

Table 4.11: Standardised hospital separation ratios by principal diagnosis, birthplace and sex, persons aged 15 years and over, 1997–98

ICD-9-CM	Males					Females				
	Standardised hospital separation ratio ^(a) (Australian-born = 1.0)					Standardised hospital separation ratio ^(a) (Australian-born = 1.0)				
	Total	UK and Ireland	Other Europe	Asia	Other	Total	UK and Ireland	Other Europe	Asia	Other
Infectious	21,339	*0.72	*0.74	1.00	*0.92	22,027	*0.86	*0.75	*0.80	*0.83
Tuberculosis	419	1.01	*1.65	*14.89	*2.68	372	*0.64	1.18	*21.50	*2.39
Cancers	178,688	*0.70	*0.69	*0.44	*0.69	188,233	*0.79	*0.76	*0.61	*0.83
Skin	3,764	*0.40	*0.31	*0.10	*0.45	3,158	*0.56	*0.44	*0.09	*0.42
Lung	11,636	0.99	*1.04	*0.68	*0.77	5,252	*1.20	*0.64	*0.50	*0.78
Prostate	11,682	*0.70	*0.59	*0.39	*0.71	n.a.	n.a.	n.a.	n.a.	n.a.
Breast	n.a.	n.a.	n.a.	n.a.	n.a.	17,730	*0.96	*0.79	*0.59	*0.91
Cervix	n.a.	n.a.	n.a.	n.a.	n.a.	1,994	0.95	*0.79	*1.24	*1.52
Diabetes mellitus	11,809	*0.68	*0.81	*0.49	*0.66	10,150	*0.67	*0.92	*0.58	*0.78
Mental	104,173	*0.68	*0.68	*0.33	*0.67	119,847	*0.79	*0.59	*0.31	*0.81
Cardiovascular	244,185	*0.77	*0.88	*0.58	*0.92	187,274	*0.81	*0.92	*0.60	*0.94
Ischaemic	104,882	*0.78	*0.86	*0.64	1.00	54,944	*0.82	*0.86	*0.64	*0.97
Stroke	26,894	*0.69	*0.81	*0.58	*0.82	24,909	*0.74	*0.77	*0.78	*0.88
Respiratory	111,499	*0.72	*0.71	*0.52	*0.79	108,301	*0.81	*0.59	*0.45	*0.78
Asthma	11,253	*0.71	*0.51	*0.54	*0.93	21,948	*0.79	*0.38	*0.43	*0.80
Digestive	297,254	*0.76	*0.79	*0.56	*0.80	318,327	*0.79	*0.81	*0.54	*0.79
Injury and poisoning	190,734	*0.72	*0.62	*0.38	*0.74	144,288	*0.83	*0.71	*0.47	*0.77
All causes	2,231,442	*0.74	*0.82	*0.60	*0.84	2,778,141	*0.79	*0.83	*0.66	*0.91

* Significantly different from 1.00 at the 5% level.

(a) The standardised hospital separation ratio is a relative measure of hospital use between the overseas-born and Australian-born populations. The ratio for Australian-born is 1.00, and ratios that exceed 1.00 indicate relatively greater hospital use in that population than for the Australian-born. Likewise, ratios less than 1.00 indicate less hospital use due to a given cause than for the Australian-born population.

Note: Age standardised to the Australian population at 30 June 1991.

Source: AIHW National Morbidity Database.

4.6 Aboriginal and Torres Strait Islander peoples

Australia's Aboriginal and Torres Strait Islander peoples continue to experience much poorer health than the general Australian population (see ABS & AIHW 1999 for a more detailed report). Despite the relative lack of good-quality national health statistics for Australia's Indigenous population, evidence from those jurisdictions and collections where the data are considered to be of reasonable quality indicates large differences between the health of Indigenous and non-Indigenous populations across a range of health status measures. This health disadvantage begins at an early age and continues throughout the life cycle. It reflects the broader social and economic disadvantages faced by Aboriginal and Torres Strait Islander Australians.

It is difficult at present to measure precisely the magnitude of this health disadvantage and the changes over time. The main factors limiting the quality and availability of data include incomplete identification of Aboriginal and Torres Strait Islander peoples in administrative data collections (such as death registrations, hospital records, cancer registries and communicable disease notifications); uncertainties in estimating the size and composition of the Indigenous population; and a relative lack of high-quality survey data about this comparatively small population group (ABS & AIHW 1999). A number of recent initiatives in information development, such as the National Aboriginal and Torres Strait Islander Health Information Plan (ATSIHWIU 1997), may result in some improvements to the quality and availability of data in the future. Some data-quality problems may take a great deal of time to overcome, if indeed they are solvable.

Life expectancy

Life expectancy at birth for Indigenous Australians in the period 1991–96 was estimated to be 56.9 years for males and 61.7 years for females, considerably lower than the all-Australian estimates of 75.2 years for males and 81.1 years for females (ABS & AIHW 1999). The figures for the Australian Indigenous population are similar to those for Australians born at the beginning of the twentieth century, when life expectancy was 55 years for Australian males and 59 years for Australian females.

Mortality

Information on mortality comes from deaths that occurred among usual residents of the Northern Territory, Western Australia and South Australia during calendar years 1995–97 and were registered by the end of 1998. Despite efforts to improve data quality, the level of completeness of identification of Indigenous deaths in other jurisdictions was not considered adequate during this time period to allow for reporting (ABS 1998a; ABS & AIHW 1999; Cunningham & Paradies 2000), although Queensland was considered to have adequate data quality for 1998 (ABS 1999b). Even in the three jurisdictions reported here, however, there may be underestimation of Indigenous deaths due to incomplete identification on death certificates.

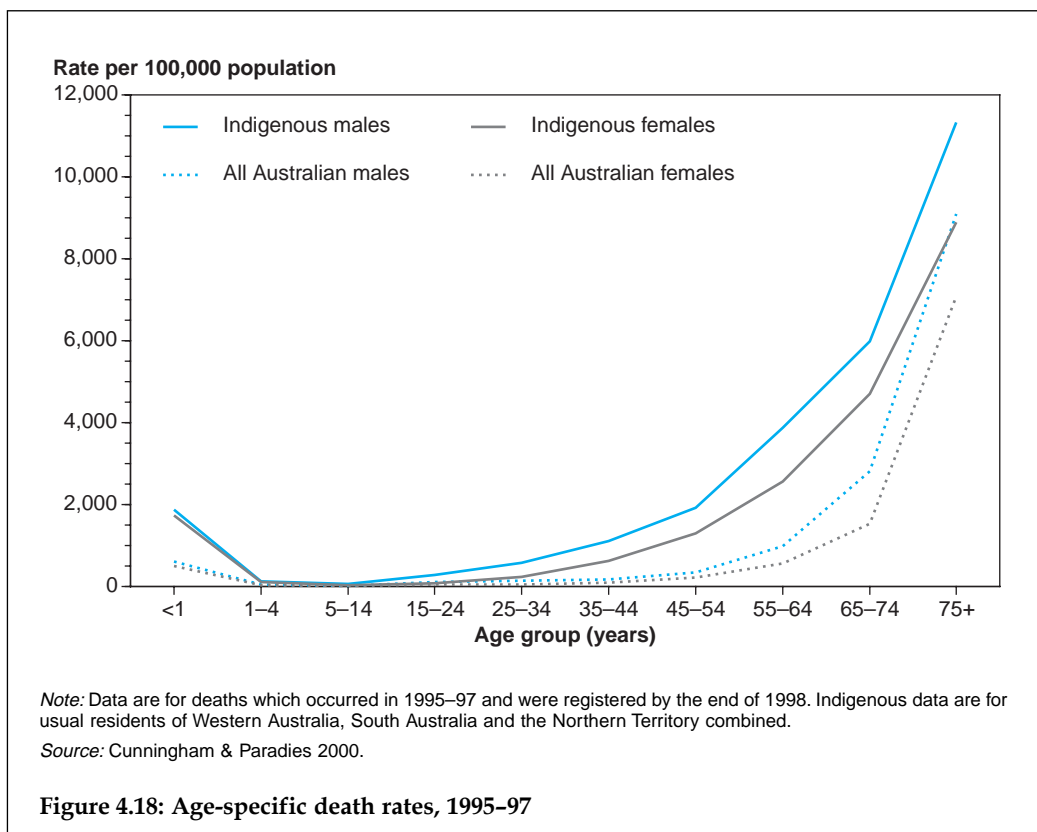
Overall mortality

In 1995–97, in Western Australia, Northern Territory and South Australia combined, there were about three times as many deaths among Indigenous people as there would have been if the Indigenous population had the same age-specific death rates as the total Australian population (Cunningham & Paradies 2000). The death rates for Indigenous people exceeded those for all Australians in every age group (Figure 4.18), but the differences were greatest, in relative terms, among those aged 35–54 years.

There are no reliable data at present to determine whether and to what extent the death rates for the Indigenous population have been changing in recent years.

Age at death

The higher age-specific death rates and the lower life expectancy at birth for Aboriginal and Torres Strait Islander peoples are reflected in the younger age distribution of Indigenous deaths. In 1995–97, more than half (53%) of the deaths of Indigenous males and 41% of the deaths of Indigenous females were of people aged less than 50 years.



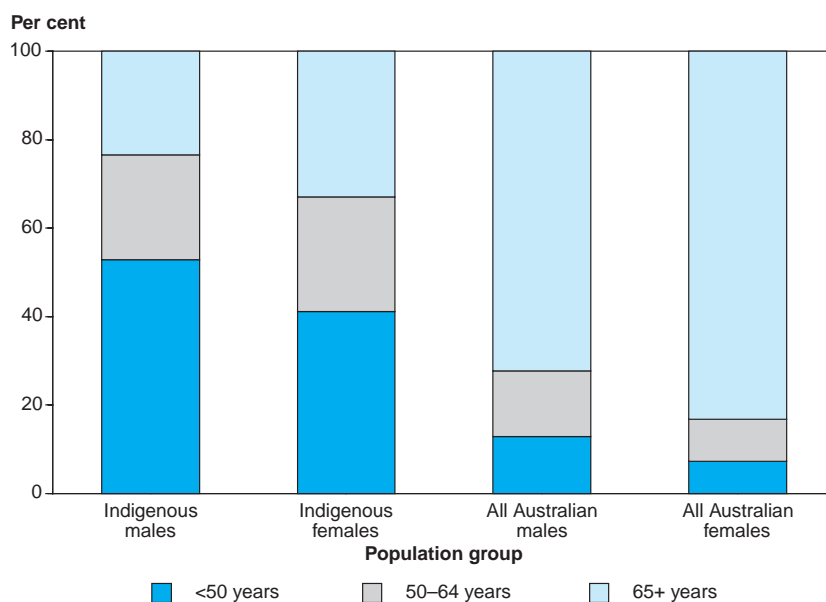
This is in stark contrast to the age distribution for all Australian deaths, with the vast majority (72% of male deaths and 83% of females deaths) occurring among people aged 65 years or more (Figure 4.19, page 210).

Causes of death

The major causes of deaths among Indigenous people were cardiovascular diseases, injury, respiratory diseases, cancer (neoplasms), and endocrine diseases (such as diabetes), which together accounted for about three-quarters of all Indigenous deaths (Cunningham & Paradies 2000). While these same causes were also the most important for the Australian population overall, deaths from these and most other causes occurred at greater rates in the Indigenous population than among other Australians (Figure 4.20, page 211).

Birth outcomes for Indigenous mothers

Despite reductions in infant and maternal mortality among Indigenous Australians over the past 30 years (see, for example, Thomson 1991), there are still considerable differences in birth outcomes between the Indigenous and non-Indigenous populations. Low-birthweight babies, stillbirths and neonatal deaths (those occurring in the first 28 days of life) are all about twice as common among births to Indigenous mothers than among births to other mothers. In 1994–96, about 12% of babies born to Indigenous



Note: Indigenous data are for deaths of usual residents of Western Australia, South Australia and Northern Territory combined.

Source: Cunningham & Paradies 2000.

Figure 4.19: Age at death, 1995-97

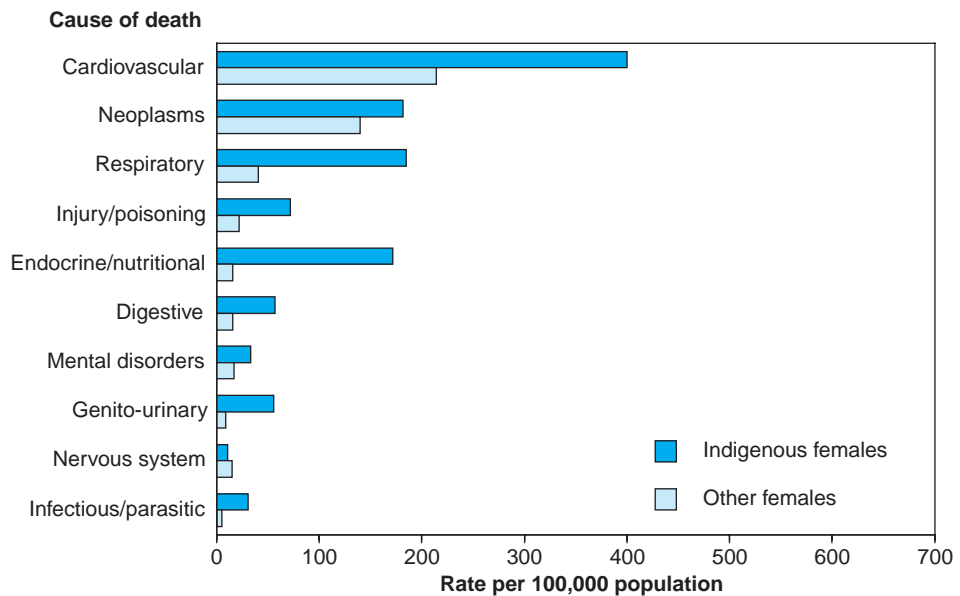
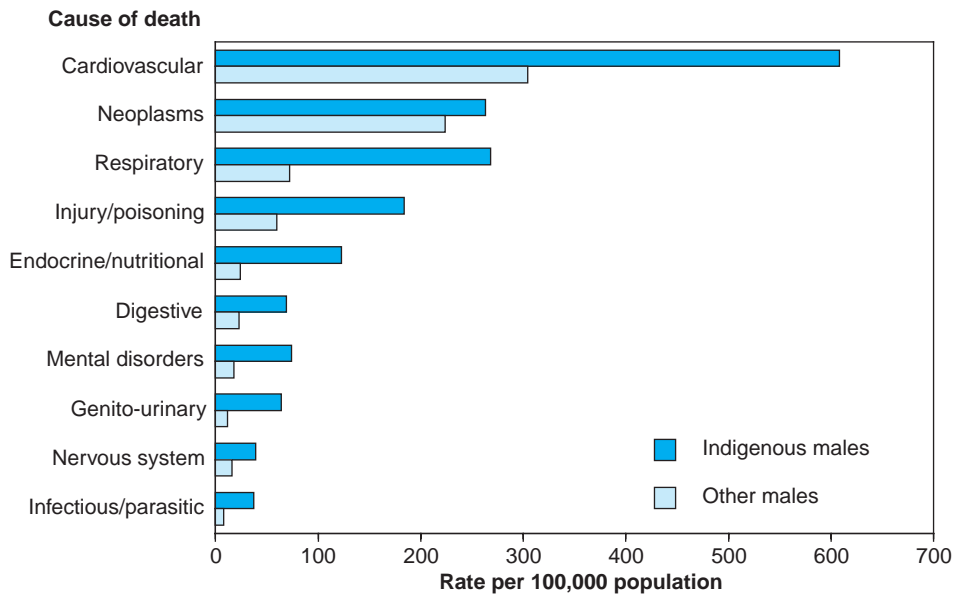
mothers were below 2,500 grams at birth, compared with about 6% of other babies. The perinatal mortality rate (stillbirths and neonatal deaths) in the same period was almost 22 per 1,000 births for babies born to Indigenous mothers, compared with just under 10 per 1,000 for other babies (AIHW NPSU: Day et al. 1999b)(Figure 4.21).

Infant mortality (death in the first year of life) was also higher for Indigenous children than for other children. In 1995-97, in the Northern Territory, Western Australia and South Australia combined, the infant death rates were 3.1 times as high for Indigenous males (1,873 per 100,000) as for all Australian males (605) and 3.5 times as high for Indigenous females (1,731) as for all Australian females (495) (Cunningham & Paradies 2000).

Morbidity

Hospitalisation

As with mortality and many other types of data, the rates of hospitalisation among Indigenous people are underestimated to the extent that the identification of Indigenous people in hospital records is incomplete. The level of under-identification is likely to vary from hospital to hospital and from State to State. Although the quality of identification has been assessed in a small number of hospitals, where coverage ranged from 55% to 100% (ATSIHWIU 1999), this has not yet occurred at a national or jurisdictional level, except in the Northern Territory (Condon et al. 1998).

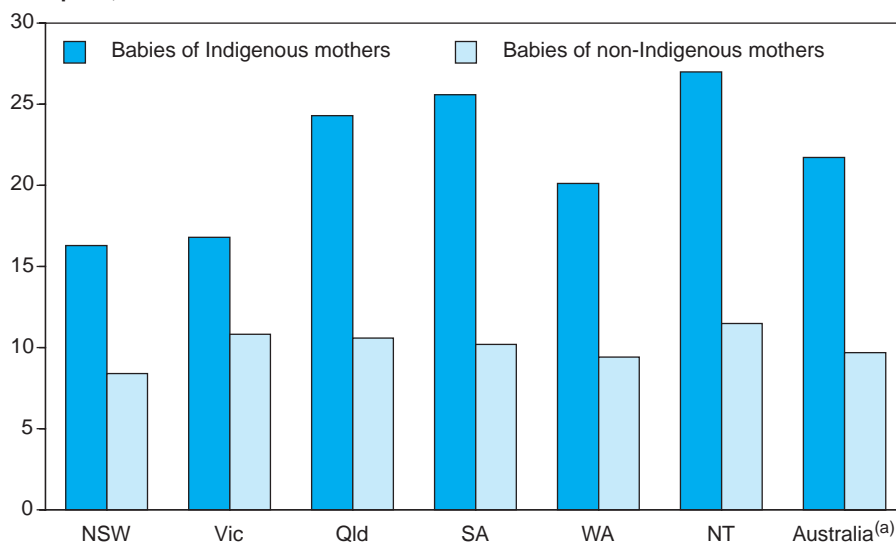


Note: Data are for deaths of usual residents of Western Australia, South Australia and Northern Territory which occurred in 1995–97 and were registered by the end of 1998. Rates are age standardised to the Australian population at 30 June 1991.

Source: Cunningham & Paradies 2000.

Figure 4.20: Age-standardised death rates for selected causes, 1995–97

Rate per 1,000 births



(a) Australian figures include Tasmania and Australian Capital Territory.

Note: Data for Tasmania and Australian Capital Territory are not presented due to small numbers and data quality concerns. Perinatal deaths include stillbirths and deaths within the first 28 days of life.

Source: AIHW NPSU: Day et al.1999a; ABS & AIHW 1999.

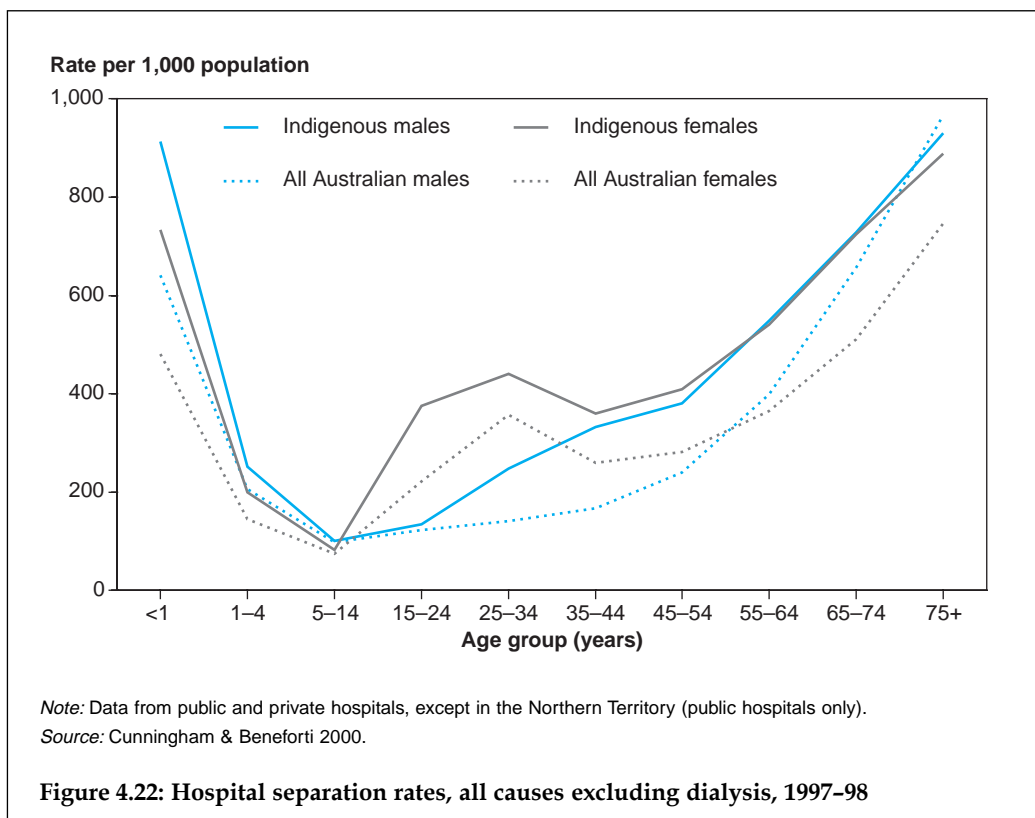
Figure 4.21: Perinatal death rates, 1994–96

In 1997–98, the age-standardised rate of hospitalisation for the total Australian population was 291 per 1,000. The age-standardised rate of hospitalisation for patients identified as Indigenous was almost twice as high, at 540 per 1,000 for all States and Territories combined (AIHW 1999). Thus a large difference was apparent despite significant undercounting of Indigenous people in hospital records because of the identification issues mentioned previously.

The rates of hospitalisation were much higher among Indigenous people than among all Australians in every age group (Figure 4.22).

Among Indigenous males, the most common causes of admission to hospital were kidney dialysis (25%), injury (13%) and respiratory diseases (12%). Among Indigenous females, the leading causes of hospitalisation were dialysis (25%), pregnancy and childbirth (17%), respiratory diseases (9%) and injury (8%) (Cunningham & Beneforti 2000). Most of the admissions for dialysis occurred as part of ongoing treatment of people with end-stage kidney failure, with individual patients accounting for as many as three admissions per week.

For most types of conditions and diseases, there were between 1.3 and 3 times as many hospitalisations as there would have been if the Indigenous population had experienced the same age-specific rates as the total Australian population (Cunningham & Beneforti 2000).



Dialysis accounted for over 40% of all procedures performed in hospital on patients identified as Indigenous (44% among Indigenous males and 41% among Indigenous females), compared with about 9% of procedures on other patients (12% among other males and 7% among other females) (Cunningham & Beneforti 2000).

Use of general practitioners

Not all health problems are treated in hospital, but there is little national information about the use of other health care services by Indigenous people. The Bettering the Evaluation And Care of Health (BEACH) survey provides the first opportunity to examine the use of general medical practitioners (GPs) by Aboriginal and Torres Strait Islander Australians.

About 1.2% of the encounters recorded in the first year of the survey (1998-99) were with patients identified as Indigenous. As 2.1% of the population is Indigenous, this shows clearly the relative under-utilisation of GPs in private practice by Indigenous peoples. The most commonly managed problems for Indigenous patients were upper respiratory tract infections (9% of encounters), acute bronchitis/bronchiolitis (5%), diabetes (5%), acute otitis media/myringitis (5%), asthma (5%) and hypertension (4%). In contrast, the most commonly managed problems among patients overall were hypertension (8% of encounters), upper respiratory tract infections (7%), immunisation/vaccination (5%) and depression (4%) (AIHW GPSCU: Britt et al. 1999).

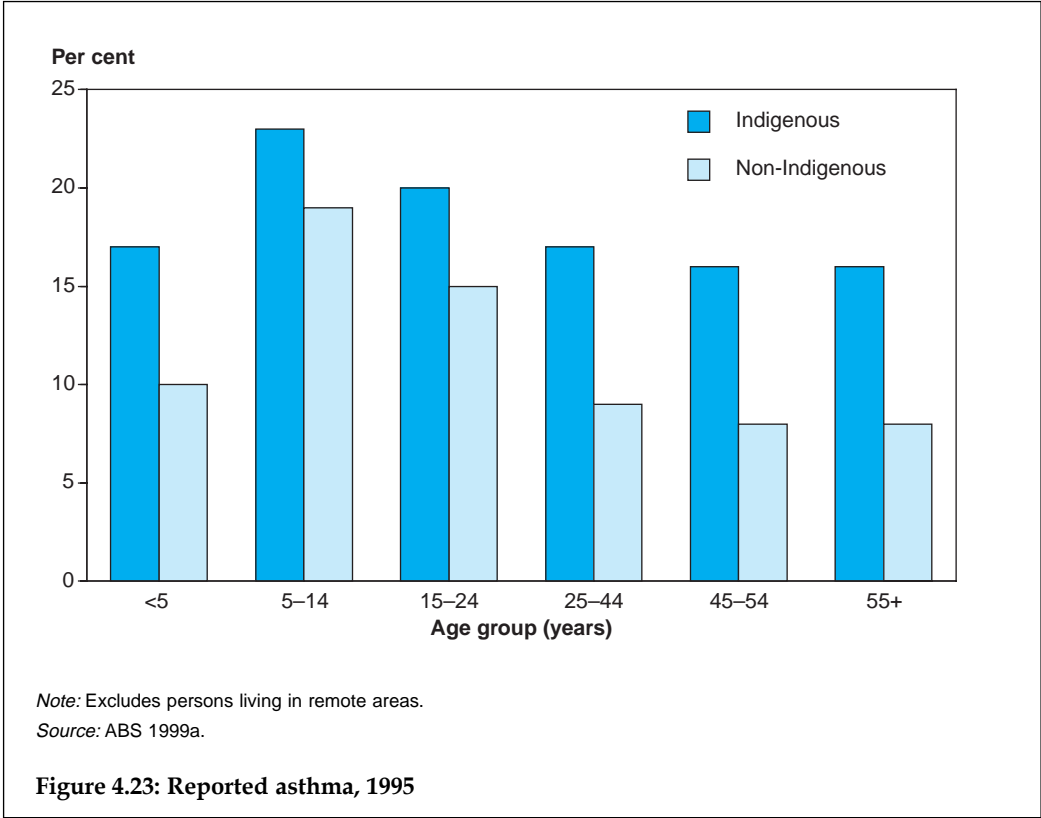
No comparable information is available about the use of other primary health care providers, such as Aboriginal health workers and nurses, or about GP-like interactions in which they are involved.

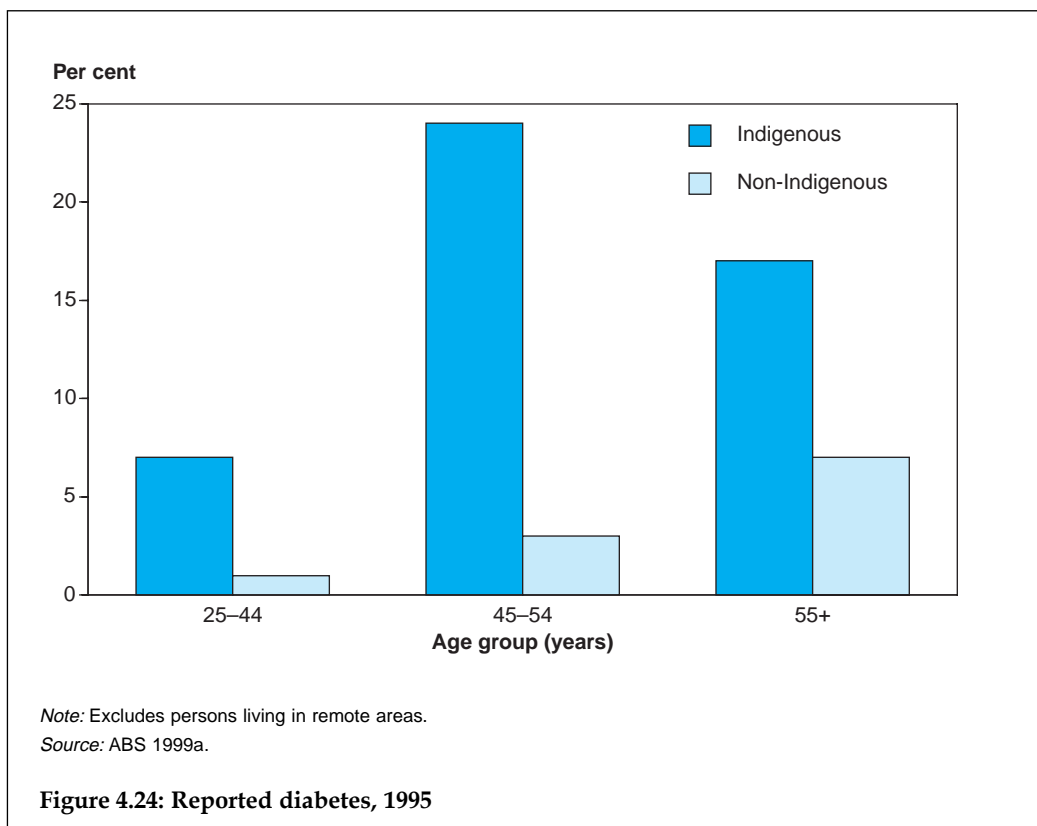
Ill health in the community

The use of health services does not necessarily indicate the prevalence or incidence of illnesses and conditions in the Indigenous population, but sources of more exact indicators of incidence or prevalence at the national level are limited.

Some information was collected about self-reported illnesses and conditions as part of the ABS National Health Survey, which in 1995 included an enhanced sample of Aboriginal and Torres Strait Islander peoples. Although information was collected from Indigenous people living in urban, rural and remote areas, there were concerns about the quality of some data for some groups of Indigenous people, especially those living in remote areas and/or who spoke a language other than English at home (ABS 1999a). People living in remote areas are excluded from the following analysis.

After adjusting for age differences, Indigenous people were more likely than non-Indigenous people to report a range of chronic diseases and conditions, such as asthma (Figure 4.23) and diabetes (Figure 4.24) (ABS 1999a).





The reported use of medications for asthma and diabetes was correspondingly high (ABS & AIHW 1999), but the most commonly reported type of medication, for both Indigenous and non-Indigenous people, was pain relievers (ABS 1999a).

Health risk factors

Some of the differences in health status can be explained by differences in the health risk factors to which people are exposed, such as low socioeconomic status, poor living conditions, poor nutrition, the use of harmful substances, and violence. As a group, Indigenous people are more likely than other Australians to be exposed to such health risk factors.

Social and economic factors

Compared with other Australians, Indigenous people are less likely to be employed and less likely to have post-school educational qualifications. They also have lower personal and household incomes. At the time of the 1996 Census, the unemployment rate for those aged 15 years or more was about 23% for Indigenous people, compared with about 9% for other Australians. About 2% of Indigenous people aged 15 years or more reported a Bachelor degree or higher in 1996, compared with 11% of other Australians. The median weekly personal income of Indigenous people in 1996 was \$218, below the

median weekly income recorded for the total population (\$294). Median weekly household income was also lower for Indigenous households (\$540) than for other households (\$632), despite the larger size of Indigenous households (ABS 1998a).

Housing and living conditions

Indigenous people are much less likely than other Australians to live in a home that is owned or being purchased by its occupants, which is generally taken as indicative of security of tenure. In the 1996 Census, about 31% of Indigenous households owned or were purchasing their home, compared with 71% of other households (ABS 1998a). Among households renting their dwelling, the majority of Indigenous households (53%) rented their home from either a government agency or a community/cooperative housing agency, whereas most other renter households (67%) rented from a private owner (ABS 1998a).

Indigenous households in the 1996 Census were larger than other households (3.7 versus 2.7 people on average) and were much more likely to live in crowded dwellings. About 2% of all Indigenous households (and almost 7% of Indigenous people) lived in dwellings with 10 or more people, compared with only 0.04% of other households (and 0.14% of other people). Almost half (49%) of all private dwellings in Australia with 10 or more people living in them were occupied by Indigenous households. Among large households (that is, with 10 or more people), Indigenous households were more likely than other households to live in smaller dwellings. The majority (70%) of large Indigenous households lived in dwellings with three or fewer bedrooms. In contrast, there were five or more bedrooms in almost half (46%) of the dwellings occupied by other large households (ABS 1998a; ABS & AIHW 1999).

Indigenous households counted in the Census were more likely than other households to live in improvised dwellings, such as sheds, humpies or other rough accommodation. Almost a third (31%) of all households counted in improvised dwellings were Indigenous households (ABS & AIHW 1999), even though Indigenous households account for less than 2% of all Australian households (ABS 1998a). Indigenous people were also more likely than other Australians to use the Supported Accommodation Assistance Program, which provides services to people who are homeless or at risk of being homeless (AIHW 1997).

Nutritional status

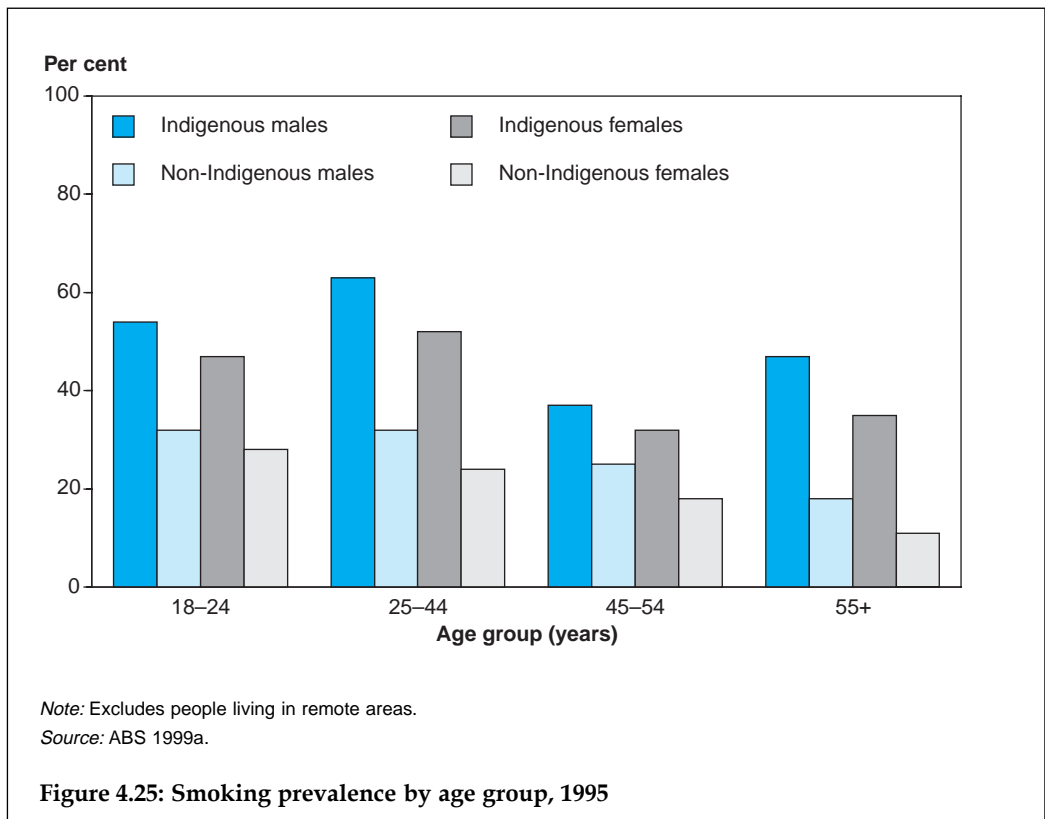
Adequate consumption of nutritious foods is important for good health, but little information is currently available at the national level about the food intake of Indigenous people. However, it is likely that the economic and geographic disadvantages faced by the Indigenous population are reflected in nutritional disadvantages as well.

One aspect of nutritional status for which national information does exist is relative weight. Indigenous people are more likely than other Australians to be classified as obese based on their body mass index (BMI). Among Indigenous adults aged 18 years or more who were measured in the 1994 National Aboriginal and Torres Strait Islander Survey, about 28% of females and 25% of males were classified as obese (BMI greater than 30). This compares unfavourably with figures for all Australians from the 1995

National Nutrition Survey, in which 19% of females and the same proportion of males aged 19 years and over were classified as obese, based on BMI derived from measured height and weight (Cunningham & Mackerras 1998).

Drugs and other harmful substances

Indigenous adults are about twice as likely to smoke cigarettes as non-Indigenous adults (Figure 4.25), which puts them at increased risk of heart disease, cancer, respiratory disease and other conditions. Although Indigenous people are more likely than non-Indigenous people to abstain from alcohol, those who do drink are more likely to drink at unsafe levels. The use of illicit drugs and other harmful substances (such as leaded petrol) is also of concern among the Indigenous population (ABS & AIHW 1999). For example, a recent study in Western Australia highlighted the rapid increase in first-time hospital admission rates for Indigenous people for illicit-drug problems, especially cannabis and amphetamines, during the first half of the 1990s (Patterson et al. 1999).



Exposure to violence

Although it is difficult to quantify precisely the extent of the impact of violence on the health and wellbeing of Indigenous Australians, there is strong evidence that Indigenous people as a group are at increased risk of being exposed to violence.

Deaths from intentional injury are more common for Indigenous people than for other Australians. In 1995–97 in the Northern Territory, Western Australia and South Australia combined, there were about seven times as many deaths among Indigenous females and almost eight times as many deaths among Indigenous males as would have been expected if the all-Australian rates had applied (Cunningham & Paradies 2000). In the period 1989 to 1996, it was estimated that about 20% of victims and 22% of offenders in intimate-partner homicides were Indigenous (Carcach & James 1998).

Indigenous females are grossly overrepresented in hospitalisations recorded as being due to intentional injury. Of all hospitalisations among females in 1997–98, almost half (46%) of those classified as being due to intentional injury were among females identified as Indigenous. It is possible that some intentional injuries to non-Indigenous females were coded as another type of injury, such as ‘accidental falls’, but this cannot completely explain the disparity between the two groups because the rates of hospitalisation were higher for Indigenous females than for non-Indigenous females for almost every type of injury. Indigenous males were also at much greater risk of hospitalisation for intentional injury compared with their non-Indigenous counterparts, but the differences were not as extreme (Cunningham & Beneforti 2000).

Although death registrations and hospital statistics on intentional injury point to a heavy burden of violence among Indigenous people, they do not tell the whole story. Not all victims of violence are admitted to hospital or killed, and not all the results of violence are physical. However, there is little good statistical information about other aspects of violence, such as those relating to mental and emotional wellbeing.

Health services and expenditure

Appropriate health services are necessary help reduce disparities in health status between population groups. According to an analysis of health expenditure in the financial year 1995–96, about \$2,320 per person was spent on health services to Indigenous people, compared with \$2,163 for services to non-Indigenous people (Deeble et al. 1998). This difference in expenditure (8%) is much smaller than the differences for many of the health status measures shown above.

Aboriginal and Torres Strait Islander peoples appear to have a different pattern of service use from that for the rest of the population (Figure 4.26), with higher estimated per person expenditure for Indigenous people for public hospital services and community health services, and lower per person expenditure for Medicare, the Pharmaceutical Benefits Scheme, nursing homes, dental and other professional services, and private hospitals (Deeble et al. 1998).

4.7 Socioeconomically disadvantaged

There has been considerable focus in Australia and overseas on the association between socioeconomic disadvantage and health. The relationship between increasing mortality and morbidity with decreasing socioeconomic status has been well demonstrated (Turrell et al. 1999). Similarly, many of the differences in health between groups, such as between men and women, between Indigenous people and non-Indigenous persons, and between urban and rural residents, also show a relationship with socioeconomic factors (AIHW: