regular.

Alcohol consumption *continued*

In the National Drug Strategy household surveys, respondents were asked whether they had ever had a full glass of alcohol. If so, they were asked a series of questions about their patterns of alcohol consumption, including when they had their most recent drink, how often they drank alcohol, what they usually drank, how much, etc. A 'current drinker' was defined as a person who reported that he or she had had an alcoholic drink in the previous year and still drank at least once a year. This category includes regular and occasional drinkers. 'Current regular drinkers' were those people who reported drinking alcohol either daily or at least weekly. 'Current occasional drinkers' were those who reported drinking less often than weekly but at least once a year. People in the 'no longer drinks' category were those who reported that they had had at least one full glass of alcohol but said that it was more than a year since their last drink or that they no longer drank. Those who said they had never had a full glass of alcohol were considered to be 'never drinkers'.

Availability of services and professionals

Refers to health services and professionals within 25 kilometres of where interviewed:

- *Permanent*—Available at least three days per week;
- *Visiting*—Available between two days per week and once a month; and
- *Not available*—Available less than once a month or not available at all. (NATSIS)

Before/after school care

Also known as Outside School Hours Care. Provides care for school-aged children before and/or after school during the school term.

Body mass index (BMI)

A person's weight in kilograms (kg) divided by the square of his or her height in metres (m), that is, kg/m^2. BMI was based on measured height and weight in the National Aboriginal and Torres Strait Islander Survey and self-reported height and weight in the National Health Survey. Persons were categorised into one of four groups according to their BMI. The groups used are consistent with recommendations of the National Health and Medical Research Council.

BODY MASS INDEX

Underweight	Less than 20
Acceptable	20–25
Overweight	Greater than 25–30
Obese	Greater than 30

Bounded Locality

See Section of State.

Capital city	All State and Territory capital city Statistical Divisions. (NATSIS)
Care and protection orders	Includes children '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 1998b, p. 85). This definition is more inclusive than what was used in previous years, so results presented here are not comparable with results from years prior to 1997. See AIHW 1998b and 1999b for more details.
Community Development Employment Projects (CDEP)	The CDEP scheme enables 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 centres	Centres which often provide a number of services, e.g. nursing, medical, dental, nutritional and may be active in preventative medicine, e.g. advising on sexually transmitted diseases, immunisation and family planning. In more remote areas, services might be limited to nurses, doctors, and Aboriginal Health Workers. (NATSIS)
Community landlord	Refers to dwellings owned by community organisations, predominantly Aboriginal or Torres Strait Islander organisations, such as housing associations, land councils and community councils. (NATSIS)
Conditions	See Type of conditions.
Congenital malformation	Structural or anatomical abnormalities that are present at birth, usually resulting from abnormal development in the first three months of pregnancy.
Drinker	See Alcohol consumption.
Employed	Employed people are those aged 15 years or more who, during the week prior to census night: worked for payment or profit; had a job from which they were on leave or otherwise temporarily absent; were on strike or stood down temporarily; or worked as unpaid helpers in a family business. (Census).
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.
	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 inset 2.1 and chapter 11 for more details.

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 care givers who provide care for children aged 1–12 years in the carer's own home.

'Hard' illicit drugs Defined as those drugs of particular concern for law enforcement agencies: speed (non-medical), cocaine, heroin, hallucinogens, designer drugs, and injecting of illegal drugs. (NDS)

Health card Refers to a range of government health entitlement and concession cards including:

- Department of Veterans Affairs Entitlement Card;
- pensioner concession card;
- Commonwealth seniors health card;
- health benefits card;
- health care card;
- safety net concession card; and
- safety net entitlement 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.

Health promotional services These include discussions and seminars presented by a professional on topics related to health, e.g. nutrition, smoking and alcohol. They may also be provided by a nurse or Aboriginal Health Worker. (NATSIS)

Hostels A supervised lodging. Some hostels provide accommodation and care for older people who, because of their frailty are unable to stay in their own home and need some daily help. Others provide accommodation for other groups such as students, people undergoing rehabilitation for substance misuse, or homeless people.

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 (that is, a lone person household). (Census)

Household income	Household income is the sum of the personal incomes of each resident aged 15 years or more present in the household. Persons who were temporarily absent on census night, or had nil or negative income, or did not state their income, do not contribute to household income.
Illicit drugs	The following drugs when used for non-medical purposes: speed, cocaine, sleeping pills/tranquillisers, marijuana, analgesics, heroin, petrol sniffing, other inhalants, hallucinogens, designer drugs, and injecting of any illegal drug. (NDS)
Income	People aged 15 years or more were asked to state their usual 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. (Census)
Indigenous	Persons who identified themselves to be of Aboriginal and/or Torres Strait Islander origin. See also Aboriginal, and Torres Strait Islander.
Indigenous family	An Indigenous family is one in which either the reference person or his/her spouse is of Aboriginal and/or Torres Strait Islander origin. (Census)
Indigenous household	In the Census, an Indigenous household is a family household where any family in the household is defined as an Indigenous family (see above), or a lone person household where the lone person is of Aboriginal and/or Torres Strait Islander origin. Group households are not included. In the National Aboriginal and Torres Strait Islander Survey, a household was categorised as Indigenous if one or more members of the household identified as being of Aboriginal and/or Torres Strait Islander origin.
Industry	This variable describes the industries in which employed people (aged 15 years and over) work, and is coded to the Australian and New Zealand Standard Industrial Classification (ABS 1993).
Infant mortality	Deaths of children under one year of age.
Jurisdiction	As used in this publication, refers to States and Territories.
Labour force status	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 Cooperative Housing Group; Employer-Government; Employer-Other; or Other. (Census)
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 conditions	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. (NATSIS, NHS)
Low birthweight	Birthweight of less than 2,500 grams.
Major Urban	See Section of State.
Median income	Median income is the midpoint of the distribution of income.
Medications	See Type of medication.
Mental health services	Provide access to psychiatrists or psychologists who treat people suffering from emotional or mental conditions. (NATSIS)
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.
Neoplasms	Includes various types of cancers.
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.
Nursing homes	Cater for people who are highly dependent and need a lot of daily help with personal care and ongoing nursing.
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	This variable describes the main job held by employed people (aged 15 years and over) during the week prior to census night, and is coded using the Australian Standard Classification of Occupations, Second Edition (ABS 1997a).

Other health professionals	Includes acupuncturists, audiologists/audiometrists, chiropractors, chemists, chiropodists/podiatrists, dieticians/nutritionists, herbalists, hypnotherapists, naturopaths, nurses, opticians/optometrists, osteopaths, occupational therapists, physiotherapists, psychologists, social workers/welfare officers, speech therapists/pathologists. (NHS)
Other Urban	See Section of State.
Out-of-home placements	Defined as 'out of home overnight care for children and young people under 18 years of age, where the State or Territory makes a financial payment' (AIHW 1998b, p. 37). Placements in certain types of facilities are not included. See AIHW (1998b, 1999b) for more details.
Participation rate	Number of persons in the labour force (that is, 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, Employed, Unemployed, Not in the labour force. (Census)
Perinatal death	A stillbirth or neonatal death.
Perinatal mortality rate	The number of perinatal deaths in a year per 1,000 total births in the same year.
Place of enumeration	The place where a person was located when counted on census night. (Census)
Place of usual residence	The place where a person usually resides. (Census)
Post-school educational qualification	This variable describes the level of the highest post-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. (Census)
Pre-school/kindergarten	Provide programs to prepare children for their first year at school. Generally operate on a short day sessional basis and are closed during school holidays.
Private dwelling	In the National Aboriginal and Torres Strait Islander Survey, this refers to premises occupied by a household, including houses, flats, home units, garages, tents and improvised houses, but excluding hostels, hospitals, prisons and other institutional type accommodation. In the Census, this refers to a building or structure in which a household lives. Houses under construction, derelict houses, vacant tents, or converted garages are not counted nor are hotels, guest houses, prisons, hospitals or other communal dwellings.
Private health insurance	Private health insurance is cover provided for a fee by private health insurance organisations to reimburse all or part of the cost of hospital and/or ancillary services. The range of services and the level of cover provided by private health insurance may vary for each service.

Private landlord/private renter

Refers to all privately owned dwellings rented directly or through a real estate agent. (NATSIS) See also Landlord type.

Recent conditions

Medical conditions (illness, injury or disability) experienced in the two weeks prior to interview. May include long-term conditions experienced in the period.

Reference person

The reference person 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 who has identified himself or herself as Person 1 on the census Household Form. (Census)

Remote

The term remote is used in relation to 1995 National Health Survey data to indicate those living in sparsely settled areas. Results for people living in such areas are not included in the National Health Survey results reported in this publication. See Sparsely settled area for more details.

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. (NATSIS). See also Section of State.

Rural Balance

See Section of State.

Satisfactory dwelling/dwelling that meets needs of household

Respondents were asked whether the dwelling met the needs of the people living there. If the answer was no, they were asked to identify specific problems with the dwelling. (NATSIS)

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; and
- Rural Balance—the rural remainder of the State or Territory. (Census).

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 respondent's perception of his or her 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 National Aboriginal and Torres Strait Islander Survey, smoking referred to cigarette smoking only. A current smoker was a person who answered 'yes' or 'sometimes' when asked whether he or she smoked cigarettes (including packet and roll-your-own). In the National Health Survey, smoking referred to the smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excluded chewing tobacco and smoking of non-tobacco products. A 'current smoker' was a person who reported smoking tobacco at the time of the survey. 'Regular smoking' was defined as smoking one or more cigarettes (or pipes or cigars) per day on average. An 'ex-smoker' was a person who said he or she did not smoke at the time of interview, but had done so in the past. People who said they had never smoked tobacco were categorised as 'never smokers'. In the National Drug Strategy household surveys, smoking referred to cigarettes, cigars or pipes. A 'current smoker' was defined as a person who smoked at least one full cigarette in the previous year and who still smoked at least once a year. This category includes regular and occasional smokers. 'Current regular smokers' were people who reported smoking either daily or at least weekly at the time of the survey. 'Current occasional smokers' were those who reported smoking less often than weekly but at least once a year. People who reported that they had had at least one full cigarette in their life but said that it was more than a year since their last smoke or that they no longer smoked were categorised in the group 'no longer smokes'.
Sparsely settled area	Refers to Statistical Local Areas (SLAs) in which the dwelling density for the SLA as a whole was less than 0.057 dwellings per square kilometre (or 57 dwellings per 100 square kilometres). In 1995, about 156,200 people lived in sparsely settled areas, of whom about 68,400 were Indigenous and 87,800 were non-Indigenous. Results from the National Health Survey for people from sparsely settled areas are not included in this publication.
Standard drink	A standard drink contains 10 grams of alcohol. See also Alcohol consumption.
Stillbirth (foetal death)	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. (In Western Australia, the minimum figures are 500 grams or 22 weeks.) For more information see Day, Sullivan and Lancaster (1999a).
Torres Strait Islander	A person who identifies himself or herself to be of Torres Strait Islander origin. See also Indigenous.

Type of conditions	All reported recent and long-term medical conditions and other reasons for health-related actions reported in the National Health Survey were coded to a list of 134 selected conditions/reasons for action developed by the Australian Bureau of Statistics. This classification was based on the Ninth Revision of the International Classification of Diseases (ICD-9), but was modified to take account of the fact that information obtained is ‘as reported’ by respondents. Special codes were created for some non-illness reasons for action (e.g. check-up, preventive measures) and for some frequently reported conditions which could not be readily coded to ICD–9 categories because insufficient detail was provided (e.g. back problems, virus, infection). A complete 1995 National Health Survey condition code list with approximate ICD-9 code equivalent can be found in ABS (1996e). (NHS)
Type of medication	Two classifications of type of medication are shown in this publication: ▪ reported type of medication, which refers to type of medication as categorised by the respondent, and tends to reflect the reason(s) for using the medication, rather than the type of ingredients or actions of the medication; and ▪ generic type of medication, based on the World Health Organisation’s Anatomical Therapeutic Chemical Classification, and adapted for use in the survey. This classification, although based on the Anatomical Therapeutic Chemical Classification, covered selected types of medication only. A copy of this classification is included in ABS (1996e). (NHS)
Unemployed	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. (Census).
Unemployment rate	The unemployment rate is the number of unemployed people expressed as a percentage of the labour force (that is, employed plus unemployed persons). (Census)
Urban	See Section of State.
Vitamins, minerals, natural or herbal medications	Respondents were asked whether in the last two weeks they had taken any vitamins, minerals, natural or herbal medications. No questions were asked as to the type of vitamin, mineral, natural or herbal medicine taken. Whether or not these products were actually vitamin, mineral, herbal or natural type medicines was based on the respondents’ perceptions only. (NHS)

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ABS	Australian Bureau of Statistics
AHMAC	Australian Health Ministers' Advisory Council
AIHW	Australian Institute of Health and Welfare
ATSIC	Aboriginal and Torres Strait Islander Commission
CDHFS	Commonwealth Department of Health and Family Services
NCHECR	National Centre in HIV Epidemiology and Clinical Research
NHMRC	National Health and Medical Research Council
WHO	World Health Organization

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