

Health in rural and remote Australia

The first report of the Australian Institute of Health and Welfare on rural health

**Kathleen Strong
Phil Trickett
Ian Titulaer
Kuldeep Bhatia**

**Australian Institute of Health and Welfare
Canberra**

AIHW Cat. No. PHE 6

© Commonwealth of Australia 1998

This work is copyright. Apart from any use as permitted under the *Copyright Act 1968*, no part may be reproduced without written permission from AusInfo. Requests and enquiries concerning reproduction and rights should be directed to the Manager, Legislative Services, AusInfo, GPO Box 84, Canberra ACT 2601.

ISBN 0 642 24782 x

The Australian Institute of Health and Welfare's World Wide Web site can be found at:
<http://www.aihw.gov.au>

Suggested citation

Australian Institute of Health and Welfare 1998. AIHW Cat. No. PHE 6. Health in rural and remote Australia. Canberra: AIHW.

Australian Institute of Health and Welfare

Board Chair
Professor Janice Reid
Director
Dr Richard Madden

The Institute is an independent health and welfare statistics and information agency in the Commonwealth Health and Family Services portfolio. The Institute's mission is to inform community discussion and decision making through national leadership in the development and provision of authoritative and timely information and analysis on the health and welfare of Australians.

Contents

<i>Foreword</i>	<i>iv</i>
<i>Acknowledgements</i>	<i>v</i>
<i>Summary</i>	<i>vi</i>
1 Introduction	1
2 Sociodemographics	5
3 Health status	13
4 Health risk factors and preventive measures.....	59
5 Health resources	77
6 Emerging issues.....	101
7 Data sources, developments and deficiencies.....	107
<i>Appendix I: Statistical methods</i>	111
<i>Appendix II: Statistical Local Areas by State and RRMA classification</i>	115
<i>References</i>	131

Foreword

This report is the first produced by the Australian Institute of Health and Welfare (AIHW) devoted entirely to the health of Australians living in rural and remote zones. It compares the health of those living in rural and remote zones with that of those living in the metropolitan zone by analysing a wide range of national health data sources, including death registrations, hospital statistics, and results from the 1995 ABS National Health Survey. The report will be an invaluable resource for researchers, policy makers and educators who wish to understand the health problems and service needs of those living in rural and remote Australia.

The health of people living in rural and remote zones is poorer than that of their metropolitan counterparts with respect to some health indicators. Likewise, the health of Indigenous people is known to be poorer than that of other Australians. In this report, the impact of Indigenous health on health differentials between metropolitan, rural and remote zones is quantified using mortality data from the jurisdictions with reliable registration of Indigenous deaths—South Australia, the Northern Territory and Western Australia. Mortality data for Indigenous, other Australians and all Australians show that the proportion of the population of Indigenous origin is not high enough in the metropolitan and rural zones to have any marked effect on health differentials between these areas. Thus, rural health disadvantage is not a result of poorer Indigenous health, but instead reflects disadvantage for all Australians living in this zone.

This report has been prepared with the assistance of funding from the Commonwealth Department of Health and Family Services. The AIHW is planning to conduct further work on rural and remote health and would welcome comments on any aspect of this report.

Richard Madden
Director
Australian Institute of Health and Welfare

Acknowledgements

The Rural Health Branch of the Commonwealth Department of Health and Family Services funded this report. This support was given under the Rural Health Support Education and Training (RHSET) grant program, grant No. 301, *The Development of Performance Indicators for Rural Health*. We would also like to thank Mike Langan and Keith Carter from the ABS, Ross Saunders and Duncan Laria of the Department of Health and Family Services, and Paul Lancaster, Peter Day, Warwick Conn, Graham Angus, John Harding and Zhibin Liu of the AIHW for provision of data. Thanks to Andrew Smith and Amanda Nobbs for help with the production of the publication.

Special thanks go to all those who reviewed the manuscript and provided constructive comments including John Anderson, Tony Barnes, Wendy Brown, Joan Cunningham, Michael de Looper, John Harding, Leanne Head, Paul Jelfs, and Colin Mathers.

Summary

Australia's rural and remote populations have poorer health than their metropolitan counterparts with respect to several health outcomes. They have higher mortality rates and consequently lower life expectancy. They also experience higher hospitalisation rates for some causes of ill health. This report adopts an indicator-based approach to compare the health of rural and remote populations with that of metropolitan Australians. Mortality data, cancer incidence, hospital statistics, ABS 1995 National Health Survey risk factors, medical labour force statistics, and Medicare data have all been analysed using the three zone/seven category Rural, Remote and Metropolitan Area classification (RRMA). This classification was developed in 1994 jointly by the Department of Primary Industries and Energy and the then Department of Human Services and Health. The seven RRMA categories are 'capital cities' and 'other metropolitan centres' within the metropolitan zone, 'large rural centres', 'small rural centres' and 'other rural areas' within the rural zone, and 'remote centres' and 'other remote areas' within the remote zone.

Report structure

The report is composed of seven chapters and three appendices including an introduction which explains the major factors influencing rural health disadvantage. The main chapters address rural and remote differentials for sociodemographics, health status, risk factors and preventive methods, and health service expenditure and utilisation. Separate chapters are provided for emerging issues and data sources and deficiencies. Appendix I gives detailed information on the statistical methods used in this report and appendix II provides a list of statistical local areas by RRMA category for each State and Territory. Finally, there is a list of references used in the report which is a useful source for further reading on the subject of rural health. A description of the main points of each chapter follows.

Sociodemographics

From a demographic point of view, Australia is very much an urban society. At 30 June 1996, more than 70% of its population lived in the metropolitan zone with 90% of these residents living in 'capital cities'.

Life-expectancy varies with geographic location. Those living in 'capital cities' can expect to live longer than their counterparts living in remote zone, and to a lesser extent, those living in rural areas. This is a reflection of the lower death rates for those living in 'capital cities' compared to those living in rural and remote areas. Demographic statistics indicate that:

- rural females can expect to live 80.8 years, only 0.4 years less than females living in 'capital cities'
- males living in the rural zone can expect to live 74.7 years, compared to those living in 'capital cities' who can expect to live 75.6 years
- males living in 'other remote areas' can expect to live 71.5 years, 4 years less than their 'capital cities' counterparts
- females living in 'other remote areas' can expect to live 77.4 years, almost 4 years less than females from 'capital cities'.

Differences in fertility rates between women living in metropolitan, rural and remote zones have also been examined. The analysis shows that women in rural and remote zones are having more children than those living in 'capital cities'.

- In 1995, women living in 'other rural areas' had a total fertility rate of 2.2 children per woman, compared with 1.7 children for women living in 'capital cities'.
- Women living in 'remote centres' had the highest total fertility rate in 1995, 2.5 children per woman.

Those living in rural and remote zones also have the concern that socioeconomic status is linked to geographic location. The three indicators of socioeconomic wellbeing calculated from the 1991 Census, 'Economic resources', 'Education and occupation', and 'Disadvantage', all show increasing socioeconomic disadvantage with increasing distance from a major urban centre.

Health status

This report examines a range of indicators of health status, specifically important causes of death, incidence of common cancers and major causes of hospitalisation. Major differences in death rates across RRMA categories for the 1992-96 period include:

- male and female total death rates for those living in 'capital cities' were 6% lower than for those living in 'large rural centres' and 20% lower than for those living in 'remote centres'
- injury is a major contributor to premature mortality in Australia, and there is a strong pattern of increasing mortality from injury with increasing remoteness, particularly for males
- death rates for all causes of injury in males living in 'other remote areas' were double those of males living in 'capital cities'
- males living in 'other rural areas' experienced death rates from injury around 50% higher than those living in 'capital cities'
- death rates from road vehicle accidents show an even more pronounced pattern of increase with increasing remoteness
- both males and females living in 'other rural areas' die in road vehicle accidents at more than double the rate of those living in 'capital cities'.

Hospitalisation often follows the same pattern as mortality. Similar patterns include:

- hospitalisation rates for injury, with much higher rates in the rural and remote zones compared to the metropolitan zones
- hospitalisation rates for falls in people aged 65 years or more show higher rates in rural and remote zones
- male hospitalisation rates due to burns in the remote zone were seven times those of males living in 'capital cities'
- both males and females living in the rural zone also experience higher hospitalisation rates from burns than those from 'capital cities', with rates around one-third higher than in 'capital cities'.

Other causes of death and hospitalisation show a less clear pattern for rural and remote health outcomes. Some examples of this more complex pattern are:

- there are no significant differences in stroke death rates between metropolitan, rural and remote Australia. But, hospitalisation rates from stroke show a pattern of increasing rates with increasing rurality and remoteness, for both sexes
- both mortality and hospitalisation rates from coronary heart disease reveal slightly higher rates in the rural zone, compared to 'capital cities'. Mortality rates from coronary heart disease are slightly higher still for people living in the remote zone in contrast with hospitalisation rates from coronary heart disease which are higher in the rural and metropolitan zones for females but surprisingly lower for males.

Summary

Risk factors and preventive measures

A range of risk factors and preventive measures were derived from the ABS 1995 National Health Survey. The risk factors examined include being overweight, smoking, high alcohol consumption, high serum cholesterol and high blood pressure. Preventive measures include participation in breast cancer and cervical cancer screening programs, the use of sun protection and walking for exercise. The major findings are:

- males from 'other metropolitan centres', 'remote centres' and 'other remote areas' report the highest rates of high alcohol consumption
- the remote zone and 'other metropolitan centres' report the highest proportions of male and female smokers
- males and females in 'other metropolitan centres', the rural zone and 'remote centres' report higher use of sun protection compared to males and females from 'capital cities'
- over 55% of females over the age of 40 from all zones have participated in some form of breast cancer screening program in the last 5 years
- 70% of women aged 18 or older report having had a Pap smear test in the last 2 years regardless of whether they live in a rural, remote or metropolitan zone.

Health resources

People living in rural and remote zones have less access to health care compared with those living in the metropolitan zone. Indicators of hospital services, expenditure and important health labour force personnel such as general practitioners (GPs), pharmacists and nurses were used to identify areas of rural and remote health access disadvantage. The important findings include:

- the supply of GPs and pharmacists (retail) falls sharply in the rural and remote zones
- nurses provide a higher proportion of health care in rural and remote Australia than in metropolitan Australia
- the number per capita of medical specialists is substantially lower in 'small rural centres', 'other rural areas' and the remote zone than in the metropolitan zone
- 'capital cities' have 30% more hostel accommodation for the aged than the rural zone and three times more hostel places per capita than 'remote centres'
- nursing home availability decreases with increasing remoteness
- Medicare data indicate that people living in rural and remote zones are using less services than those living in the metropolitan zone
- overall hospitalisation rates are highest for those living in the remote zone.

Impact of Indigenous health on RRMA differentials

Australia's Indigenous population continues to experience much poorer health than other Australians. Therefore, in reporting on the health differences between metropolitan, rural and remote Australians, it is important to quantify the impact of the health status of the Indigenous population on these differences.

Australia's Indigenous population makes up a little over 2% of Australia's total population. The proportion of Indigenous people in each RRMA category determines the impact of Indigenous health on health differences between metropolitan, rural and remote zones. This proportion varies considerably across RRMA categories. Indigenous people constitute:

- 1% of the metropolitan zone population
- 3% of the rural zone population
- 13% of the population in 'remote centres'

- 26% of the population in 'other remote areas'.

To illustrate the impact of Indigenous health on differences in health status across RRMA categories, analysis of mortality data for the period 1992–96 was examined for the three States and Territories considered to have the most complete registration of Indigenous deaths. Western Australia, South Australia and the Northern Territory have identified more than 90% of their Indigenous deaths over this period. The resulting analysis shows that:

- the proportion of Indigenous people is not high enough in the rural zone to have an impact on differences in health status between people living in metropolitan and rural zones
- the substantially higher proportion of Indigenous people living in the remote zone means that the Indigenous population does statistically lower the health status of people in the remote zone compared to metropolitan and rural zones.

