



Fact Sheet 9

The state of rural health

MAY 2009

People in rural and remote Australia tend to have higher rates of disease and injury – and to die younger – than their counterparts in our major cities. The reasons include socio-economic and personal health risk factors, riskier environments and reduced access to services. However, they also tend to experience higher levels of satisfaction with life.

Rural Australians

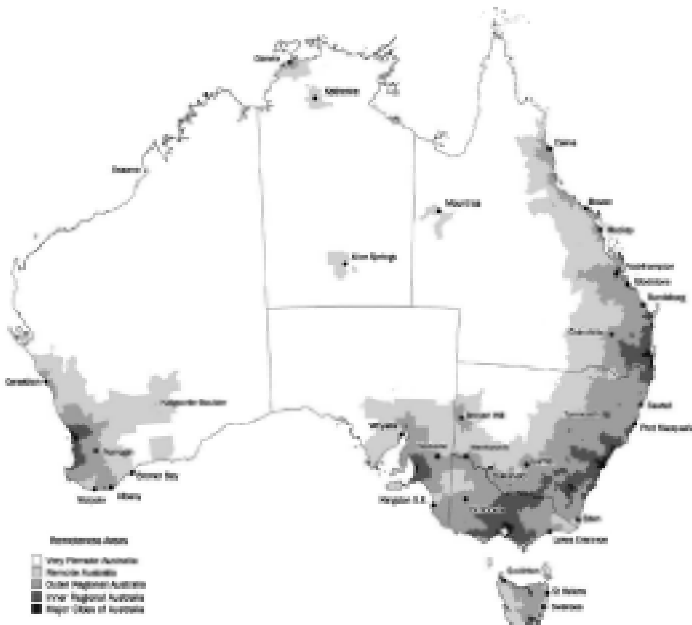
About seven million people or 32 per cent of the total Australian population live outside major cities. While some of them are farmers, miners, forest workers or fishermen and their families, most workers in rural and remote Australia are to be found in the retail, health, education, government, manufacturing, processing, transport and other sectors. Most of the seven million live in regional cities and country towns of various sizes.

On average, they have lower levels of education, lower incomes and poorer health risk factor profiles than people in the major cities. For instance they are exposed to greater physical risks. Apart from dangerous occupations such as farming, fishing and forestry, other physical risks (eg road accident) are greater and retrieval times are longer should they experience health difficulties. They are also more likely to smoke, drink too much alcohol, be overweight and take insufficient exercise.

People in these areas also have lower levels of access to health and other services; almost all health professionals are less prevalent, some dramatically so. The need to travel to specialist services in capital cities, especially for ongoing treatment, can greatly disrupt occupations and family life.

Aboriginal and Torres Strait Islander people make up a substantial proportion of the population in rural and especially remote areas. On average their health outcomes are substantially poorer than those of other Australians.

Figure 1: Remoteness areas of Australia Source: ABS 2007.



Notwithstanding this profile, many people choose to live outside major cities for a number of very compelling reasons, including a sense of community, peace, reduced traffic, contact with nature and other lifestyle factors. There is little empirical evidence on the health benefits of living outside major cities.

For the purposes of this paper, discussion of disease patterns across Australia will use the ABS Australian Standard Geographic Classification Remoteness Structure (Figure 1).

Overall mortality

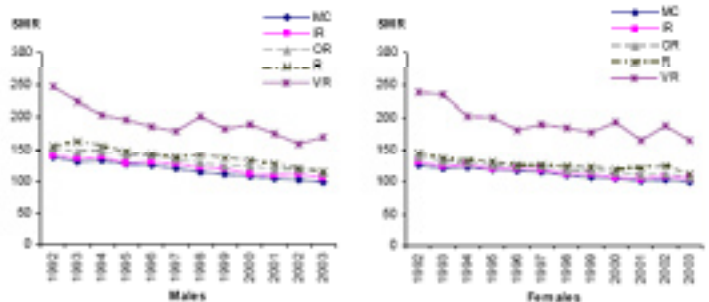
Death rates in regional and remote areas are, on average, 1.05-1.15 and 1.2-1.7 times higher than in major cities. In all of these areas average death rates for Indigenous people are more than three times higher than for the general population.

The need for elderly people from small remote centres to migrate to larger centres to access services reduces reported inter-regional mortality differences. Even so, death rates for the non-Indigenous population in regional areas are still higher than in major cities.

Remote residence alone does not necessarily equate to high mortality. For example, while average death rates in remote areas are very high, rates in some of them are actually lower than in some areas within major cities.

Death rates (Standard Mortality Ratios, or SMRs) in Very Remote areas have declined at about twice the rate apparent in other areas (Figure 2).

Figure 2: Overall trend in SMRs, 'all causes', males and females, 1992-2003



Note: SMRs calculated using Major Cities rates in the period 2001-2003 as the standard, and expressed as multiples of 100. Source: AIHW 2006.

For females, chronic obstructive pulmonary disease (COPD) mortality has decreased in major cities but shown little change in regional and remote areas while lung cancer mortality appears to have increased in almost all areas. Suicide mortality appears to have increased for both males and females in remote areas.

Chronic diseases

About 70 per cent of the additional deaths that raise mortality in regional and remote areas above that in major cities are due to:

- coronary heart disease (CHD - 19 per cent of excess deaths) and other circulatory disease (18 per cent, excluding stroke);
- diabetes (6 per cent) as the primary cause of death, although this greatly understates its association with the development of other diseases (eg CHD);
- chronic obstructive pulmonary disease (9 per cent); and
- cancers (15 per cent), with lung and prostate cancer featuring strongly.

Circulatory disease and cancer mortality declined strongly between 1992 and 2003, especially in very remote areas. Diabetes mortality for males has tended to show little change or has increased, while for females it has shown little change or has decreased.

Table 1 describes the prevalence of selected chronic diseases self-reported in regional areas in 2004–05. There is little information about prevalence of chronic diseases in remote areas because national surveys seldom sample in them

Asthma, bronchitis and arthritis are about 1.2 times more common outside major cities. For these diseases, prevalence mirrors mortality.

It is hard to know how to interpret the rest of the table. It is likely that people are less aware of whether they have circulatory diseases, diabetes and osteoporosis because, particularly in early stages, symptoms may not be immediately obvious.

Table 1: Prevalence of selected self-reported chronic disease

| Chronic disease | Sex | MC crude percent | Standardised ratios | | | All ex MC |
|-----------------|---------|------------------|---------------------|--------------|--------------|--------------|
| | | | MC | IR | OR+R | |
| | | | Standardised ratios | | | |
| Diabetes | Males | 4 | 1.00 | 0.83 | 0.95 | 0.88 |
| Diabetes | Females | 3 | 1.00 | *1.31 | 1.18 | *1.26 |
| Diabetes | Persons | 4 | 1.00 | 1.03 | 1.04 | 1.03 |
| Osteoporosis | Persons | 3 | 1.00 | 0.90 | *0.67 | *0.82 |
| CVD (stroke) | Persons | 1 | 1.00 | 0.78 | 1.19 | 0.93 |
| CHD | Persons | 2 | 1.00 | 1.14 | *0.63 | 0.95 |
| Asthma | Persons | 10 | 1.00 | *1.22 | 1.08 | *1.16 |
| Bronchitis | Persons | 3 | 1.00 | 1.17 | *1.36 | *1.24 |
| Arthritis | Persons | 14 | 1.00 | *1.24 | *1.23 | *1.24 |

Note: CVD=cerebrovascular disease (stroke), CHD=coronary heart disease. Numbers in bold and with an asterisk were significantly different from 1.00 at the 95% level of confidence. All ratios indirectly age-standardised to rates in Major Cities. Results for OR +R areas relates predominantly to OR areas and includes relatively little information from remote areas. Results are presented for persons, and where patterns differ between the sexes, for males and females. Source: AIHW 2008, derived from 2004-05 ABS National Health Survey.

Cancer

Cancer mortality is higher in regional and remote areas compared with major cities.

The incidence of new cases of cancer was about 1.1 times higher in regional areas than in major cities. Major contributors to excess cancer mortality outside major cities were prostate, lung, and colorectal cancers.

Injury

Injury is 1.2 times more likely to occur in regional areas than in major cities, while death due to injury is up to 1.5 and 3.2 times higher in regional and remote areas.

Injury is responsible for about 18 per cent and 26 per cent of all excess deaths in regional and remote areas, being a proportionally more important contributor for males than females.

Traffic accidents and suicide were responsible for 9 per cent and 4 per cent of all the excess deaths outside major cities.

Death rates due to traffic accidents have tended to decline in all areas. Of concern, between 1992 and 2003 suicide rates for both sexes appear to have been increasing in remote areas, as also have rates for females in inner regional areas.

Disability

Disability among females appears to be about as prevalent in rural and remote areas as in major cities. However, for males, the prevalence of disability and severe/profound activity limitation appears to be about 20 per cent and 30 per cent higher in regional areas than in major cities. It is not clear whether this is due to higher risks for disability, or whether people with disabilities tend to move to regional areas.

Dental health

Six and 12 year olds in rural areas have 1.2 to 1.6 times as many decayed, missing or filled teeth as those in major cities. This is likely due to lower access to fluoridated water and local dentists.

Mental health

The rates of mental health problems appear roughly similar in major cities, regional and remote areas, but the problems of dealing with it are exacerbated in rural areas. Suicide rates are higher in the country. Ironically, on average, rural people tend to be more satisfied with their lives than their major city counterparts.

Infectious diseases

While less likely to be fatal in modern times, infectious diseases can still be significantly debilitating and reduce the options for healthy life. Rates of notification tend to be higher outside major cities; for example, salmonella, Ross River virus, pertussis and sexually transmitted infections tend to be, respectively, up to 4, 9, 2 and 12 times as likely to be notified in regional and remote areas compared with major cities.

For more information check the following links:

<http://www3.interscience.wiley.com/cgi-bin/fulltext/121645430/PDFSTART>

<http://www.aihw.gov.au/ruralhealth/index.cfm>