

# **Rural & remote health**

Web report | Last updated: 29 May 2017 | Author: AIHW

Australians living in rural and remote areas tend to have shorter lives, higher levels of disease and injury and poorer access to and use of health services compared to people living in metropolitan areas. Poorer health outcomes in rural and remote areas may be due to a range of factors, including a level of disadvantage related to education and employment opportunities, income and access to health services.

#### Findings from this report:

5.4x the rate of deaths due to a land transport accidents in Remote and very remote areas compared to Major cities

1.7x higher rate of suicide in Remote and very remote areas, compared to Major cities

1.3x mortality rates for people living in Remote and very remote areas, compared to people living in Major cities

1 in 5 people living in Outer regional and remote areas smoke daily

Last updated 7/08/2017 v3.0

© Australian Institute of Health and Welfare 2018 (cc) BY





# **Rural health**

Australians living in rural and remote areas tend to have shorter lives, higher levels of disease and injury and poorer access to and use of health services compared to people living in metropolitan areas. Poorer health outcomes in rural and remote areas may be due to a range of factors, including a level of disadvantage related to education and employment opportunities, income and access to health services. People living in rural and remote areas may also have more occupational and physical risk, for example from farming or mining work and transport-related accidents. The proportion of adults engaging in behaviours associated with poorer health, such as tobacco smoking and alcohol misuse, are also higher in these areas.

Higher death rates and poorer health outcomes outside major cities, especially in remote areas, also reflect the higher proportion of the population in those areas who are Aboriginal or Torres Strait Islander Australians [1].

Despite poorer health outcomes for some, the Household, Income and Labour Dynamics in Australia (HILDA) survey found that Australians living in small towns (fewer than 1,000 people) and non-urban areas generally experienced higher levels of life satisfaction compared to those living in *Major cities* [2].

#### References

- 1. AlHW 2015. The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples: 2015. Cat. no. IHW 147. Canberra: AlHW.
- 2. Wilkins R 2015. The Household, Income and Labour Dynamics in Australia Survey: selected findings from waves 1 to 12. Melbourne: Melbourne Institute of Applied Economic and Social Research.

Last updated 16/08/2017 v4.0

© Australian Institute of Health and Welfare 2018 (c) BY



# Health risk factors and remoteness

People in regional and remote Australia were more likely to engage in behaviours associated with poorer health. This included higher rates of daily smoking, alcohol intake, overweight and obesity, and lower levels of exercise.

#### Rates of different health behaviours and risk factors in different residential areas

Health risk factors	Major cities	Inner regional	Outer regional/ Remote
Current daily smoker	13%	17%	21%
Overweight or obese	61%	69%	69%
No/low levels of exercise	64%	70%	72%
Exceed lifetime alcohol risk guideline	16%	18%	23%
High blood pressure	22%	27%	24%

#### Notes

- 1. '%' represents prevalence of risk factor in each region (excluding Very remote areas of Australia).
- 2. 'Proportions' are not age-standardised and, in some instances, higher prevalence may reflect the older age profiles in *Inner* regional and *Outer regional/Remote* areas.

#### **Smoking**

• In 2014–15 people living outside of *Major cities* had higher rates of current daily smoking based on self-reported data, with the proportion increasing with remoteness. About 1 in 5 (21%) people living in *Outer regional and remote* areas smoked tobacco daily, compared with 17% of people living in *Inner regional* areas and 13% in *Major cities* [1].

### Diet and weight status

- About 7 in 10 adults (69%) from *Inner regional, Outer regional and remote* areas were measured as overweight or obese in 2014–15, compared with about 6 in 10 (61%) in *Major cities*.
- In contrast to the higher rates of overweight and obesity, people living in *Outer regional and remote* areas were more likely to eat the recommended number of serves of vegetables per day compared to those living in *Major cities* or *Inner regional* areas (11% and 7%, respectively). The proportion of people eating the recommended two serves of fruit per day was generally the same across all areas.
- The likelihood of consuming alcohol in quantities that risked harm in the long term increased with remoteness. For example, 23% of people living in *Outer regional and remote* areas consumed alcohol in amounts that risked long-term harm, compared to 18% in *Inner regional* areas and 16% in *Major cities*.

### **Exercise**

• Physical inactivity increased with remoteness. Almost three-quarters (72%) of people from *Outer regional and remote* areas did no or little exercise in 2014–15, compared with 64% in *Major cities*.

### High blood pressure

• In 2014–15, the proportion of people with high blood pressure (hypertension) was greater for people living in *Inner regional* (27%) and *Outer regional and remote* (24%) areas, compared with people living in *Major cities* (22%).

### References

ABS (Australian Bureau of Statistics) 2015. National Health Survey: First Results, 2014–15. ABS cat. no. 4364.0.55.001.
Canberra: ABS.

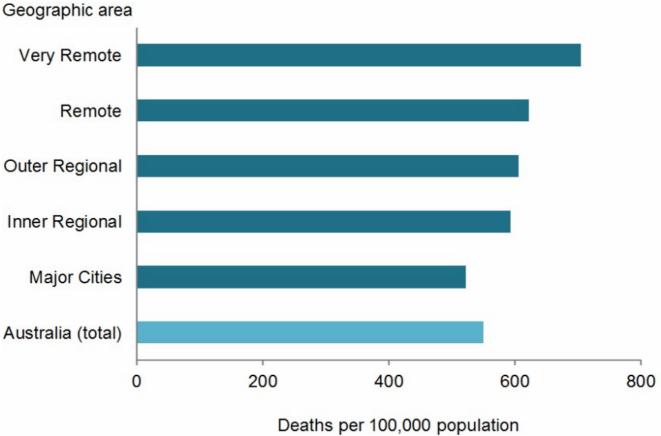


### **Deaths & remoteness**

Mortality rates in Australia increase with remoteness. In 2015, people living in *Remote and very remote* areas had a mortality rate 1.3 times as high as people living in Major cities (655 per 100,000 population compared with 522 per 100,000).

The higher death rates outside major cities, especially in remote areas, may reflect the higher proportions of populations in those areas who are Aboriginal or Torres Strait Islander Australians. Indigenous Australians tend to have higher mortality rates and are more likely to live outside metropolitan areas when compared to non-Indigenous Australians [1].

Figure 1: Total deaths (age-standardised rate), by remoteness, 2015



## Leading causes of death in rural areas

In 2015:

- Coronary heart disease was the leading cause of death for all areas across Australia, with mortality rates 1.3 times higher in *Remote and very remote* areas compared with *Major cities*.
- People living in combined *Remote and very remote* areas were 2.3 times as likely to die from diabetes, compared to those living in *Major cities*. Suicide was 1.7 times as high.
- The rate of dying due to road transport accidents was more than 5 times as high in *Remote and very remote* areas than in *Major cities* (AIHW unpublished analysis of National Mortality Database).

#### References

1. ABS & AIHW 2008. The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples 2008. Cat. no. IHW 21. Canberra: AIHW.



# **Health conditions & remoteness**

People living outside *Major cities* were more likely to have long-term health conditions including arthritis, asthma, back problems, deafness, long-sightedness, diabetes, heart, stroke and vascular disease. However, people living outside *Major cities* were less likely to be shortsighted. Rates of cancer, osteoporosis and chronic obstructive pulmonary disease (COPD) were generally similar across all areas.

Disease type	Major cities	Inner regional	Outer regional/ Remote
Arthritis	14%	20%	18%
Back pain and problems	16%	18%	16%
Asthma	10%	12%	12%
COPD	2.4%	3.4%	2.7%
Blindness	0.5%	0.9%	0.8%
Deafness	9.8%	15%	14%
Diabetes	4.7%	6.0%	6.7%
CVD	4.7%	6.7%	5.8%
Cancer	1.6%	1.7%	1.8%
Mental health problems	17%	19%	19%

#### Notes

- 1. '%' represents prevalence of chronic diseases in each region (excluding Very remote areas of Australia).
- 2. Proportions are not age-standardised, and in some instances higher prevalence may reflect the older age profiles in *Inner regional* and *Outer regional/Remote* areas.
- 3. 'COPD' refers to chronic obstructive pulmonary disease.
- 4. 'Blindness' includes partial and complete blindness.
- 5. 'CVD' refers to heart, stroke and vascular disease.

#### References

1. ABS (Australian Bureau of Statistics) 2015. National Health Survey: First Results, 2014–15. ABS cat. no. 4364.0.55.001. Canberra: ABS.

Last updated 16/08/2017 v5.0

© Australian Institute of Health and Welfare 2018



# **Access to health services**

People living in *Remote and very remote* areas generally have poorer access to, and use of, health services than people in regional areas and *Major cities*. They also have lower rates of bowel cancer screening, higher rates of potentially avoidable hospital admissions, and lower access to selected hospital procedures [1].

In 2014–15, people living in *Major cities* were more likely than those living in regional and remote Australia to have visited a general practitioner (GP) in the last 12 months (86% compared with 83% in *Inner regional* areas and 84% in *Outer regional and remote* areas) [2].

In 2014, the full-time equivalent (based on total weekly hours worked) rate of employed GPs per 100,000 population was higher in *Remote and very remote* areas (137) than in *Major cities* (109); however:

- the overall rate of employed medical practitioners (including specialists) was lower (253 per 100,000 population compared with 409)
- the number of GP services provided per person in Very remote areas during 2010–11 was about half that of Major cities [3].

Those living in *Major cities* were also more likely to have consulted a dentist in the last 12 months than people living in regional and remote areas of Australia (49% and 42%, respectively) [2].

People living in remote areas of Australia may need to travel long distances or relocate to attend health services or receive specialised treatment. For example, based on combined data for 2005–2010, 57% of people with end-stage kidney disease who lived in *Very remote* areas at the start of their treatment moved to less remote areas within 1 year.

In 2013–14, the rate for emergency hospital admissions involving surgery was highest for people living in *Very remote* areas (22 per 1,000 population) and fell with decreasing remoteness to be lowest among people living in *Major cities* (12 per 1,000).

#### References

- 1. AIHW 2016. Australia's health 2016. Australia's health no. 15. Cat. no. AUS 199. Canberra: AIHW.
- 2. Australian Bureau of Statistics (ABS) 2017. Health service usage and health related actions, Australia 2014¬–15. ABS cat. no. 4364.0.55.002. Canberra: ABS.
- 3. Duckett S, Breadon P & Ginnivan L 2013. Access all areas: new solutions for GP shortages in rural Australia. Melbourne: Grattan Institute.

Last updated 4/07/2017 v2.0

© Australian Institute of Health and Welfare 2018 (c) BY



### **Notes**

The term 'rural and remote' encompasses all areas outside Australia's *Major cities*. Using the Australian Standard Geographical Classification System, these areas are classified as *Inner regional*, *Outer regional*, *Remote* or *Very remote*. For further information, please see the Australian Standard Geographical Classification System on the Australian Bureau of Statistics website.

It can be difficult to assess the implications of remoteness for health due to:

- the interactions between remoteness, low socioeconomic position and the higher proportion of Indigenous Australians in many of these areas compared with *Major cities*
- the variability in the distribution of disadvantage and of Indigenous Australians across all areas—for example, levels of disadvantage on the fringe of *Major cities* can be more akin to those in rural/remote areas than to inner-city areas
- gaps in the availability and coverage of health data in rural and remote areas, and in information available at the local area level.

It is also difficult to measure whether there is adequate supply of medical services because of the influence of factors such as varying health-seeking behaviours, professional scope of practice, and health system efficiency across remoteness areas.

Last updated 7/08/2017 v2.0 © Australian Institute of Health and Welfare 2018