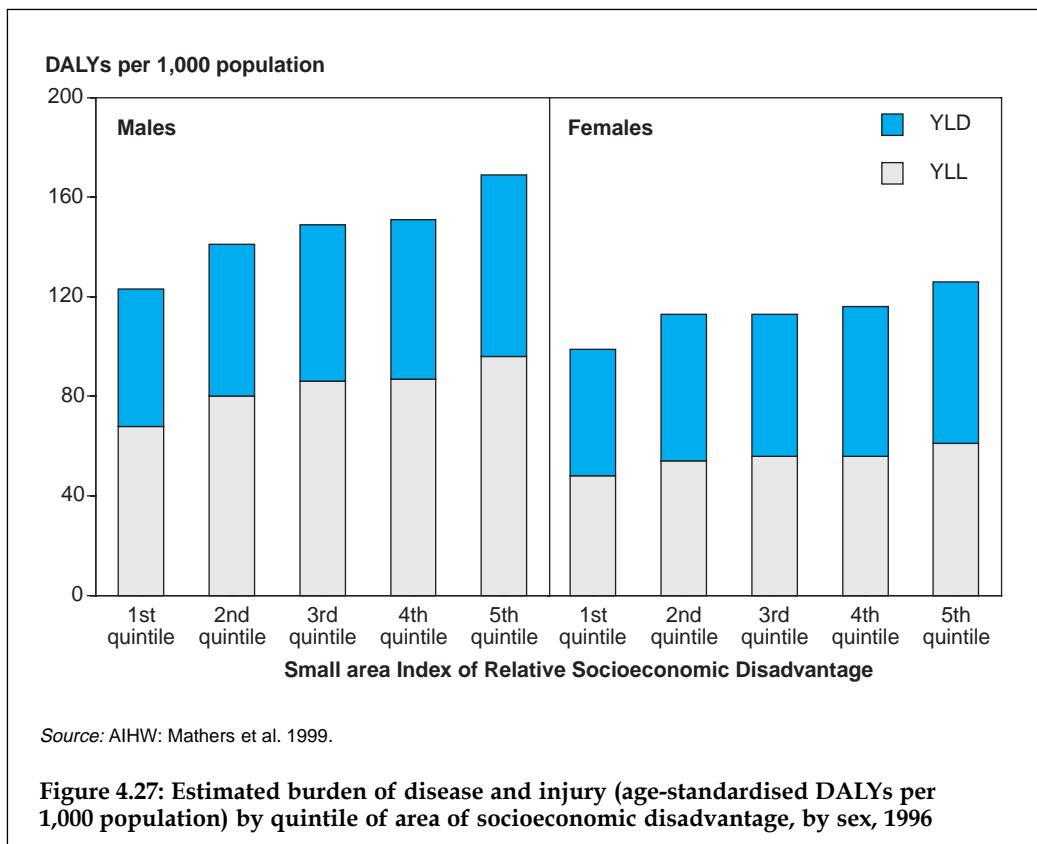


Among all people aged 15 years and over, 17% rated their health as fair or poor, with this percentage ranging from 12% in the least disadvantaged areas to 22% of those in the most disadvantaged areas (ABS 1999f).



Of the fifteen most common non-minor illnesses recorded in the survey, five were more common in the most disadvantaged areas, including arthritis, asthma, bronchitis/emphysema, ulcer and diabetes. As found in earlier studies, the more socio-economically disadvantaged also made greater use of doctors and outpatient/casualty services, but were less likely to use preventive health services (ABS 1999f).

4.8 Rural and remote populations

The health of populations living in rural and remote areas of Australia is worse than of those living in capital cities and other metropolitan areas (AIHW 1998). Mortality and illness levels increase as the distance from metropolitan centres increases. Relatively poor access to health services, lower socioeconomic status and employment levels, exposure to comparatively harsher environments and occupational hazards contribute to and may explain most of these inequalities. Also, a large proportion of the population in the more remote parts of Australia are Aboriginal and Torres Strait Islander peoples, who generally have poorer health status.

The geographical basis of reporting in this section is the Rural, Remote and Metropolitan Areas (RRMA) classification which is outlined in Table 4.13. This classification is based mainly on population numbers and an index of remoteness (DPIE & DSHS 1994).

Demographic and environmental factors

About 29% of the Australian population (including 64% of the Indigenous population) live in rural and remote Australia. Although Aboriginal and Torres Strait Islander peoples constitute about 2.1% of the total Australian population, they make up 1% of the capital city population and 20% of the population of the remote zone. The remote zone also has a low or negative population growth rate, higher fertility rates, more children and fewer old people (AIHW 1998), and Year 12 high school completion rates tend to be 10% lower than in capital cities (SCRCSSP 1997). The Index of Relative Socioeconomic Disadvantage tends to increase with increasing remoteness (AIHW 1998).

Table 4.13: Population distribution by Rural, Remote and Metropolitan Areas classification

RRMA category	Population (1998)		Population growth 1991–96 (per cent)	Indigenous population (1996) ^(a)	
	Number	Per cent		Number	Per cent
Metropolitan					
Capital cities	11,952,545	63.8	1.2	117,103	1.0
Other metropolitan centres	1,421,040	7.6	1.8	22,880	1.7
Rural					
Large rural centres	1,119,312	6.0	1.5	33,435	3.1
Small rural centres	1,218,495	6.5	1.2	34,009	2.8
Other rural areas	2,466,695	13.2	0.9	63,807	2.6
Remote					
Remote centres	224,168	1.2	0.1	27,530	12.6
Other remote areas	345,549	1.8	-0.3	87,088	25.9
Total	18,747,804	100.0	1.2	385,852	2.1

(a) 1998 estimates of the Indigenous population by statistical local area (SLA) were not available.

Source: AIHW, derived from ABS SLA population estimates.

Risk factors

Personal health risk factors tend to be worse in remote areas than in metropolitan areas. For example, a higher proportion of males in remote areas self-report high alcohol consumption (8.0% compared with 4.4% in capital cities). Also, in remote areas a higher proportion of people smoke (approximately 10 percentage points higher for both sexes) and a lower proportion of men walk for exercise (AIHW 1998). Based on self-reported measures of height and weight, a higher proportion of women from remote areas are overweight.

Mortality and morbidity

Death rates show a graduated increase with increasing remoteness. Death rates vary according to age and sex grouping, but overall the rates for the Indigenous population are two to three times higher than those of the non-Indigenous population. The higher death rates in remote areas for the population overall can be largely explained by the high proportion of Indigenous peoples living in those areas (Table 4.14).

The death rate for Indigenous people in the remote zone was about 10% higher than for Indigenous people in the metropolitan zone. A major reason for this was the higher rates of death from respiratory disease and injury in the remote zone.

The death rates for non-Indigenous males and females in the remote zone were lower than in the metropolitan zone, even though rates of injury-related death were higher in the remote zone.

Indigenous males in the rural zone have a similar death rate to their metropolitan counterparts, and Indigenous females have a death rate 10% lower than their metropolitan counterparts (Table 4.14). Death rates for non-Indigenous people were similar or only slightly higher for the rural zone compared with the metropolitan zone.

Table 4.14: Mortality rates for the Indigenous and non-Indigenous populations by geographic zone, 1994–98 (per 100,000 population)

	Indigenous status	Death rate 1994–98			Total
		Metropolitan	Rural	Remote	
Males	Indigenous	1,763	1,721	1,916	1,825
	Non-Indigenous	773	*800	746	778
	Total males	779	*809	*948	805
Females	Indigenous	1,215	1,097	1,361	1,286
	Non-Indigenous	507	502	*454	505
	Total females	511	509	*649	524

* Significantly different from the metropolitan zone at the 5% level.

Notes

1. Age standardised to the Australian population at 30 June 1991.
2. Based on data for South Australia, Western Australia and the Northern Territory.

Source: AIHW 1998a.

Recent data indicate that the health of those in remote areas is generally poorer in each of the National Health Priority Areas:

- Mortality from heart, stroke and vascular disease is marginally higher in remote areas than in metropolitan areas. Mortality from rheumatic heart disease is almost three times higher in remote areas, reflecting the high rate in the Indigenous population. The hospital admission rate for coronary heart disease is 1.4 times higher, and the admission rates for stroke are 1.4 times higher for males and 1.6 times higher for females in remote areas than in metropolitan areas (DHAC & AIHW 1999b).
- Whereas rural and metropolitan death rates from diabetes are similar, death rates in remote areas are approximately twice as high, reflecting the high rate in Indigenous people. Hospital admission rates for rural residents are a little higher, and admission

rates for remote residents are more than 2.5 times higher than those for their metropolitan counterparts (DHAC & AIHW 1999a).

- Cancer mortality is similar in metropolitan, rural and remote areas. People living in the remote zone show higher cervical cancer and slightly lower melanoma incidence and death rates (AIHW 1998).
- Death rates and hospital admissions due to injury are moderately higher in rural areas, but two to three times higher in remote areas compared with capital cities (AIHW 1998a). In remote areas, approximately 30% of these extra injury deaths are attributable to motor vehicle accidents, 20% to suicide and 10% to interpersonal violence.
- There are few comparative data available on mental health; however, higher suicide rates, particularly in young men from rural and remote areas, may indicate higher levels of depression (DHAC & AIHW 1999c). In 'other remote areas', the male suicide rate is one-and-a-half times the capital cities rate, and the suicide rate of males aged 15–24 years is almost twice that of their capital city counterparts.
- Asthma death rates are up to twice as high in more remote areas compared with metropolitan centres (AIHW 1998).

Children and youth

Death rates for children aged less than 15 years are higher with increasing remoteness. Half of all deaths in this age group are due to injury, with smaller proportions due to cancer and asthma. In the remote zone, where the death rate is almost double that for metropolitan children, over 60% of these extra deaths were due to injury, and of these half were as a result of motor vehicle accidents and a third were due to drowning (with boys having higher rates than girls for all these causes). Death rates for all children from the rural zone fall between the rates for metropolitan and remote zones (AIHW: Moon et al. 1998).

Death rates for Indigenous children in the metropolitan and remote zones were approximately double those for non-Indigenous children in those zones. Indigenous children from the remote zone had death rates double that of metropolitan and rural zone Indigenous children.

Hospital admission rates for girls and boys were higher in the remote zone (172 and 227 per 1,000 population respectively) than in the rural zone (113 and 156 per 1,000 population respectively) and in the metropolitan zone (113 and 156 per 1,000 population respectively).

Death rates for young adults (those aged 15–24 years) increase with increasing remoteness. The death rate for young adult males in 'other remote areas' was twice that for their capital city counterparts. Death from motor vehicle accidents was three times more likely for young adults in remote areas compared with those living in capital cities. Young males from remote areas are almost twice as likely to commit suicide compared with young males from capital cities. Injury death rates for young adults fell substantially in the last decade in all three zones, with rates for motor vehicle accident deaths decreasing by about 40%. However, rates for suicide death increased by about 16% in the last decade.

Death rates for young Indigenous adults (15–24 years) are double the rate for all young Australian adults in this age group across all three zones. The death rate for young Indigenous males in the remote zone was twice that of their metropolitan zone Indigenous counterparts, but for young Indigenous females there was no significant difference between death rates in each zone. Almost 70% of these Indigenous deaths were due to injury as for all young adults.

Hospital admission rates for young adults increase with increasing remoteness. Females were admitted at twice the rate of males (though this difference was greater in more remote areas). In ‘other remote areas’ the hospital admission rate for males and females respectively were one-and-a-half times and two-and-a-half times the admission rate of their capital city counterparts. Of the leading causes for male admission, only injury showed a clear and strong trend for significantly higher rates (three times higher) in ‘other remote areas’ compared with capital cities. Females in ‘other remote areas’ were admitted for pregnancy-related reasons at a rate 2.5 times higher and for injury at a rate 4 times higher than their capital city counterparts.

Oral health

Major differences in oral health exist between the metropolitan, rural and remote areas. Variations in tooth loss indicate differing historical treatment patterns between urban, rural and remote locations.

Table 4.15: Complete tooth loss among adults aged 18 years and over, 1994–96 (per cent)

Age group	Metropolitan	Rural	Remote	Australia
18–24 years	0.1	0.2	0.0	0.1
25–44 years	1.4	2.1	*2.2	1.8
45–64 years	11.7	21.5	*14.8	14.2
65+ years	36.6	50.0	43.2	40.3
Total	9.3	16.2	9.4	10.9

* Estimate has a relative standard error greater than 25%.

Source: National Dental Telephone Interview Surveys 1994, 1995, 1996.

Complete tooth loss increases with increasing age (Table 4.15). In total, less than 2% of adults aged less than 45 years had lost all their natural teeth, but this increased to more than one in five rural adults in the 45–64 age group. Adults aged 65 years and over from rural areas had a higher rate of complete tooth loss than adults from remote or metropolitan areas.

See page 285 for information on the use of dental services by persons in urban, rural and remote areas.

Health workforce

The number of healthcare professionals in an area is an important factor in influencing both health status and access to care. The availability of healthcare professionals across the geographic areas is described in section 5.4 (page 260)

Expenditure and access

There are 65% more public hospital beds available per person in the rural zone compared with capital cities. The per person amount spent on hospitalisation (as measured by average cost weight and ignoring length of stay) is similar for residents of metropolitan and rural zones (AIHW 1998). Hospital admission rates are 20–40% higher for remote zone residents (due to higher rates of medical admission) compared with residents of capital cities, but rates of admission for remote area residents requiring specialist medical practitioners and equipment are lower, being 70–90% of capital city rates (AIHW 1998).

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