Population health profile of the Mallee Division of General Practice

Population Profile Series: No. 67

PHIDU

November 2005

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National Library of Australia Cataloguing in Publication entry

Population health profile of the Mallee Division of General Practice.

Bibliography.
ISBN 0 7308 9475 4.

1. Public health - Victoria - Mallee - Statistics. 2. Health status indicators - Victoria - Mallee - Statistics. 3. Health service areas - Victoria - Mallee. 4. Mallee (Vic.) - Statistics, Medical. I. Public Health Information Development Unit (Australia). II. Australia. Dept. of Health and Ageing. III. Australian Institute of Health and Welfare. (Series : Population profile series, 1833-0452 ; no. 67).

362.1099459

ISSN 1833-0452 Population Profile Series

Public Health Information Development Unit, The University of Adelaide
A Collaborating Unit of the Australian Institute of Health and Welfare

This profile was produced by PHIDU, the Public Health Information Development Unit at The University of Adelaide, South Australia. The work was funded under a grant from the Australian Government Department of Health and Ageing. The views expressed in this profile are solely those of the authors and should not be attributed to the Department of Health and Ageing or the Minister for Health and Ageing.

The data in this report are designed to be used for needs assessment and planning purposes: while they are based on the best available data and analytic processes, data available by postcode or Statistical Local Area, as used in this report, cannot be precisely translated to Division. Division totals in the report should, therefore, be seen as estimates. Interpretation of differences between data in this profile and similar data from other sources needs to be undertaken with care as such differences may be due to the use of different methodology to produce the data.

Suggested citation:

PHIDU. (2005) *Population health profile of the Mallee Division of General Practice*. Population Profile Series: No. 67. Public Health Information Development Unit (PHIDU), Adelaide.

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This publication, the maps and supporting data, together with other publications on population health, are available from the PHIDU website (www.publichealth.gov.au).

Published by Public Health Information Development Unit, The University of Adelaide

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Population health profile
of the *Mallee Division of General Practice*

Introduction

This profile has been designed to provide a description of the population of the Mallee Division of General Practice, and aspects of their health. Its purpose is to provide information to support a population health approach, which aims to improve the health of the entire population and to reduce health inequalities among population groups: a more detailed discussion of a population health approach is provided in the supporting information, page 19.

Contents

The profile includes a number of tables, maps and graphs to profile population health in the Division and provides comparisons with other areas (eg. country Victoria and Australia). Specific topics covered include:

- a socio-demographic profile (pages 2-6);
- GP workforce data (page 9);
- immunisation rates (page 9);
- rates of premature death (page); and
- estimates of the prevalence of chronic disease and selected risk factors (pages 11-15).

Key indicators

Location: Victoria

Division number: 332

Population‡:	**No.**	**%**
Total	87,565	
65+	12,861	14.7%
<25	30,119	34.4%
Indigenous	3,132	3.6%

Disadvantage score[1]: 984

GP services per head of population:

Division‡	3.5
Australia	4.7

Population per FTE GP:

Division‡	1,798
Australia	1,403

Premature death rate[2]:

Division‡	329.7
Australia	290.4

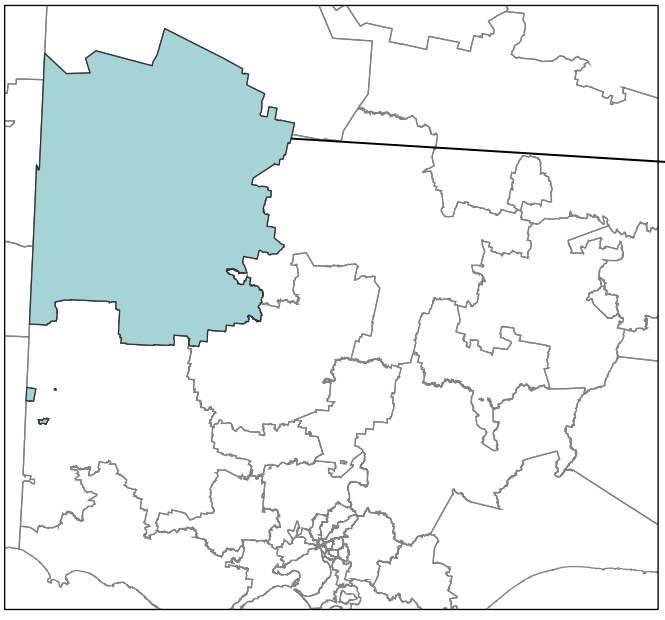
[1] **Numbers below 1000 (the index score for Australia) indicate the Division is relatively disadvantaged**

[2] **Deaths at ages 0 to 74 years per 100,000 population**

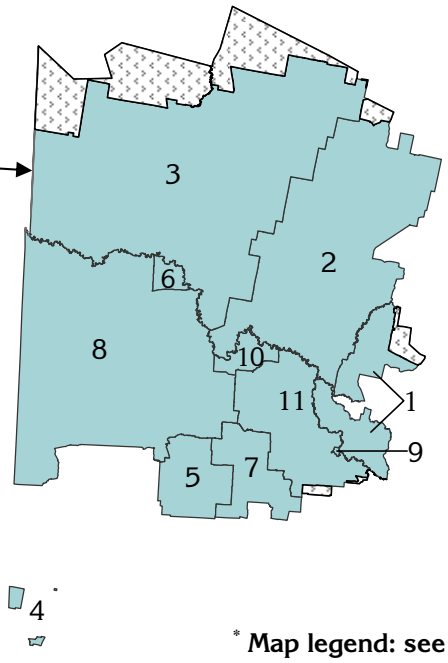
‡ **See note "Data converters and mapping" re calculation of Division Total**

Mallee Division of General Practice

Victorian Divisions of General Practice



Mallee DGP by SLA



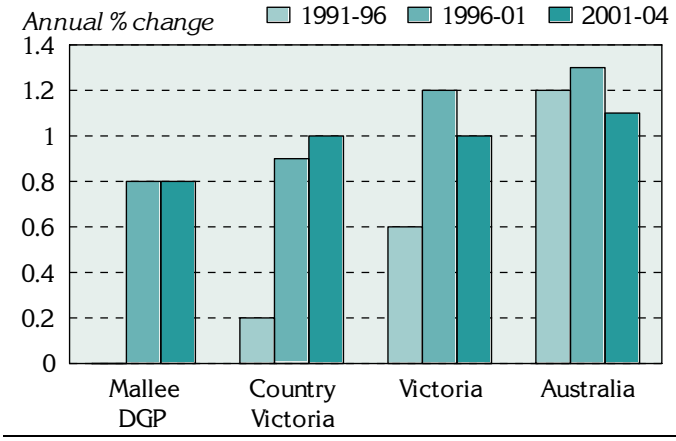
* **Map legend: see page 6**

Socio-demographic profile

Population

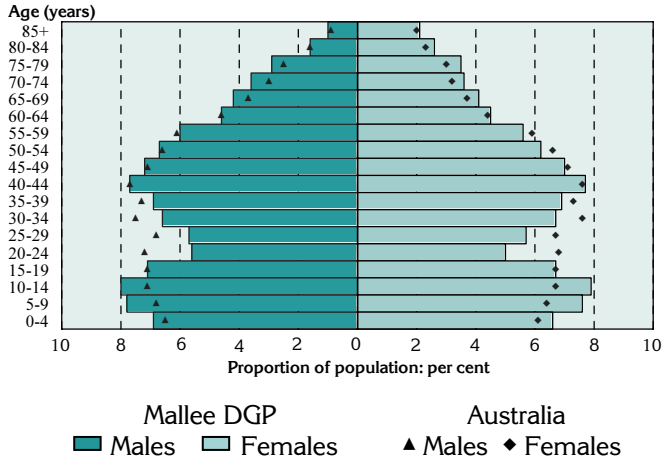
The Mallee Division had an Estimated Resident Population of 87,565 at 30 June 2004.

Figure 1: Annual population change, Mallee DGP‡, country Victoria[1], Victoria and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2004



Over the five years from 1991 to 1996, the Division's population remained the same, while there were increases in country Victoria (0.2%), Victoria (0.6%), and Australia as a whole (1.2%). From 1996 to 2001, the annual percentage increase in the Division (0.8%) was below that in country Victoria (0.9%), Victoria (1.2%) and Australia (1.3%). The same growth rate of 0.8% per year from 2001 to 2004 was again below the annual increases for country Victoria and Victoria (1.0%) and Australia (1.1%).

Figure 2: Population in Mallee DGP‡ and Australia, by age and sex, 2004



The most notable differences in the age distribution of the Division's population (when compared to Australia overall) are:

- at younger ages – higher proportions of children aged 0 to 14 years (most pronounced at ages 5 to 14 years);
- from 20 to 39 years – lower proportions (perhaps moving away to continue education, or to seek employment opportunities); and
- at older ages – slightly higher proportions of males and females aged 65 years and over.

Table 1: Population by age, Mallee DGP‡ and Australia, 2004

Age group (years)	Mallee DGP		Australia	
	No.	%	No.	%
0-14	19,574	22.4	3,978,751	19.8
15-24	10,545	12.0	2,762,769	13.8
25-44	23,633	27.0	5,881,048	29.3
45-64	20,952	23.9	4,864,037	24.2
65-74	6,805	7.8	1,374,792	6.8
75-84	4,686	5.4	934,505	4.7
85+	1,371	1.6	295,602	1.5
Total	**87,565**	**100.0**	**20,091,504**	**100.0**

As shown in the age-sex pyramid above, the Mallee DGP had more children aged 0 to 14 years (22.4%), but fewer people aged 15 to 44 years (39.0%) compared to Australia as a whole (with 20.0% and 43.1%) (Table 1). The proportions of the Division's population aged 65 to 84 years were higher than those for Australia.

The Mallee DGP comprised 4.5% of people born in predominantly non-English speaking countries and resident in Australia for five years or more (Table 2), similar to country Victoria (4.4%), but much lower than Victoria (13.8%). Recent arrivals (those resident in Australia for less than five years) from non-English speaking countries comprised 0.7% of the Division's population, higher than in country Victoria (0.4%), but lower than Victoria (2.4%).

[1]References to 'country Victoria' relate to Victoria excluding the Melbourne Statistical Division

‡ **See note under 'Data converters and mapping' re calculation of Division totals on this page**

Data Sources: see 'Data sources and limitations' at end of report

Of these residents, 1.3% had poor proficiency in English (determined when people aged five years and over born overseas in predominantly non-English speaking countries reported in the Census speaking another language and speaking English 'not well' or 'not at all'), higher than country Victoria (0.6%), but lower than Victoria (3.4%).

Table 2: Non-English speaking born, Mallee DGP, country Victoria and Australia, 2001

People born in predominantly non-English speaking countries	Mallee DGP		Country Victoria		Victoria		Australia	
	No.	%	No.	%	No.	%	No.	%
Resident in Australia for five years or more	3,754	4.5	56,852	4.4	644,806	13.8	2,019,410	10.8
Resident in Australia for less than five years	542	0.7	5,810	0.4	110,557	2.4	408,074	2.2
Poor proficiency in English[1]	984	1.3	7,285	0.6	147,394	3.4	425,399	2.4

[1] **Calculated on persons aged 5 years and over who reported speaking another language and speaking English 'not well' or 'not at all'**

Major non-English speaking birthplaces, Mallee DGP, 2001

Australian-born people comprised 93.8% of the Division's population, notably higher than the Australian figure of 72.6%. Of the 3.6% of people from English speaking countries, 2.7% were from the UK and Eire. The major birthplaces of the non-English speaking population include Germany and The Netherlands (0.3%); and Italy and the Philippines (0.2%); all other birthplaces of non-English speaking populations represented 0.1% or less of the Division's population.

Socioeconomic status

The indicators presented in this section describe geographic variations in the distribution of the population for a number of key socioeconomic influences, which impact on the health and wellbeing of populations.

The Mallee DGP had a similar proportion of single parent families (10.2%) compared to country Victoria (10.7%), but a substantially higher proportion of Aboriginal and Torres Strait Islanders (3.6%) than for country Victoria as a whole (1.1%) (Figure 3, Table 3).

Secondary school education participation of 16 year olds in the Division (75.2%) was below that for country Victoria (81.2%).

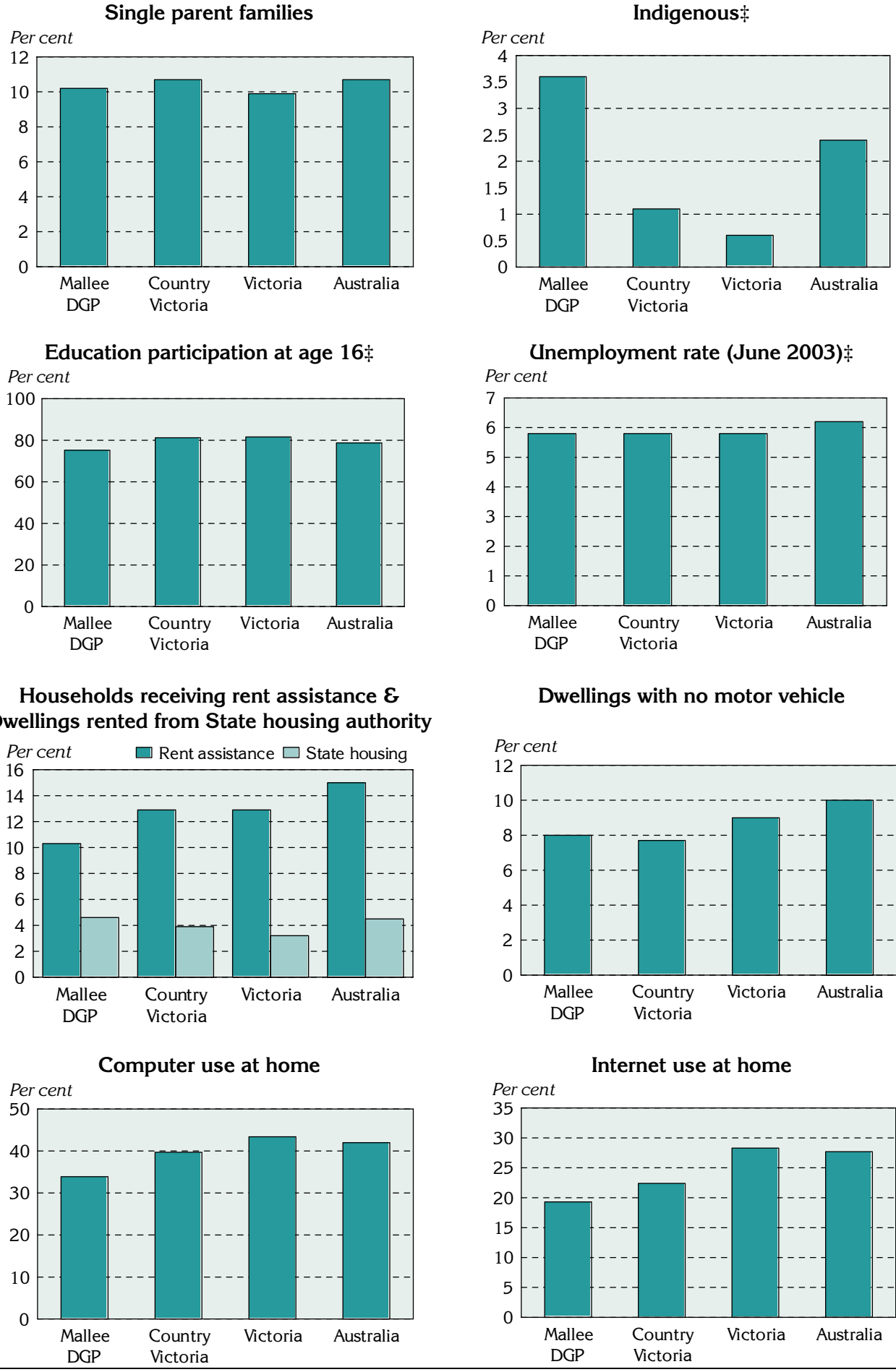
A smaller proportion of the Division's households received rent assistance from Centrelink (10.3%) compared to country Victoria and Victoria (both 12.9%), but there were marginally more dwellings rented from the State housing authority (4.6%, compared to 3.9% and 3.2%, respectively). The proportion of dwellings with no access to a motor vehicle (8.0%) was similar to that for country Victoria (7.7%), but lower than the rate for Victoria (9.0%).

The Division had notably smaller proportions of the population who reported using, at home, a computer (33.9%) and the Internet (19.3%) compared to country Victoria (39.7% and 22.4%).

These socioeconomic indicators show the Division to comprise a population of slightly below average socioeconomic status: see also the note on page 5 (Summary of socioeconomic ranking).

Figure 3: Socio-demographic indicators, Mallee DGP, country Victoria, Victoria and Australia, 2001

Note the different scales



‡ See note under 'Data converters and mapping' re calculation of Division totals

Data Sources: see 'Data sources and limitations' at end of report

Table 3: Socio-demographic indicators, Mallee DGP, country Victoria, Victoria and Australia, 2001

Indicator	Mallee DGP		Country Victoria		Victoria		Australia	
	No.	%	No.	%	No.	%	No.	%
Single parent families	2,258	10.2	36,341	10.7	120,824	9.9	529,969	10.7
Indigenous‡	3,132	3.6	15,130	1.1	27,846	0.6	458,261	2.4
Full-time secondary school education at age 16‡	943	75.2	16,154	81.2	54,494	81.6	130,198	78.7
Households: rent assistance	1,744	10.3	62,105	12.9	212,587	12.9	1,006,599	15.0
Dwellings rented from the State housing authority	1,430	4.6	18,852	3.9	54,805	3.2	317,171	4.5
Dwellings: no motor vehicle	2,499	8.0	37,538	7.7	155,728	9.0	708,073	10.0
Computer use at home	28,267	33.9	505,663	39.7	2,001,169	43.4	7,881,983	42.0
Internet use at home	15,975	19.3	290,350	22.4	644,806	28.3	2,019,410	27.7

‡ **See note under 'Data converters and mapping' re calculation of Division total**

The unemployment rate of 5.8% in Mallee DGP was consistent with the rates for country Victoria and Victoria (both 5.8%) (Figure 3, Table 4). The labour force participation rate (81.2%) was higher than for country Victoria and Victoria (both 75.3%), while the female labour force participation rate (69.8%) was similar to those in country Victoria (69.0%) and Victoria (70.6%).

Table 4: Unemployment and labour force participation, Mallee DGP, country Victoria, Victoria and Australia, 2003

Labour force indicators	Mallee DGP		Country Victoria		Victoria		Australia	
	No.	%	No.	%	No.	%	No.	%
Unemployment rate‡	2,592	5.8	41,083	5.8	144,584	5.8	623,791	6.2
Labour force participation‡	44,482	81.2	705,081	75.3	2,492,980	75.3	10,038,147	75.2
Female labour force participation (2001)	13,162	69.8	207,271	69.0	840,995	70.6	3,306,521	69.7

‡ **See note under 'Data converters and mapping' re calculation of Division total**

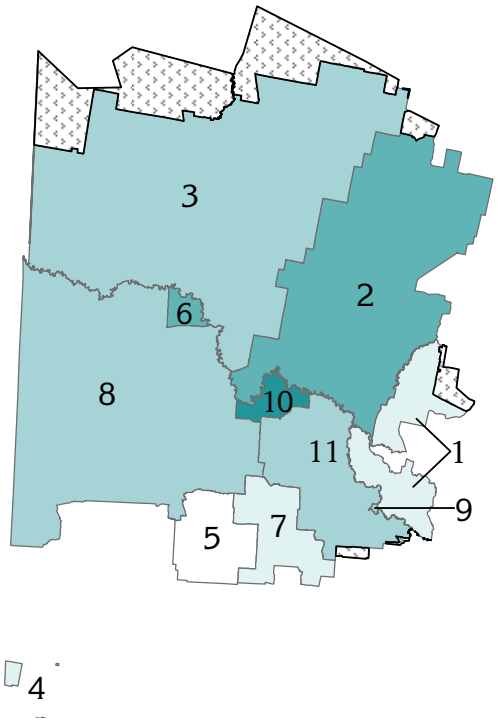
Summary of the socioeconomic ranking of the Mallee DGP

Following the 2001 Census, the Australian Bureau of Statistics (ABS) produced four socio-economic indexes for areas (SEIFA) which describe various aspects of the socioeconomic profile of populations in areas. The scores for these indexes for each Statistical Local Area (SLA) or part SLA in Mallee DGP are shown in the supporting information, Table 12, page 19: SLAs are described on page 20.

The Mallee DGP area's SEIFA Index of Relative Socio-Economic Disadvantage (IRSD) score is 984, marginally (1.6%) below the average score for Australia (1000) and country Victoria (999); this highlights the marginally lower socioeconomic status profile of the Division's population. There are wide variations in the IRSD at the SLA level within the Division (Map 1).

Map 1: Index of Relative Socio-Economic Disadvantage, by SLA, Mallee DGP, 2001

See note under 'Methods' re Data converters and mapping concerning SLAs mapped to the Division. This is of particular relevance where part of an SLA is mapped to the Division.



* most disadvantaged

\# data were not mapped: see note under 'Methods' re Data converters and mapping.

Alphabetical key to Statistical Local Areas, Mallee DGP, 2001

Balranald	2	Swan Hill - Robinvale	10
Buloke - North	7	Wakool	1
Mildura - Part A	6	Wentworth	3
Mildura - Part B	8	West Wimmera	4
Swan Hill Balance	11	Yarriambiack - North	5
Swan Hill - Central	9		

Data Sources: see 'Data sources and limitations' at end of report

Socioeconomic status: Indigenous population

At the 2001 Census, 3.6% of the population of the Mallee DGP were estimated to be of Aboriginal or Torres Strait Islander origin, higher than the proportion for country Victoria (1.1%).

The largest Indigenous populations were in the SLAs of Mildura - Part A (an estimated 1,153 people, 36.8% of the Indigenous population in the Division), Wentworth (768 people, 24.5%), Swan Hill - Central (399 people, 12.7%) and Swan Hill - Robinvale (395 people, 12.6%).

Table 5: Population by Indigenous status*, SLAs in Mallee DGP‡, 2001

Statistical Local Area	Indigenous		Non-Indigenous		Total	
	No.	%	No.	%	No.	%
Mildura - Part A	1,153	36.8	44,141	53.2	45,294	52.6
Wentworth	768	24.5	6,446	7.8	7,214	8.4
Swan Hill - Central	399	12.7	9,513	11.5	9,912	11.5
Swan Hill - Robinvale	395	12.6	3,608	4.3	4,003	4.6
Balranald	192	6.1	2,465	3.0	2,657	3.1
Swan Hill Balance	137	4.4	7,297	8.8	7,434	8.6
Other	89	2.8	9,561	11.5	9,650	11.2
Total	**3,214**	**100.0**	**87,802**	**100.0**	**91,016**	**100.0**

* **Experimental estimates of Aboriginal and Torres Strait Islander people, ABS 2001**
‡ **See note under 'Data converters and mapping' re calculation of Division totals**

The proportion of Indigenous single parent families in the Division (37.9%) was notably higher than for the Indigenous population in country Victoria (27.0%), and four times that of the Division's non-Indigenous population (9.3%) (Table 6).

Less than half (45.0%) of Indigenous 16 year olds living in the Division were involved in full-time secondary school education, notably lower than the Indigenous participation rate in country Victoria (55.5%), and substantially below the rate for the Division's non-Indigenous population (79.7%).

A higher proportion of the Indigenous population lived in dwellings rented from the State housing authority (30.1%) compared to the Indigenous population in country Victoria (24.0%), and substantially more than the Division's non-Indigenous population (4.1%).

Table 6: Socio-demographic indicators, Mallee DGP‡, country Victoria and Australia, 2001*

Indicator	Mallee DGP‡		Country Victoria		Australia	
	No.	%	No.	%	No.	%
Population						
- Indigenous	3,132	3.6	15,130	1.1	458,261	2.4
- Non-Indigenous	83,032	96.4	1,405,112	98.9	18,952,407	97.6
Single parent families						
- Indigenous	255	37.9	942	27.0	26,587	25.8
- Non-Indigenous	1,998	9.3	35,399	10.5	503,382	10.4
Full-time secondary school education at age 16						
- Indigenous	33	45.0	171	55.5	5,997	50.5
- Non-Indigenous	897	79.7	15,872	83.1	327,055	80.3
Dwellings rented from State housing authority						
- Indigenous	233	30.1	1,005	24.0	23,974	20.8
- Non-Indigenous	1,165	4.1	17,331	3.8	284,502	4.5
People who used a computer at home						
- Indigenous	390	14.4	3,084	23.6	73,636	18.0
- Non-Indigenous	27,728	35.6	499,731	41.1	7,761,390	44.1
People who used the Internet at home						
- Indigenous	149	5.5	1,412	10.8	35,384	8.6
- Non-Indigenous	15,829	20.3	288,792	23.8	5,135,445	29.2

Note: The 'Total population' data are based on the experimental estimates of Aboriginal and Torres Strait Islander people; the remaining data are based on ABS Census data
‡ **See note under 'Data converters and mapping' re calculation of Division totals**

The proportion of the Indigenous population in Mallee DGP who reported using a computer at home (14.4%) was notably less than for the Indigenous population in country Victoria (23.6%), and substantially below the rate for the Division's non-Indigenous population (35.6%) (Table 6).

The rate of home Internet use by the Indigenous population in the Division (5.5%) was half that of the Indigenous population in country Victoria (10.8%), and less than one third the rate for the Division's non-Indigenous population (20.3%).

The Mallee DGP Indigenous population's unemployment rate of 20.5% was consistent with the Indigenous rate for country Victoria (21.7%), but was more than three times the rate of the non-Indigenous population in the Division (5.7%) (Table 7). However, taking into account the Indigenous population receiving payments as part of the Community Development Employment Projects (CDEP) scheme (effectively an Aboriginal work-for-the-dole scheme), the 'real' Indigenous unemployment rate was 31.8%, higher than the 'real' Indigenous unemployment rate for country Victoria (26.0%).

The Indigenous labour force participation rate (46.3%) and Indigenous female labour force participation rate (38.9%) were lower than the rates for the Indigenous population in country Victoria (52.4%, and 46.0%. Both participation rates were substantially lower than those for the Division's non-Indigenous population (73.4%, and 69.6%).

Table 7: Unemployment and labour force participation, Mallee DGP‡, country Victoria and Australia, 2001

Labour force indicators	Mallee DGP‡		Country Victoria		Australia	
	No.	%	No.	%	No.	%
Unemployment rate						
- Indigenous	140	20.5	823	21.7	24,930	20.0
- Non-Indigenous	2,070	5.7	41,398	7.4	624,337	7.3
Labour force participation*						
- Indigenous	683	46.3	3,790	52.4	124,517	52.4
- Non-Indigenous	36,187	73.4	557,958	71.7	8,609,525	72.9
Female labour force participation*						
- Indigenous	295	38.9	1,611	46.0	52,981	46.6
- Non-Indigenous	14,189	69.6	226,062	68.4	3,564,409	69.8
Indigenous unemployment rate						
- excluding CDEP	140	20.5	823	21.7	24,930	20.0
- CDEP	77	11.3	164	4.3	17,662	14.2
- Total (including CDEP)	217	31.8	987	26.0	45,592	34.2

* **Includes people paid through Community Development Employment Projects**
‡ **See note under 'Data converters and mapping' re calculation of Division totals**

Data Sources: see 'Data sources and limitations' at end of report

General medical practitioner (GP) supply

A total of 48.6 full-time equivalent (FTE) GPs, and 56.5 full-time workload equivalent (FWE[2]) GPs worked in the Mallee DGP in 2003/04 (Table 8). Of the FWE GPs, 14.0% were female, and 19.9% were over 55 years of age (compared to 25.6% and 28.3%, respectively, for Victoria).

Apart from the estimated day-time population, the rates of population per FTE GP varied, depending on the population measure used, from a high of 1,798 people per GP (calculated on the average Estimated Residential Population (ERP) as at 30 June 2003 and 2004), to a low of 1,737 people per GP (calculated on the 1 August 2001 Usual Resident Population (URP) – usual residents of the Division counted in Australia on Census night). The rates of population per FWE GP were lower, ranging from 1,493 (calculated on the URP) to 1,545 (calculated on the ERP).

When calculated on the estimated day-time population, the rates of population per GP in the Division were 2.3% below those calculated on the URP.

Based on the ERP, the rates of population per GP in Mallee DGP were notably higher than the rates for Victoria and Australia, indicating a much lower level of provision of GP services in the Division.

Table 8: Population per GP in Mallee DGP, Victoria and Australia, 2003/04

Population measure	Population	GPs		Population per GP	
		FTE	FWE	FTE	FWE
Mallee DGP					
Census count (adjusted)*	85,099	48.6	56.5	1,752	1,505
Usual Resident Population (URP) (adjusted)*	84,396	..	..	1,737	1,493
Estimated Resident Population (ERP)	87,366	..	..	1,798	1,545
Day-time population (estimated on the URP)* ‡	82,454	..	..	1,697	1,458
Victoria (ERP)	4,942,102	3,575	4,157	1,382	1,189
Australia (ERP)	19,989,303	14,246	16,872	1,403	1,185

* **The Census count, Usual Resident Population and Day-time population were adjusted to reflect population change between 2001 and 2003/04, as measured by the ERP**

‡ **See note under 'Data converters and mapping' re calculation of Division totals**

Immunisation

Data from the Australian Childhood Immunisation Register show that 94.0% of children in the Division in 2002 were fully immunised at age one, consistent with the Australian proportion of 94.2%.

Immunisation by provider type for children between the ages of 0 to 6 is shown in Table 9. The proportion of children in the Division who were immunised by a general practitioner was 12.8%, far below the rate for Australia of 70.0%, with 73.8% immunised at a local government council, and 13.5% at a community health centre, or by a community health worker.

Table 9: Childhood immunisation at ages 0 to 6 by provider type, Mallee DGP and Australia, 2003/04

Provider	Mallee DGP	Australia
	%	%
General practitioner	12.8	70.0
Local government council	73.8	16.6
Community health centre / worker	13.5	9.8
Public hospital	0.0	2.1
Aboriginal health service / worker	0.0	0.9
Other*	0.0	0.6
Total: Per cent	100.0	**100.0**
Number	**17,780**	**3,843,610**

* **Includes immunisations in/ by State Health Departments, RFDS and private hospitals**

[2] The FWE value is calculated for each GP location by dividing the GP's total Medicare billing (Schedule fee value of services provided during the reference period) by the mean billing of full-time doctors in that derived major speciality for the reference period. Thus, a GP earning 20% more than the mean billing of full-time doctors is shown as 1.2 FWE: this differs from full-time equivalent (FTE) counts, where the FTE value of any GP cannot exceed 1.0

Premature mortality

Deaths at ages below 75 years are used as an indicator of health status, as they largely reflect premature deaths, given the current levels of life expectancy in Australia.

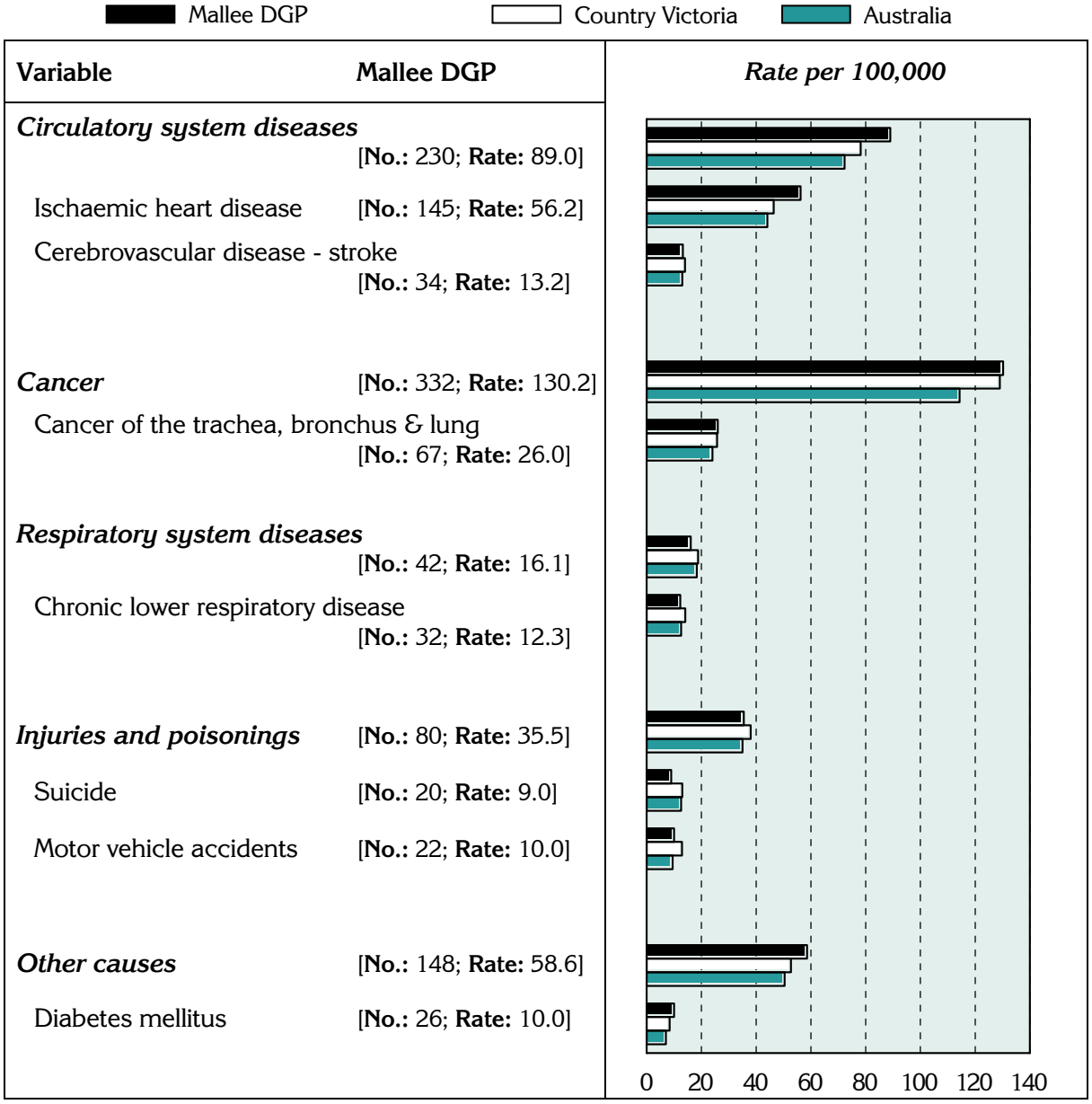
The 'all causes' death rate in the Division at ages 0 to 74 years (329.7 deaths per 100,000 population) is higher than for country Victoria (316.8) and for Australia (290.4): the rates have been age standardised to allow for comparisons between areas, regardless of differences in age profiles between the Division and Australia.

The major causes of premature mortality in the Division, as for country Victoria and Australia as a whole, are cancer and diseases of the circulatory system (Figure 4). Death rates in the Division were generally higher than those for Australia and country Victoria, with lower rates evident for respiratory system diseases and rates for injuries and poisonings being similar to the levels in Australia and country Victoria.

The data on which the following chart is based are in Table 14.

Figure 4: Deaths before 75 years of age by major condition group and selected cause, Mallee DGP‡, country Victoria and Australia, 2000-02*

Indirectly age standardised rate per 100,000 population



* 'No.' is the total number of deaths for the 2000-02 period; 'Rate' is an annual rate, based on the 3 year average

‡ See note under 'Data converters and mapping' re calculation of Division totals

Data Sources: see 'Data sources and limitations' at end of report

Chronic diseases and risk factors

The term "chronic disease" describes health problems that persist across time and require some degree of health care management (WHO 2002). Chronic diseases tend to have complex causes, are often long lasting and persistent in their effects, and can produce a range of complications (Thacker et al. 1995). They are responsible for a significant proportion of the burden of disease and illness in Australia and other westernised countries. Given the ageing of the population, this trend is likely to continue.

At different life stages, risk factors for chronic diseases and their determinants include genetic predisposition; poor diet and lack of exercise; alcohol misuse and tobacco smoking; poor intra-uterine conditions; stress, violence and traumatic experiences; and inadequate living environments that fail to promote healthy lifestyles (NPHP 2001). Risk factors are also more prevalent in areas of low socioeconomic status, and in communities characterised by low levels of educational attainment; high levels of unemployment; substantial levels of discrimination, interpersonal violence and exclusion; and poverty. There is a higher prevalence of risk factors among Indigenous communities, and other socioeconomically disadvantaged Australians (NPHP 2001).

Background

In this section, estimates of the prevalence of selected chronic diseases and risk factors, and two summary measures of health, are shown for the Division, and for non-remote SLAs within the Division. These estimates are only available for some SLAs in this Division – generally the 'non-remote' areas – as remote areas were not included in the 2001 National Health Survey. Note that the estimates have been predicted from self-reported data, and are not based on clinical records or physical measures. The chronic diseases and risk factors are those for which sufficiently reliable estimates can be made for the Division from national survey data. The process by which the estimates have been made, and details of their limitations, are described in the Notes section, pages 17-18. The data on which the following charts are based are in Table 15.

The estimates provide information of relevance to a number of the National Health Priority Areas (NHPAs – asthma; cardiovascular health; diabetes mellitus; injury prevention and control; mental health; and arthritis and musculoskeletal conditions: estimates have not been made for cancer control, the other NHPA). The risk factors for which estimates have been made are those which are accepted as being associated with these important chronic conditions. They are overweight (not obese), obesity, smoking, lack of exercise and high-risk alcohol use.

The numbers are estimates for an area, not measured events as are death statistics: they should be used as indicators of likely levels (and not actual levels) of a condition or risk factor in an area.

Prevalence estimates: chronic disease‡

It is estimated that relatively fewer people in Mallee DGP reported having respiratory system diseases, diabetes type 2, mental and behavioural disorders, osteoarthritis and osteoporosis (females) compared to Australia as a whole (Figure 5): that is, the prevalence rates per 1,000 population for these conditions were lower. Rates for the other listed conditions were consistent with, or higher than, the national rates.

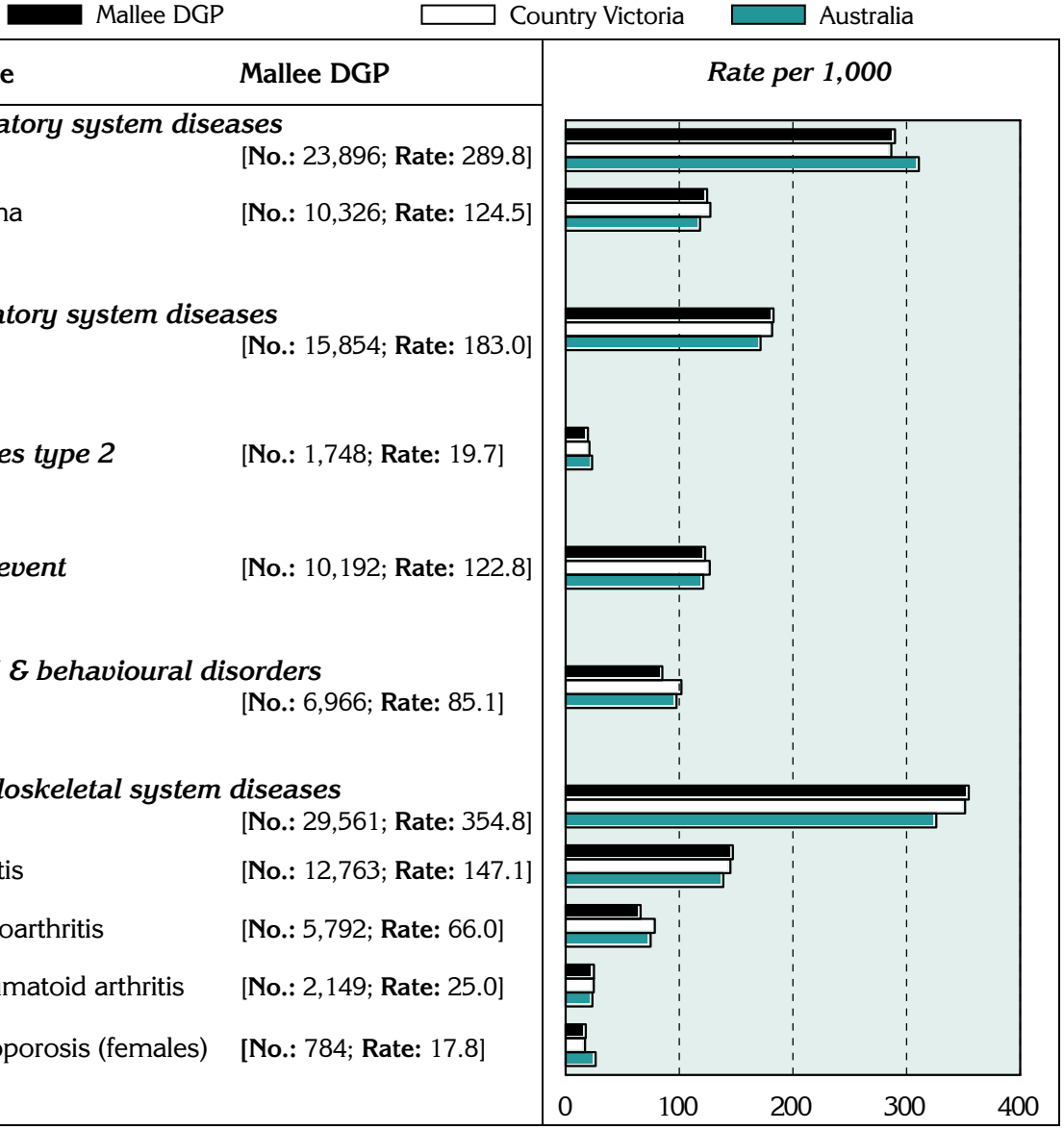
Prevalence estimates: self-reported health‡

The NHS includes two measures of self-reported health. One is the Kessler Psychological Distress Scale–10 items (K–10). This is a scale of non-specific psychological distress based on 10 questions about negative emotional states in the four weeks prior to interview, asked of respondents 18 years and over (ABS 2002). The other asks respondents aged 15 years and over to rate their health on a scale from 'excellent', through 'very good', 'good' and 'fair', to 'poor' health. The population of the Division aged 18 years and over is estimated to have a similar proportion with very high psychological distress levels as measured by the K–10 compared to Australia as a whole (Figure 6). The proportion of the population aged 15 years and over estimated to have reported their health as 'fair' or 'poor' is slightly above the national average.

‡ See note under 'Data converters and mapping' re calculation of Division totals

Figure 5: Estimates* of chronic disease and injury, Mallee DGP‡, country Victoria and Australia, 2001

Indirectly age standardised rate per 1,000 population

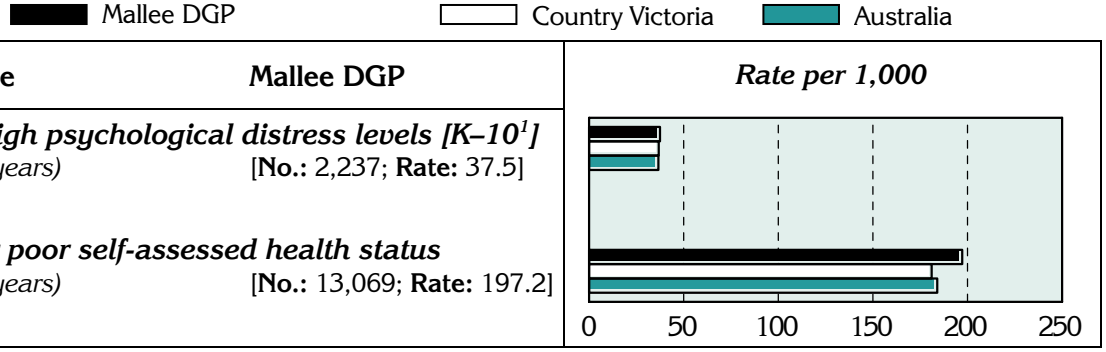


* 'No.' is a weighted estimate of the number of people in Mallee DGP reporting each chronic condition and is derived from synthetic predictions from the 2001 NHS

‡ See note under 'Data converters and mapping' re calculation of Division totals

Figure 6: Estimates* of measures of self-reported health, Mallee DGP‡, country Victoria and Australia, 2001

Indirectly age standardised rate per 1,000 population



* 'No.' is a weighted estimate of the number of people in Mallee DGP reporting under these measures and is derived from synthetic predictions from the 2001 NHS

[1] Kessler 10

‡ See note under 'Data converters and mapping' re calculation of Division totals

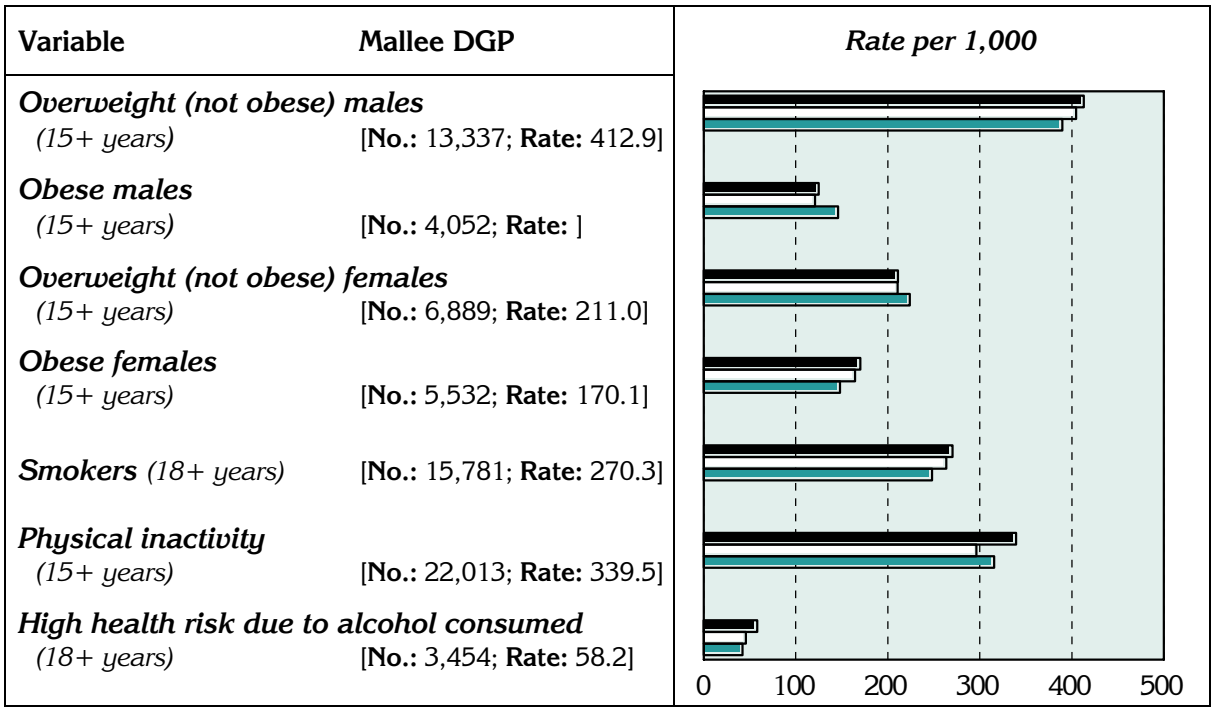
Data Sources: see 'Data sources and limitations' at end of report

Prevalence estimates: risk factors‡

The generally higher rates in the Division (when compared with the Australian population) for the selected risk factors, except for obesity in males and overweight in females, are consistent with the socioeconomic status profile of the area (Figure 7).

Figure 7: Estimates* of selected risk factors, Mallee DGP‡, country Victoria and Australia, 2001

Indirectly age standardised rate per 1,000 population



* 'No.' is a weighted estimate of the number of people in Mallee DGP with these risk factors and has been predicted using data from the 2001 NHS and known data for the Division

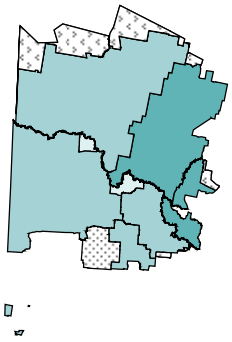
‡ See note under 'Data converters and mapping' re calculation of Division totals

The following maps provide details of the geographic distribution, at the SLA level, of the estimated prevalence of chronic disease (Map 2), self-reported health (Map 3) and risk factors associated with chronic disease (Map 4).

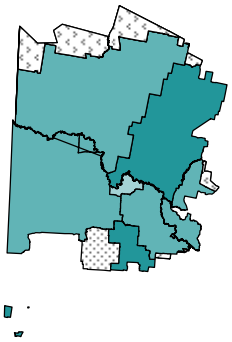
In the following maps, users should note that the estimates shown for part SLAs in the Division (see Table 13, page 20, for per cent of SLA population in the Division) represent the estimates for the whole SLA, and not just the part shown. However, SLAs with only a small proportion of their population in the Division are likely to have little influence on the total estimates for the Division which have been based on the percentage of the SLA population in the Division.

Map 2: Estimates* of chronic disease and injury by SLA, Mallee DGP, 2001

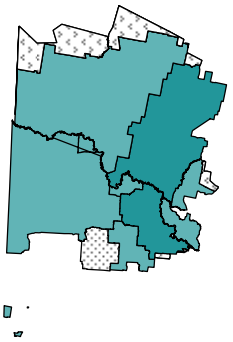
Respiratory system diseases



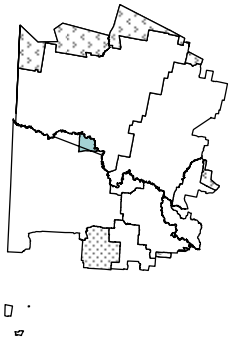
***Respiratory system diseases:* Asthma**



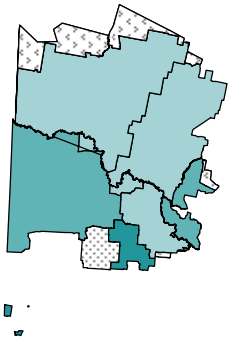
Circulatory system diseases



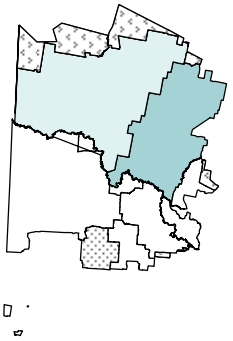
Diabetes type 2



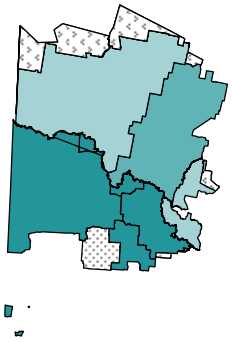
Injury event



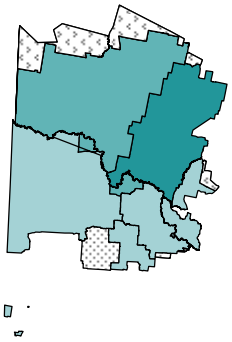
Mental & behavioural disorders



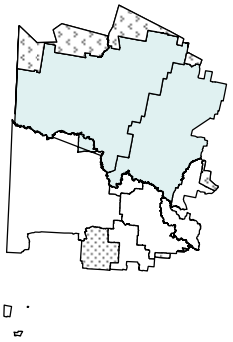
Musculoskeletal system diseases



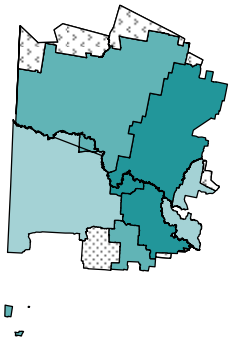
***Musculoskeletal system diseases:* Arthritis**



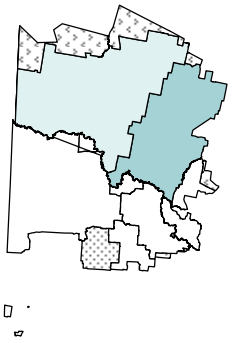
***Arthritis:* Osteoarthritis**



***Arthritis:* Rheumatoid arthritis**



Osteoporosis (females)



Per cent difference from Australian average

- *10% or more above*
- *5% to less than 10% above*
- *within 5% of the average*
- *5% to less than 10% below*
- *10% or more below*
- *not mapped#*
- *not mapped##*

* *See Notes on the data re these estimates.*

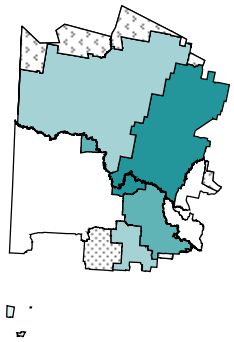
\# *Data not mapped: see 'Data converters and mapping' section under Notes on the data.*

\## *Estimates not available for remote areas*

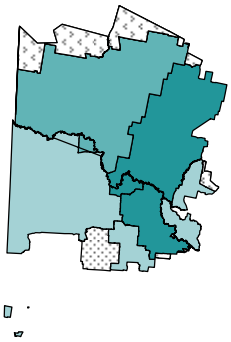
Data Sources: see 'Data sources and limitations' at end of report

Map 3: Estimates* of measures of self-reported health by SLA, Mallee DGP, 2001

Very high psychological distress levels [K–10[1]] (18+ years)



Fair or poor self-assessed health status (15+ years)



Per cent difference from Australian average

- *10% or more above*
- *5% to less than 10% above*
- *within 5% of the average*
- *5% to less than 10% below*
- *10% or more below*
- *not mapped#*
- *not mapped##*

* *See Notes on the data re these estimates.*

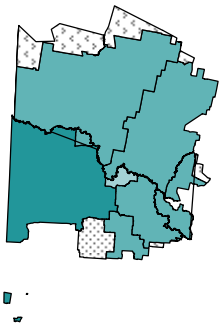
\# *Data not mapped: see 'Data converters and mapping' section under Notes on the data.*

\## *Estimates not available for remote areas*

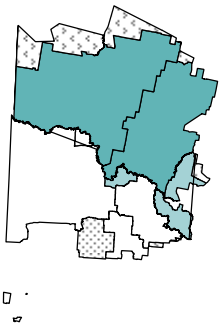
[1] **Kessler 10**

Map 4: Estimates* of selected risk factors by SLA, Mallee DGP, 2001

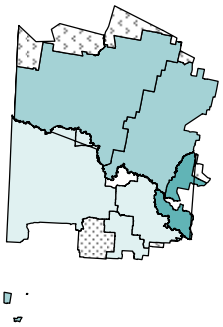
Overweight (not obese) males (15+ years)



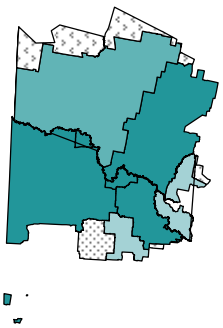
Obese males (15+ years)



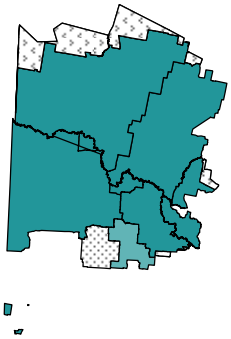
Overweight (not obese) females (15+ years)



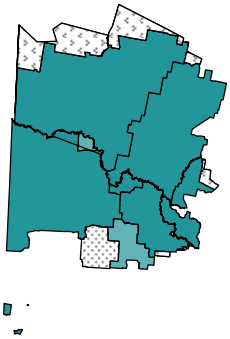
Obese females (15+ years)



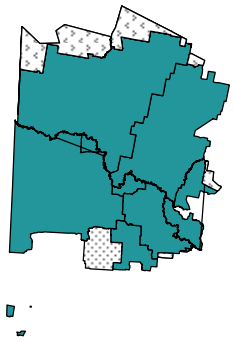
Smokers (18+ years)



Physical inactivity (15+ years)



High health risk due to alcohol consumed (18+ years)



Per cent difference from Australian average

- *10% or more above*
- *5% to less than 10% above*
- *within 5% of the average*
- *5% to less than 10% below*
- *10% or more below*
- *not mapped#*
- *not mapped##*

* *See Notes on the data re these estimates.*

\# *Data not mapped: see 'Data converters and mapping' section under Notes on the data.*

\## *Estimates not available for remote areas*

Notes on the data

Data sources and limitations

General

References to 'country Victoria' relate to Victoria excluding the Melbourne Statistical Division.

Data sources

Table 10 details the data sources for the material presented in this profile.

Table 10: Data sources

Section	Source
Key indicators	
GP services per head of population	GP services data supplied by Department of Health and Ageing, 2003/04 Population data: Estimated Resident Population, ABS, mean of 30 June 2003 and 30 June 2004 populations
Socio-demographic profile	
Figures 1 and 2; Table 1	Estimated Resident Population, ABS, 30 June for the periods shown
Tables 2, 3 and 4; Figure 3	Data were extracted by postal area from the ABS Population Census 2001[1], except for the following indicators: - *Indigenous* – Experimental estimates of Aboriginal and Torres Strait Islander people, ABS 2001 (unpublished) - *Full-time secondary education participation at age 16* – Census 2001 (unpublished) - *Households receiving rent assistance* – Centrelink, December Quarter 2001 (unpublished) - *Unemployment rate / Labour force participation* – extracted from *Small Area Labour Markets Australia*, June Quarter 2003, Department of Employment and Workplace Relations
Map 1; Table 12	ABS SEIFA package, Census 2001
Tables 5, 6 and 7	For all indicators, data were from the ABS Population Census 2001 (unpublished), except for the data in *Table 5* and the *Total population* figures which were based on the Experimental estimates of Aboriginal and Torres Strait Islander people, ABS 2001 (unpublished)
General medical practitioner (GP) supply	
Table 8	GP data supplied by Department of Health and Ageing, 2003/04 Population estimates used in calculating the population per GP rates are the: - Census count[2], ABS Population Census 2001, scaled to 2003/04 - Usual Resident Population[3], ABS Population Census 2001, scaled to 2003/04 - Day-time population: calculated from journey to work data, ABS Population Census (URP) 2001 (unpublished); and 2001 Census URP, scaled to 2003/04 - Estimated Resident Population, ABS, June 2003/2004
Immunisation	
Text comment: 1 year olds	National Centre for Immunisation Research and Surveillance, 2002
Table 9	Australian Childhood Immunisation Register, Health Insurance Commission, 2003/04 (unpublished)
Premature mortality	
Figure 5; Table 14	ABS Deaths, 2000 to 2002
Chronic diseases and associated risk factors (see notes Table 11)	
Figures 6, 7 and 8; Maps 2, 3 and 4; Table 15	Estimated from 2001 National Health Survey (NHS), ABS (unpublished)

[1] **All data extracted from Usual Residents Profile, except for data variables only released in the Basic Community Profile**
[2] ***Census count* - those counted in the Division on Census night, including tourists, business people and other visitors**
[3] ***Usual Resident Population* - those who usually live there and who were in Australia at the time and would have provided details in the Census at the address where they were counted**

Chronic diseases and associated risk factors

The data for chronic conditions and risk factors for SLAs have been estimated from the 2001 National Health Survey (NHS), conducted by the ABS: see note below on synthetic estimates. The NHS sample includes the majority of people living in private households, but excludes the most remote areas of Australia. These areas cover 86.4% of Australia's land mass and comprise just 3% of the total population, however, 28% of Australia's Indigenous population live in these areas. Thus it has not been possible to produce these estimates for Divisions with relatively high proportions of their population in the most remote areas of Australia.

The data for chronic conditions and risk factors are self-reported data, reported to interviewers in the 2001 NHS. Table 11 includes notes relevant to this data.

Table 11: Notes on estimates of chronic diseases and associated risk factors

Indicator	Notes on the data
Estimates of chronic disease and injury (Figure 6 and Map 2)	
Long term conditions	- Respondents were asked whether they had been diagnosed with any long term health condition (a condition which has lasted or is expected to last for 6 months or more), and were also asked whether they had been told by a doctor or nurse that they had asthma, cancer, heart and circulatory conditions, and/or diabetes
Injury event	- Injuries which occurred in the four weeks prior to interview
Estimates of measures of self-reported health (Figure 7 and Map 3)	
Very high psychological distress levels (K10)	- Derived from the Kessler Psychological Distress Scale-10 items (K-10), which is a scale of non-specific psychological distress based on 10 questions about negative emotional states in the 4 weeks prior to interview. 'Very high' distress is the highest level of distress category (of a total of four categories)
Fair or poor self-assessed health status	- Respondent's general assessment of their own health, against a five point scale from excellent through to poor – 'fair' or 'poor' being the two lowest in the scale
Estimates of selected risk factors (Figure 8 and Map 4)	
Overweight (not obese)	- Based on self-reported height and weight; BMI calculated and grouped into categories (to allow reporting against both WHO and NHMRC guidelines) - overweight: 25.0 to less than 30.0
Obese	- Based on self-reported height and weight; BMI calculated and grouped into categories (to allow reporting against both WHO and NHMRC guidelines) – obese: 30.0 and greater
Smokers	- Respondent's undertaking regular (or daily) smoking at the time of interview
Physical inactivity	- Did not exercise in the two weeks prior to interview through sport, recreation or fitness (including walking) – excludes incidental exercise undertaken for other reasons, such as for work or while engaged in domestic duties
High health risk due to alcohol consumed	- Respondent's estimated average daily alcohol consumption in the seven days prior to interview (based on number of days and quantity consumed). Alcohol risk levels were grouped according to NHMRC risk levels for harm in the long term, with 'high risk' defined as a daily consumption of more than 75 ml for males and 50 ml for females

Note: For a full description, refer to *ABS 2001 National Health Survey,* Cat. No. 4364.0 and *ABS 2001 Health Risk Factors, Cat. No.* 4812.0

Methods

Synthetic estimates

The estimates of the prevalence of chronic disease and associated risk factors have been predicted for a majority of SLAs across Australia, using modelled survey data collected in the 2001 ABS National Health Survey (NHS) and known characteristics of the area. A synthetic prediction can be interpreted as the likely value for a 'typical' area with those characteristics: the SLA is the area level of interest for this project (where SLAs had small populations they were grouped to larger areas). This work was undertaken by the Australian Bureau of Statistics, as they hold the NHS unit record files: the small area data were compiled by PHIDU.

The approach used is to undertake an analysis of the survey data for Australia to identify associations in the NHS data between the variables that we wish to predict at the area level (eg. prevalence of chronic conditions and risk factors) and the data we have at the area level (eg. socioeconomic status, use of health services). The relationship between these variables for which we have area level data (the predictors) and the reporting of chronic conditions in the NHS is also a part of the model that is developed by the ABS. For example, such associations might be between the number of people reporting specified chronic conditions in the NHS and:

- the number of hospital admissions (in total, to public and to private hospitals, by age, sex and diagnosis),
- socioeconomic status (as indicated by Census data, or for recipients of government pensions and benefits), and
- the number of visits to a general medical practitioner.

The results of the modelling exercise are then applied to the SLA counts of the predictors. The prediction is, effectively, the likely value for a typical area with those characteristics. The raw numbers were then age-standardised, to control for the effects of differences in the age profiles of areas.

The numbers are estimates for an area, not measured events as are death statistics: they should be used as indicators of likely levels of a condition or risk factor in an area.

Premature deaths

Details of deaths by SLA were purchased from the ABS. The raw numbers were then age-standardised, by the indirect method, to control for the effects of differences in the age profiles of areas.

Data converters and mapping

Conversion to Division of data available by postcode

The allocation of postcodes to Divisions was undertaken using information from the Department of Health and Ageing's web site, which shows the proportion of a postcode in a Division (see page 19).

Conversion to Division of data available by SLA
(marked in this profile as ‡ **See note under 'Data converters and mapping' re calculation of Division total**)

Where the data presented in these profiles were only available by SLA they have been converted to Division of General Practice areas using a concordance based on data at the 2001 Census. A copy of the concordance is included in the Population data: A Guide for Divisions of General Practice: it is also available from the Divisions' data area on PHIDU web site.

In brief, the concordance splits the data (eg number of deaths) for each SLA across one or more Divisions. The proportion of an SLA's data that is allocated to each Division was calculated from (a) CD level Census 2001 data that splits SLAs across approximations to postcodes (referred to as postal areas) and (b) data on the DoHA website that splits postcodes across Divisions. This concordance can be adjusted to meet any new configuration of Division boundaries based on the 2001 Collection Districts, or combinations thereof.

The estimated population of each SLA in this Division is shown in Table 13.

Mapping

In some Divisions the maps may include a very small part of an SLA which has not been allocated any population, or either has a population of less than 100 or has less than 1% of the SLA's total population: these areas are mapped with a pattern.

Supporting information

This and other information is also available at www.publichealth.gov.au

A definition of population health

Population health, in the context of general practice, has been defined[1] as:

"The prevention of illness, injury and disability, reduction in the burden of illness and rehabilitation of those with a chronic disease. This recognises the social, cultural and political determinants of health. This is achieved through the organised and systematic responses to improve, protect and restore the health of populations and individuals. This includes both opportunistic and planned interventions in the general practice setting."

The key determinants of health are social support networks, employment and working conditions, social environments, physical environments, geographical isolation, personal health practices, healthy child development, ageing and disability, biology and genetic endowment, health services, gender and culture. In the Aboriginal and Torres Strait Islander context this means that a population health approach to health services will assist in ensuring "that Aboriginal and Torres Strait Islander people enjoy a healthy life equal to that of the general population, that is enshrined by a strong living culture, dignity and justice".[2] This recognises the importance of achieving improvements to Aboriginal and Torres Strait Islander health and respects the particular health issues facing Indigenous people.

[1] **"The role of general practice in population health – A Joint Consensus Statement of the General Practice Partnership Advisory Council and the National Public Health Partnership Group" (Joint Advisory Group on General Practice and Population Health 2001)**

[2] **As defined in the Strategic Framework for Aboriginal and Torres Strait Islander Health**

SEIFA scores

Following the 2001 Census, the Australian Bureau of Statistics (ABS) produced four socioeconomic indexes for areas (SEIFA). The indexes describe various aspects of the socioeconomic make-up of populations in areas, using data collected in the 2001 Census. The Index of Relative Socio-Economic Disadvantage (labelled 'Disadvantage' in Table 12) includes all variables that either reflect or measure disadvantage. The Index of Advantage/Disadvantage is used to rank areas in terms of both advantage and disadvantage: any information on advantaged persons in an area will offset information on disadvantaged persons in the area. The Index of Economic Resources and the Index of Education and Occupation were targeted towards specific aspects of advantage/disadvantage.

For further information on the composition and calculation of these indexes see the ABS Information Paper ABS Cat No. 2039.0 available on the ABS web site www.abs.gov.au. The scores for these indexes for each Statistical Local Area (SLA) or part SLA in Mallee DGP are shown in Table 12.

In using this table, users should note that the index score shown for SLAs with less than 100 per cent in the Division represents the score for the whole SLA, and not just the part shown. However, SLAs with small proportions may have little influence on the average index score for the Division which has been based on the postcodes in the Division.

Table 12: SEIFA scores by SLA, Mallee DGP, 2001

SLA code	SLA name (& per cent of SLA in the Division)		Index score			
			Disadvantage	Advantage-Disadvantage	Economic-Resource	Education-Occupation
10300	Balranald	(95.8)	964	923	935	916
17800	Wakool	(32.9)	1012	942	928	941
18200	Wentworth	(100.0)	982	932	930	934
21271	Buloke - North	(38.9)	1040	947	903	965
24781	Mildura - Part A	(100.0)	977	939	939	946
24782	Mildura - Part B	(100.0)	1008	935	930	927
26611	Swan Hill - Central	(100.0)	995	954	946	964
26614	Swan Hill - Robinvale	(100.0)	914	900	918	897
26616	Swan Hill Balance	(100.0)	1008	928	913	935
26890	West Wimmera	(7.2)	1016	935	906	942
27631	Yarriambiack - North	(85.0)	1063	958	906	971

[*] **Proportions are approximate and are known to be incorrect in some cases, due to errors in the concordance used to allocate CDs to form postal areas**

Statistical geography of the Mallee DGP

The Mallee DGP covers 83,735 square kilometres, based on 2001 SLA data.

The postcodes in the Division (all 100%) are: 2648, 2715, 2717, 2734–2739, 3996, 3413, 3415, 3420, 3485, 3487-3491, 3494, 3496, 3498, 3500-3502, 3505-3507, 3509, 3512, 3530-31, 3533, 3544, 3546, 3549, 3583-3586, 3588-3591, 3594-3597, and 3599[3].

Statistical Local Areas (SLAs) are defined by the Australian Bureau of Statistics to produce areas for the presentation and analysis of data. In this Division, some Local Government Areas (LGAs) have been split into SLAs. For example, Mildura has two SLAs, Part A and Part B. These SLAs and all or parts of other SLAs listed comprise the Division (Table 13).

Table 13: SLAs in Mallee DGP by 2001 boundaries

SLA code	SLA name	Per cent of the SLA's population in the Division*	Estimate of the SLA's 2004 population in the Division
10300	Balranald	95.8	2,619
17800	Wakool	32.9	1,591
18200	Wentworth	100.0	7,225
21271	Buloke - North	38.9	1,358
24781	Mildura - Part A	100.0	46,987
24782	Mildura - Part B	100.0	4,175
26611	Swan Hill - Central	100.0	10,047
26614	Swan Hill - Robinvale	100.0	4,042
26616	Swan Hill Balance	100.0	7,330
26890	West Wimmera	7.2	341
27631	Yarriambiack - North	85.0	1,849

* **Proportions are approximate and are known to be incorrect in some cases, due to errors in the concordance used to allocate CDs to form postal areas**

Supporting data

The data used in Figure 4 to illustrate the rates of premature mortality in the Division are shown below in Table 14.

Table 14: Deaths before 75 years of age by major condition group and selected cause, Mallee DGP‡, country Victoria and Australia, 2000-02*

Indirectly age standardised rate per 100,000 population

Variable	Mallee DGP‡		Country Victoria		Australia	
	No.	Rate	No.	Rate	No.	Rate
Circulatory system diseases	230	89.0	3,163	78.2	38,357	72.3
Ischaemic heart disease	145	56.2	1,879	46.4	23,364	44.1
Cerebrovascular disease – stroke	34	13.2	568	14.0	6,920	13.0
Cancer	332	130.2	5,188	129.0	60,603	114.3
Cancer of the trachea, bronchus & lung	67	26.0	1,039	25.7	12,715	24.0
Respiratory system diseases	42	16.1	765	18.8	9,726	18.3
Chronic lower respiratory disease	32	12.3	574	14.1	6,657	12.6
Injuries and poisonings	80	35.5	1,406	38.0	18,573	35.0
Suicide	20	9.0	477	13.0	6,706	12.6
Motor vehicle accidents	22	10.0	473	12.9	5,014	9.5
Other causes	148	58.6	2,089	52.7	26,735	50.4
Diabetes mellitus	26	10.0	343	8.4	3,734	7.0

* **'No.' is the total number of deaths for the 2000-02 period; 'Rate' is an annual rate, based on the 3 year average**
‡ **See note under 'Data converters and mapping' re calculation of Division totals**

[3] **As per the Department of Health and Ageing web site (accessed online version as at February 2005):** http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm

The rates used to illustrate the prevalence estimates of chronic disease and injury (Figure 5), measures of self-reported health (Figure 6), and selected risk factors (Figure 7), are shown in Table 15 below.

Table 15: Estimates of chronic disease and associated risk factors, Mallee DGP‡, country Victoria and Australia, 2001

Indirectly age standardised rate per 1,000 population

Variable	Mallee DGP‡	Country Victoria	Australia
Chronic disease and injury (Figure 5)			
Respiratory system diseases	289.8	286.6	310.8
Asthma	124.5	127.5	118.3
Circulatory system diseases	183.0	181.8	171.5
Diabetes type 2	19.7	21.1	23.4
Injury event	122.8	126.8	121.2
Mental & behavioural disorders	85.1	101.9	97.6
Musculoskeletal system diseases	354.8	351.4	326.2
Arthritis	147.1	145.0	138.8
- Osteoarthritis	66.0	78.6	74.9
- Rheumatoid arthritis	25.0	24.9	23.6
Osteoporosis (females)	17.8	17.1	26.4
Measures of self-reported health (Figure 6)			
Very high psychological distress levels (18+ years)	37.5	36.8	36.6
Fair or poor self-assessed health status (15+ years)	197.2	181.1	184.0
Risk factors (Figure 7)			
Overweight (not obese) males (15+ years)	412.9	404.6	389.7
Obese males (15+ years)	125.0	120.9	145.9
Overweight (not obese) females (15+ years)	211.0	210.8	223.9
Obese females (15+ years)	170.1	164.4	148.0
Smokers (18+ years)	270.3	263.6	248.0
Physical inactivity (15+ years)	339.5	296.3	315.5
High health risk due to alcohol consumed (18+ years)	58.2	45.9	42.1

‡ **See note under 'Data converters and mapping' re calculation of Division totals**

References

Australian Bureau of Statistics (ABS) (2002). *2001 National Health Survey: summary of results.* Australia. (ABS Cat. No. 4364.0). Canberra: ABS.

National Public Health Partnership (NPHP) (2001). *Preventing Chronic Disease: A Strategic Framework.* Melbourne, Victoria.

Thacker S, Stroup D & Rothenberg R (1995). Public health surveillance for chronic conditions: a scientific basis for decisions. *Statistics in Medicine* 14: 629-641.

World Health Organization (2002). *The World Health Report 2002: Reducing Risks, Promoting Healthy Life.* Geneva: World Health Organization.

Acknowledgements

Funding for these profiles was provided by the Population Health Division of the Department of Health and Ageing (DoHA). Assistance, by way of comment on the profiles and assistance in obtaining some datasets, has also been received from the Primary Care Division of the DoHA, the ABS and the ACIR.

Further developments and updates

Subject to agreement and funding, a number of developments could be undertaken:

- Details of hospitalisations potentially avoidable through ambulatory care interventions are currently being prepared and will be forwarded to Divisions (and posted on the PHIDU web site) when they are available. Other enhancements will be considered as appropriate datasets become available.

The profiles could be updated as the data are updated. For example:

- Population estimates, avoidable hospitalisations, immunisation, and GP activity and workforce data – annually;
- Chronic disease estimates – three-yearly;
- Census data – five-yearly.

Any developments would be informed by consultation, including with Divisions.

PHIDU contact details

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