Population health profile of the Ballarat and District Division of General Practice: supplement

Population Profile Series: No. 60a

PHIDU

March 2007

PHIDU

Australian Government

Australian Institute of Health and Welfare

THE UNIVERSITY OF ADELAIDE AUSTRALIA

Copyright

National Library of Australia Cataloguing in Publication entry

Population health profile of the Ballarat and District Division of General Practice: supplement.

Bibliography.
ISBN 9 78073089 6586 (web).

1. Public health - Victoria - Ballarat Region - Statistics.
2. Health status indicators - Victoria - Ballarat Region - Statistics. 3. Health service areas - Victoria - Ballarat Region. 4. Ballarat Region (Vic.) - Statistics, Medical.
I. Public Health Information Development Unit (Australia).
(Series : Population profile series ; no. 60a).

362.1099441

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.

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. (2007) *Population health profile of the Ballarat and District Division of General Practice: supplement.* Population Profile Series: No. 60a. Public Health Information Development Unit (PHIDU), Adelaide.

Enquiries about or comments on this publication should be addressed to:

PHIDU, The University of Adelaide, South Australia 5005
Phone: 08-8303 6236 or e-mail: PHIDU@publichealth.gov.au

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

Contributors: Anthea Page, Sarah Ambrose, Kristin Leahy and John Glover

Population health profile of the Ballarat and District Division of General Practice: supplement

This profile is a supplement to the *Population health profile of the Ballarat and District Division of General Practice*, dated November 2005, available from www.publichealth.gov.au. This supplement includes an update of the population of the Ballarat and District Division of General Practice, as well as additional indicators and aspects of the Division's socioeconomic status, use of GP services and health. The contents are:

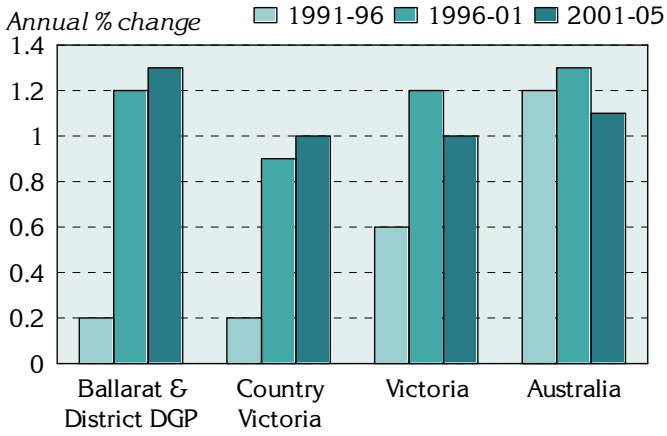
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions
- Avoidable mortality

For further information on the way Division totals in this report have been estimated, please refer to the 'Notes on the data' section of the *Population health profile*, November 2005 (www.publichealth.gov.au).

Population

The Ballarat and District Division had an Estimated Resident Population of 122,432 at 30 June 2005.

Figure 1: Annual population change, Ballarat and District DGP, country Victoria, Victoria and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005



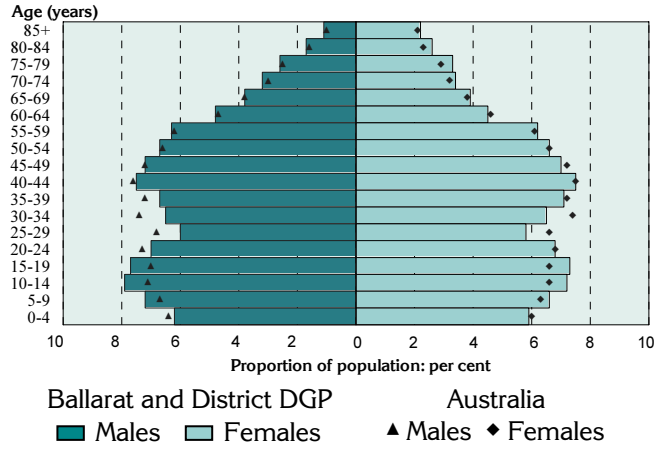
Over the five years from 1991 to 1996, the Division's population increased by 0.2% on average each year, equal to that for country Victoria (0.2%), but less than for Victoria (0.6%) and Australia as a whole (1.2%). From 1996 to 2001, the annual percentage increase (1.2%) was greater than for country Victoria (0.9%), equal to Victoria and lower than Australia (1.3%). The higher growth rate of 1.3% per year from 2001 to 2005 was greater than the annual increases for country Victoria and Victoria (1.0%) and Australia (1.1%).

Table 1: Population by age, Ballarat and District DGP and Australia, 2005

Age group (years)	Ballarat and District DGP		Australia	
	No.	%	No.	%
0-14	24,979	20.4	3,978,221	19.6
15-24	17,572	14.4	2,819,834	13.9
25-44	32,746	26.7	5,878,107	28.9
45-64	30,171	24.6	4,984,446	24.5
65-74	8,738	7.1	1,398,831	6.9
75-84	6,212	5.1	954,143	4.7
85+	2,012	1.6	315,027	1.5
Total	**122,432**	**100.0**	**20,328,609**	**100.0**

As shown in the accompanying table and the age-sex pyramid below (Figure 2), the Ballarat and District DGP had similar proportions in each age group to Australia as a whole, apart from at ages 25 to 44 years, where the proportion (26.7%) was lower than that for Australia (28.9%) (Table 1).

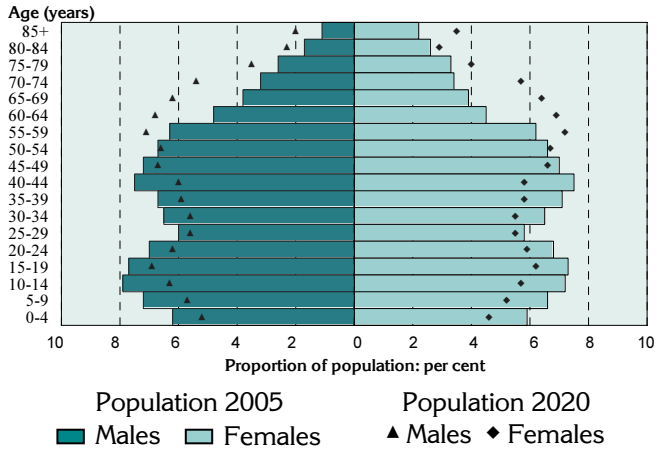
Figure 2: Population in Ballarat and District DGP and Australia, by age and sex, 2005



The age profile in the Division is very similar to that for Australia. The most notable differences are:

- at younger ages – relatively more children aged 5 to 14 years, and young people aged 15 to 19 years; and
- from 25 to 39 years – relatively fewer males and females.

Figure 3: Population projections for Ballarat and District DGP, by age and sex, 2005 and 2020



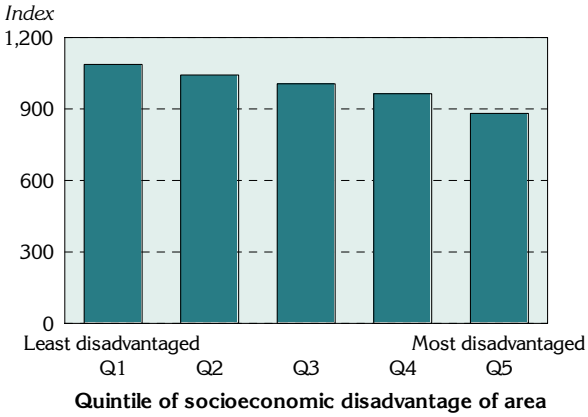
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages – relatively fewer children, young people and young adults, aged 0 to 24 years;
- from 25 to 49 years – relatively fewer males and females; and
- from 55 years onwards – relatively more males and females.

Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Ballarat and District Division of General Practice*, dated November 2005, available from www.publichealth.gov.au, for other socio-demographic indicators.

Figure 4: Index of Relative Socio-Economic Disadvantage, Ballarat and District DGP, 2001



One of four socioeconomic indexes for areas produced at the 2001 ABS Census is the Index of Relative Socio-Economic Disadvantage.

The Ballarat and District DGP has an index score of 996, below the score for Australia of 1000: this score varies widely across the Division, in a step-wise fashion, from a low of 881 in the most disadvantaged areas to 1086 in the least disadvantaged areas.

Note: each 'quintile' comprises approximately 20% of the population of the Division.

A new indicator, produced for the first time at the 2001 ABS Census, shows the number of jobless families with children under 15 years of age. There were notably more jobless families in the Ballarat and District DGP (19.9%), compared to country Victoria as a whole (17.4%) (Figure 5, Table 2).

With the introduction of the 30% rebate for private health insurance premiums, there was a once-off registration process, providing information of the postcode and residence of those who had such insurance (these data are not available at this area level for later dates). In 2001, the Division had a

notably higher proportion of people with private health insurance (48.2%), compared to country Victoria (43.0%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, Ballarat and District DGP, country Victoria, Victoria and Australia, 2001

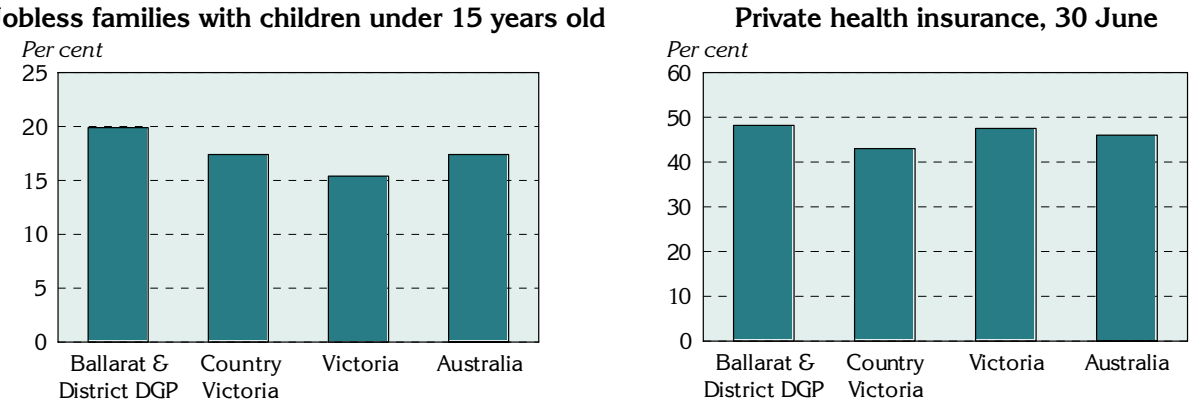
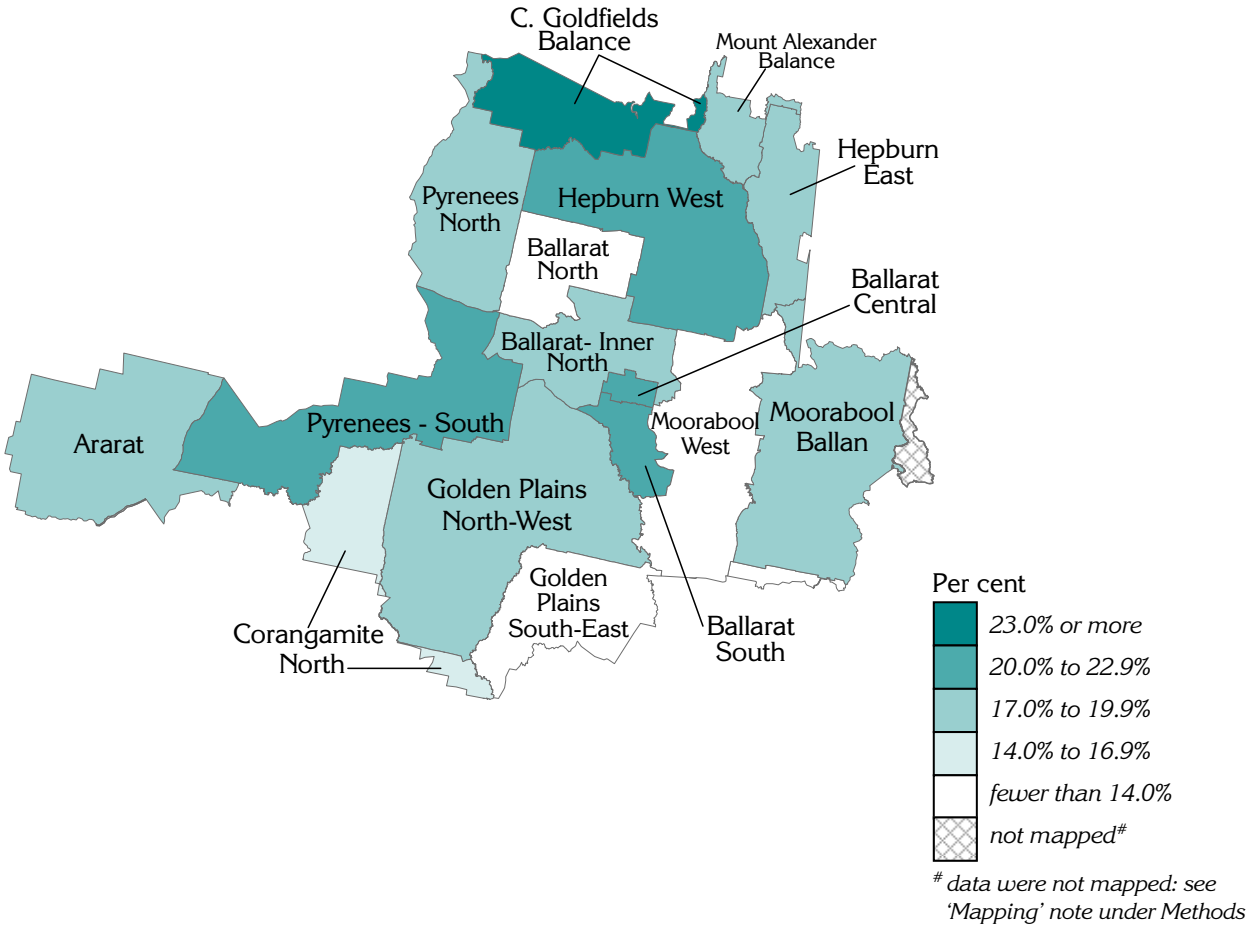


Table 2: Socio-demographic indicators, Ballarat and District DGP, country Victoria, Victoria and Australia, 2001

Indicator	Ballarat and District DGP		Country Victoria		Victoria		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	2,456	19.9	24,724	17.4	77,142	15.4	357,563	17.4
Private health insurance (30 June)	53,634	48.2	543,292	43.0	2,196,890	47.5	8,671,106	46.0

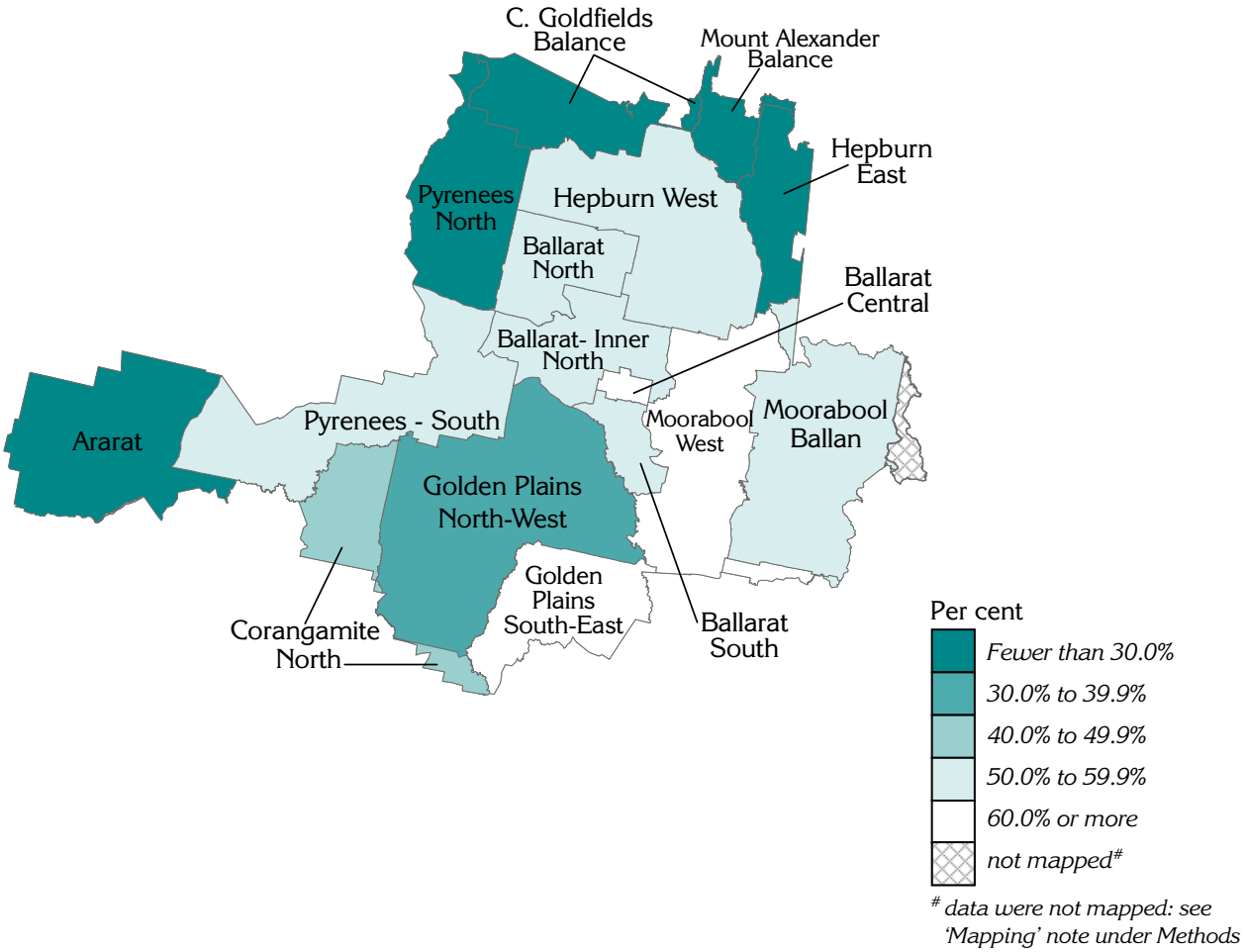
Details of the distribution of jobless families and of the population covered by private health insurance are shown by Statistical Local Area (SLA) in Maps 1 and 2, respectively.

Map 1: Jobless families with children under 15 years of age by SLA, Ballarat and District DGP, 2001



data were not mapped: see 'Mapping' note under Methods

Map 2: People covered by private health insurance by SLA, Ballarat and District DGP, 30 June 2001



GP services to residents of the Ballarat and District DGP

The following tables include information, purchased from Medicare Australia, of the movement of patients and GPs between Divisions. Note that the data only include unreferred attendances recorded under Medicare: unreferred attendances not included are those for which the cost is met by the Department of Veterans' Affairs or a compensation scheme; or are provided by salaried medical officers in hospitals, community health services or Aboriginal Medical Services, and which are not billed to Medicare. At any attendance, one or more services may have been provided.

The majority (90.9%) of unreferred attendances to residents of Ballarat and District DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 433,287 GP unreferred attendances (Table 3). A further 1.8% of unreferred attendances to residents were provided by GPs with a provider number in Central Highlands DGP, with 1.1% provided by GPs in Western Victoria DGP.

Table 3: Patient flow – People living[1] in Ballarat and District DGP by Division where attendance occurred[2], 2003/04

Division		Unreferred attendances	
Number	Name	No.	%[3]
325	Ballarat and District DGP	433,287	90.9
318	Central Highlands DGP	8,454	1.8
330	Western Victoria DGP	5,311	1.1
301	Whitehorse DGP	3,620	0.8
317	Geelong DGP	3,579	0.8
Other	..	22,504	4.7
Total	..	**476,755**	**100.0**

[1] Based on address in Medicare records
[2] Division of GP based on provider number
[3] Proportion of all unreferred attendances of patients with an address in Division 325 by Division in which attendance occurred

The majority (93.2%) of unreferred attendances provided by GPs with a provider number in Ballarat and District DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 1.8% of unreferred attendances provided by GPs in the Division were to residents of Western Victoria DGP, with 1.3% to people living in Central Highlands DGP.

Table 4: GP catchment – Unreferred attendances provided by GPs[1] in Ballarat and District DGP by Division of patient address[2], 2003/04

Division		Unreferred attendances	
Number	Name	No.	%[3]
325	Ballarat and District DGP	433,287	93.2
330	Western Victoria DGP	8,253	1.8
318	Central Highlands DGP	6,098	1.3
324	Otway DGP	2,107	0.5
317	Geelong DGP	1,927	0.4
301	Melbourne DGP	1,908	0.4
Other	..	11,407	2.5
Total	..	**464,987**	**100.0**

[1] Division of GP based on provider number
[2] Based on address in Medicare records
[3] Proportion of all unreferred attendances to GPs with a provider number in Division 325 by Division of patient address

Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier *Population health profile of the Ballarat and District Division of General Practice*, dated November 2005, available from www.publichealth.gov.au, for the separate prevalence estimates of chronic disease; measures of self-reported health and risk factors. The process by which the estimates have been made, and details of their limitations, are also described in the 'Notes on the data' section of this earlier profile.

In this section two estimates, which combine the prevalence of selected chronic diseases with a risk factor, are shown for the Division. The measures are of people who *had asthma and were smokers*, and people who *had type 2 diabetes and were overweight or obese*: note that the estimates have been predicted from self-reported data, and are not based on clinical records or physical measures.

It is estimated that there were relatively more people in Ballarat and District DGP who had asthma and were smokers, compared to Australia as a whole (Figure 6, Table 5): that is, the prevalence rate per 1,000 population was higher (although it was consistent with the level in country Victoria). There were more people in Ballarat and District DGP who had type 2 diabetes and were overweight/ obese, compared to country Victoria or Australia.

Figure 6: Estimates of selected chronic diseases and risk factors, Ballarat and District DGP, country Victoria and Australia, 2001

Table 5: Estimates of selected chronic diseases and risk factors, Ballarat and District DGP, country Victoria, Victoria and Australia, 2001

Variable	Ballarat and District DGP		Country Victoria		Victoria		Australia	
	No.[1]	Rate[2]	No.[1]	Rate[2]	No.[1]	Rate[2]	No.[1]	Rate[1]
Had asthma & smoked[3]	2,675	24.3	29,424	24.6	95,664	19.9	397,734	20.8
Had type 2 diabetes & were overweight/ obese[4]	1,852	16.8	19,136	14.1	69,192	15.1	283,176	15.2

[1] **No. is a weighted estimate of the number of people in Ballarat and District DGP reporting these chronic conditions/ with these risk factors and is derived from synthetic predictions from the 2001 NHS**
[2] **Rate is the indirectly age-standardised rate per 1,000 population**
[3] **Population aged 18 years and over**
[4] **Population aged 15 years and over**

Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions

The rationale underlying the concept of avoidable hospitalisations is that timely and effective care of certain conditions, delivered in a primary care setting, can reduce the risk of hospitalisation. Admissions to hospital for these ambulatory care sensitive (ACS) conditions can be avoided in three ways. Firstly, for conditions that are usually preventable through immunisation or nutritional intervention, disease can be prevented almost entirely. Secondly, diseases or conditions that can lead to rapid onset problems, such as dehydration and gastroenteritis, can be treated. Thirdly, chronic conditions, such as congestive heart failure, can be managed to prevent or reduce the severity of acute flare-ups to avoid hospitalisation.

This measure does not include other aspects of avoidable morbidity, namely potentially preventable hospitalisations (hospitalisations resulting from diseases preventable through population based health promotion strategies, e.g. alcohol-related conditions; and most cases of lung cancer) and hospitalisations avoidable through injury prevention (e.g. road traffic accidents).

For information on the ambulatory care sensitive conditions and ICD codes included in the analysis in this section, please refer to the *Atlas of Avoidable Hospitalisations in Australia: ambulatory care-sensitive conditions*, available from www.publichealth.gov.au.

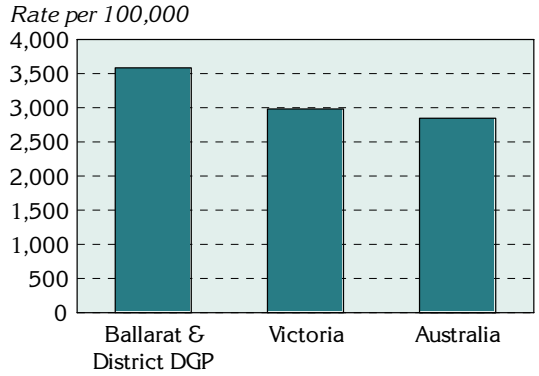
In 2001 to 2002, the 4,300 admissions from ambulatory care sensitive (ACS) conditions accounted for 11.0% of all admissions in the Ballarat and District DGP (Table 6, Figure 7), markedly above the levels in Victoria (8.8%) and Australia (8.7%).

Table 6: Avoidable[1] and unavoidable hospitalisations, Ballarat and District DGP, Victoria, and Australia, 2001/02

Category	Ballarat and District DGP			Victoria			Australia		
	No.	Rate[2]	%	No.	Rate[2]	%	No.	Rate[2]	%
Avoidable[1]	4,300	3,583.6	11.0	145,135	2,983.2	8.8	552,786	2,847.5	8.7
Unavoidable	34,934	29,758.1	89.0	1,510,437	31,088.3	91.2	5,818,199	29,970.7	91.3
Total	**39,233**	**33,356.9**	**100.0**	**1,655,572**	**34,071.5**	**100.0**	**6,370,985**	**32,818.2**	**100.0**

[1] **Admissions resulting from ACS conditions**
[2] **Rate is the indirectly age-standardised rate per 100,000 population**

Figure 7: Avoidable hospitalisations[1], Ballarat and District DGP, Victoria and Australia, 2001/02



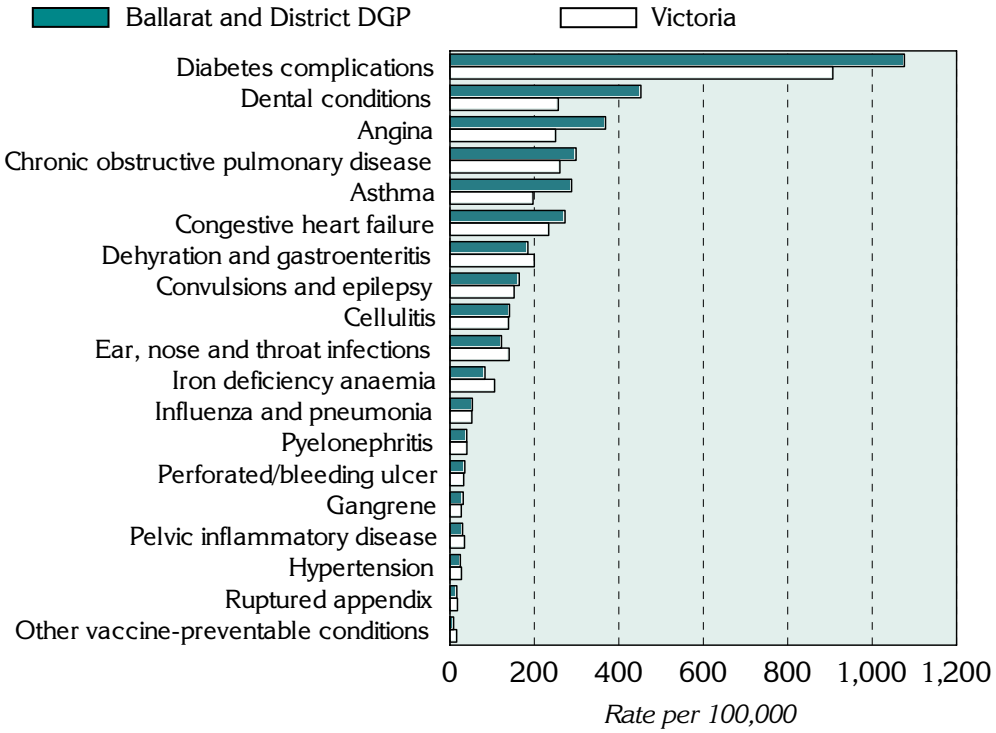
[1] **Admissions resulting from ACS conditions**

The rate of avoidable hospitalisations in Ballarat and District DGP is markedly higher, a rate of 3,583.6 admissions per 100,000 population, compared to Victoria (a rate of 2,983.2) and Australia (2,847.5).

Diabetes complications, dental conditions and angina were the three conditions with the highest rates of avoidable hospitalisations in the Ballarat and District DGP (Figure 8, Table 7).

Table 7 shows the number, rate and proportion of avoidable hospitalisations, for the individual ACS conditions, as well as the vaccine-preventable; acute; and chronic sub-categories. The majority of avoidable hospitalisations are attributable to chronic health conditions. The predominance of hospitalisations for chronic conditions in this period can be primarily attributed to the large number of admissions for diabetes complications. Dental conditions, and dehydration and gastroenteritis, have the highest rates of avoidable hospitalisations for the acute conditions.

Figure 8: Avoidable hospitalisations[1] by condition, Ballarat and District DGP and Victoria, 2001/02



[1] **Admissions resulting from ACS conditions: excludes nutritional deficiencies as less than ten admissions, and other vaccine-preventable conditions as number of admissions insufficient**

Table 7: Avoidable hospitalisations[1] by condition, Ballarat and District DGP, Victoria and Australia, 2001/02

Sub-category/ condition	Ballarat and District DGP		Victoria		Australia	
	No.	Rate[2]	No.	Rate[2]	No.	Rate[2]
Vaccine-preventable	**64**	**53.5**	**3,293**	**68.0**	**16,573**	**85.4**
Influenza and pneumonia	64	53.5	2,525	52.0	13,021	67.1
Other vaccine preventable	#	..	768	16.0	3,552	18.3
Chronic[3]	**2,930**	**2,413.0**	**97,133**	**1,982.6**	**352,545**	**1,816**
Diabetes complications	1,300	1,076.3	44,409	906.9	141,345	728.1
Iron deficiency anaemia	100	83.1	5,196	105.9	16,451	84.7
Hypertension	30	25.0	1,362	27.7	6,354	32.7
Congestive heart failure	343	272.8	11,655	234.1	42,447	218.6
Angina	449	368.7	12,285	250.4	49,963	257.4
Chronic obstructive pulmonary disease	367	298.8	12,850	260.7	54,853	282.6
Asthma	341	288.3	9,376	196.9	41,009	211.3
Acute	**1,430**	**1,218.4**	**50,153**	**1,041.7**	**200,913**	**1,035**
Dehydration and gastroenteritis	217	184.7	9,761	200.0	37,766	194.5
Convulsions and epilepsy	191	164.3	7,297	152.4	31,137	160.4
Ear, nose and throat infections	144	122.3	6,653	140.5	32,075	165.2
Dental conditions	530	452.4	12,235	256.7	43,667	224.9
Perforated/bleeding ulcer	43	35.3	1,618	32.9	5,795	29.9
Ruptured appendix	19	16.5	855	17.9	3,866	19.9
Pyelonephritis	47	39.8	1,948	40.2	7,386	38.0
Pelvic inflammatory disease	34	30.3	1,693	34.8	6,547	33.7
Cellulitis	167	141.2	6,751	139.0	28,204	145.3
Gangrene	38	31.6	1,342	27.3	4,470	23.0
Total avoidable hospitalisations[4]	**4,300**	**3,583.6**	**145,135**	**2,983.2**	**552,786**	**2,847.5**

[1] **Admissions resulting from ACS conditions**
[2] **Rate is the indirectly age-standardised rate per 100,000 population**
[3] **Excludes nutritional deficiencies as less than ten admissions**
[4] **Sub-category and condition numbers and rates do not add to the reported total avoidable admissions: five conditions (influenza & pneumonia, other vaccine preventable, diabetes complications, ruptured appendix and gangrene) are counted in 'any diagnosis', so may be included in more than one condition group**
 # Not shown or not calculated as there are fewer than five admissions over the period

Avoidable mortality

Avoidable and amenable mortality comprises those causes of death that are potentially avoidable at the present time, given available knowledge about social and economic policy impacts, health behaviours, and health care (the latter relating to the subset of amenable causes).

For information on the avoidable and amenable mortality conditions and ICD codes included in the analysis in this section, please refer to the *Australian and New Zealand Atlas of Avoidable Mortality*, available from www.publichealth.gov.au.

Over two-thirds (70.9%) of all deaths in Ballarat and District DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, consistent with the proportion for country Victoria (70.8%) (Table 8). Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 29.8% of all deaths at ages 0 to 74 years in Ballarat and District DGP, slightly higher than the 28.7% in country Victoria.

Table 8: Avoidable and unavoidable mortality (0 to 74 years) by area, Ballarat and District DGP, country Victoria, Victoria and Australia, 1997 to 2001

Mortality category	Ballarat and District DGP		Country Victoria		Victoria		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable	1,239	227.7	14,812	221.0	45,466	201.3	189,845	211.8
% of total	**70.9**	**..**	**70.8**	**..**	**70.9**	**..**	**71.5**	**..**
(Amenable)	(520)	(94.7)	(6,001)	(88.2)	(18,406)	(81.4)	(76,249)	(85.1)
(% of total)	**(29.8)**	**(..)**	**(28.7)**	**(..)**	**(28.7)**	**(..)**	**(28.7)**	**(..)**
Unavoidable	508	92.8	6,100	90.0	18,617	82.4	75,582	84.3
% of total	**29.1**	**..**	**29.2**	**..**	**29.1**	**..**	**28.5**	**..**
Total mortality	**1,747**	**320.5**	**20,912**	**311.0**	**64,083**	**283.7**	**265,427**	**296.1**
%	**100.0**	..	**100.0**	..	**100.0**	..	**100.0**	..

[1] **Rate is the indirectly age-standardised rate per 100,000 population**

Rates of avoidable mortality were higher for males than for females in each of the comparator areas. Ballarat and District DGP's rate of avoidable mortality for males was 298.4 deaths per 100,000 males, higher than the rate of 156.3 for females. The rate of amenable mortality for males in the Division was also higher, 108.8, compared to 80.5 for females, a rate ratio of 1.35 (Figure 9, Table 9).

Figure 9: Avoidable and amenable mortality by sex (0 to 74 years), Ballarat and District DGP, country Victoria, Victoria and Australia, 1997 to 2001

Note: the different scales

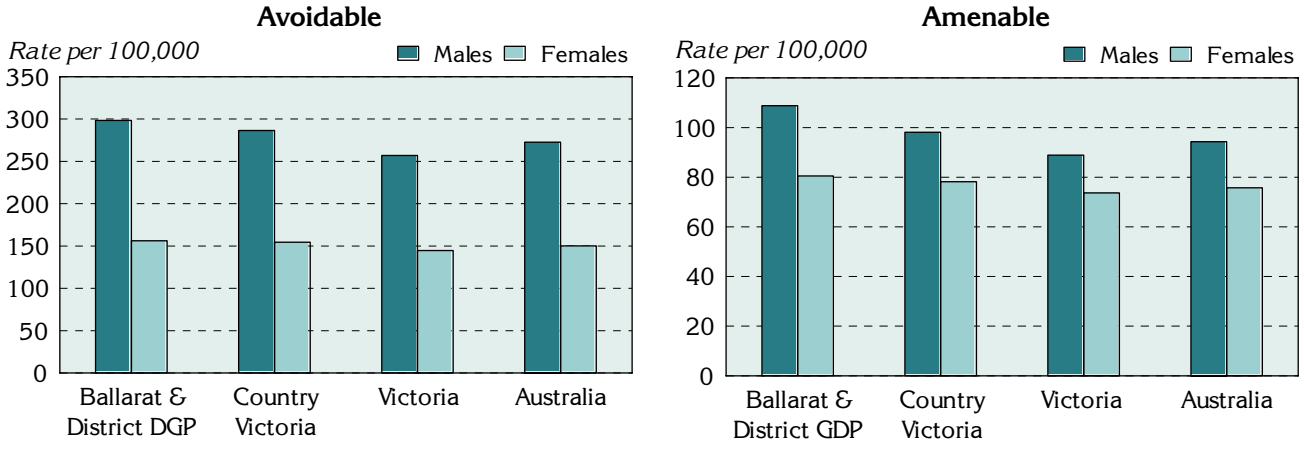


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, Ballarat and District DGP, country Victoria, Victoria and Australia, 1997 to 2001

Mortality category and sex	Ballarat and District DGP		Country Victoria		Victoria		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable								
Males	808	298.4	9,664	286.5	29,042	257.0	123,026	272.6
Females	431	156.3	5,148	154.5	16,424	144.8	66,819	150.1
Total	**1,239**	**227.7**	**14,812**	**221.0**	**45,466**	**201.3**	**189,845**	**211.8**
Rate ratio–M:F[2]	**..**	**1.91****	**..**	**1.85****	**..**	**1.77****	**..**	**1.82****
Amenable								
Males	298	108.8	3,386	98.1	10,052	88.9	42,568	94.3
Females	222	80.5	2,615	78.2	8,354	73.7	33,681	75.7
Total	**520**	**94.7**	**6,001**	**88.2**	**18,406**	**81.4**	**76,249**	**85.1**
Rate ratio–M:F[2]	**..**	**1.35****	**..**	**1.25****	**..**	**1.21****	**..**	**1.25****

[1] **Rate is the indirectly age-standardised rate per 100,000 population**

[2] **Rate ratio (M:F) is the ratio of male to female rates; rate ratios differing significantly from 1.0 are shown with * p <0.05; ** p <0.01**

Another way of measuring premature mortality is to calculate the number of years of life lost (YLL)[1], which takes into account the years a person could have expected to live at each age of death based on the average life expectancy at that age.

The numbers of YLL for Ballarat and District DGP, country Victoria, Victoria and Australia over the period of analysis are shown in Table 10 by mortality category. However, given the substantial variations in the populations of these areas, a comparison of the proportion of YLL for each area is also shown.

YLL from avoidable mortality accounted for 71.6% of total YLL (0 to 74 years) for Ballarat and District DGP, consistent with the proportion for country Victoria. The proportion of YLL from amenable mortality for Ballarat and District DGP (29.2%) was slightly higher than that for country Victoria (28.1%).

Table 10: Years of life lost from avoidable mortality (0 to 74 years), Ballarat and District DGP, country Victoria, Victoria and Australia, 1997 to 2001

Mortality category	Ballarat and District DGP		Country Victoria		Victoria		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	21,155	71.6	253,666	71.2	790,054	71.5	3,327,375	71.9
(Amenable)	(8,633)	(29.2)	(100,131)	(28.1)	(310,758)	(28.1)	(1,298,430)	(28.0)
Unavoidable	8,383	28.4	102,576	28.8	315,555	28.5	1,303,289	28.1
Total	**29,539**	**100.0**	**356,242**	**100.0**	**1,105,610**	**100.0**	**4,630,664**	**100.0**

[1] Years of life lost were calculated using the remaining life expectancy method (this provides an estimate of the average time a person would have lived had he or she not died prematurely). The reference life table was the Coale and Demeny Model Life Table West level 26 female (for both males and females), with the YLL discounted to net present value at a rate of 3 per cent per year.

In each of the areas in Table 11, the majority of avoidable mortality at ages 0 to 74 years occurred in the 65 to 74 year age group (Table 11), with 1,502.2 deaths per 100,000 population in the Ballarat and District Division. The 45 to 64 year age group accounted for the next highest rate of avoidable death in all of the comparators, with a rate 338.0 in the Ballarat and District Division.

Table 11: Avoidable and amenable mortality by age, Ballarat and District DGP, country Victoria, Victoria and Australia, 1997 to 2001

Mortality category and age (years)	Ballarat and District DGP		Country Victoria		Victoria		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable								
0-14	34	28.7	416	29.9	1,290	27.1	5,669	28.8
15-24	45	53.6	507	61.8	1,627	49.3	7,045	52.8
25-44	119	74.9	1,615	88.6	5,705	78.9	24,356	83.9
45-64	421	338.0	4,881	320.7	15,004	286.9	64,282	304.9
65-74	621	1,502.2	7,393	1396.1	21,840	1306.6	88,493	1,358.1
Total	**1,239**	**227.7**	**14,812**	**221.0**	**45,466**	**201.3**	**189,845**	**211.8**
Amenable								
0-24	28	13.8	352	15.5	1,189	14.9	5,083	15.4
25-44	33	20.1	419	22.3	1,382	19.1	5,946	20.5
45-64	186	148.5	2,091	137.4	6,489	123.8	27,464	130.3
65-74	274	661.0	3,139	593.1	9,348	558.6	37,756	579.4
Total	**520**	**94.7**	**6,001**	**88.2**	**18,406**	**81.4**	**76,249**	**85.1**

[1] **Rate is the indirectly age-standardised rate per 100,000 population**

Table 12 shows the number and age-standardised death rate by selected major condition group and selected causes included in the avoidable mortality classification.

The highest rates of avoidable mortality for the selected major condition groups in the Ballarat and District DGP were for cancer, with a rate of 77.6 deaths per 100,000 population, and cardiovascular diseases, 74.6 deaths per 100,000 population (Table 12, Figure 10). For the selected causes within the condition groups, the two major causes of avoidable mortality were ischaemic heart disease and lung cancer, with rates of 54.1 per 100,000 population and 27.5 per 100,000, respectively.

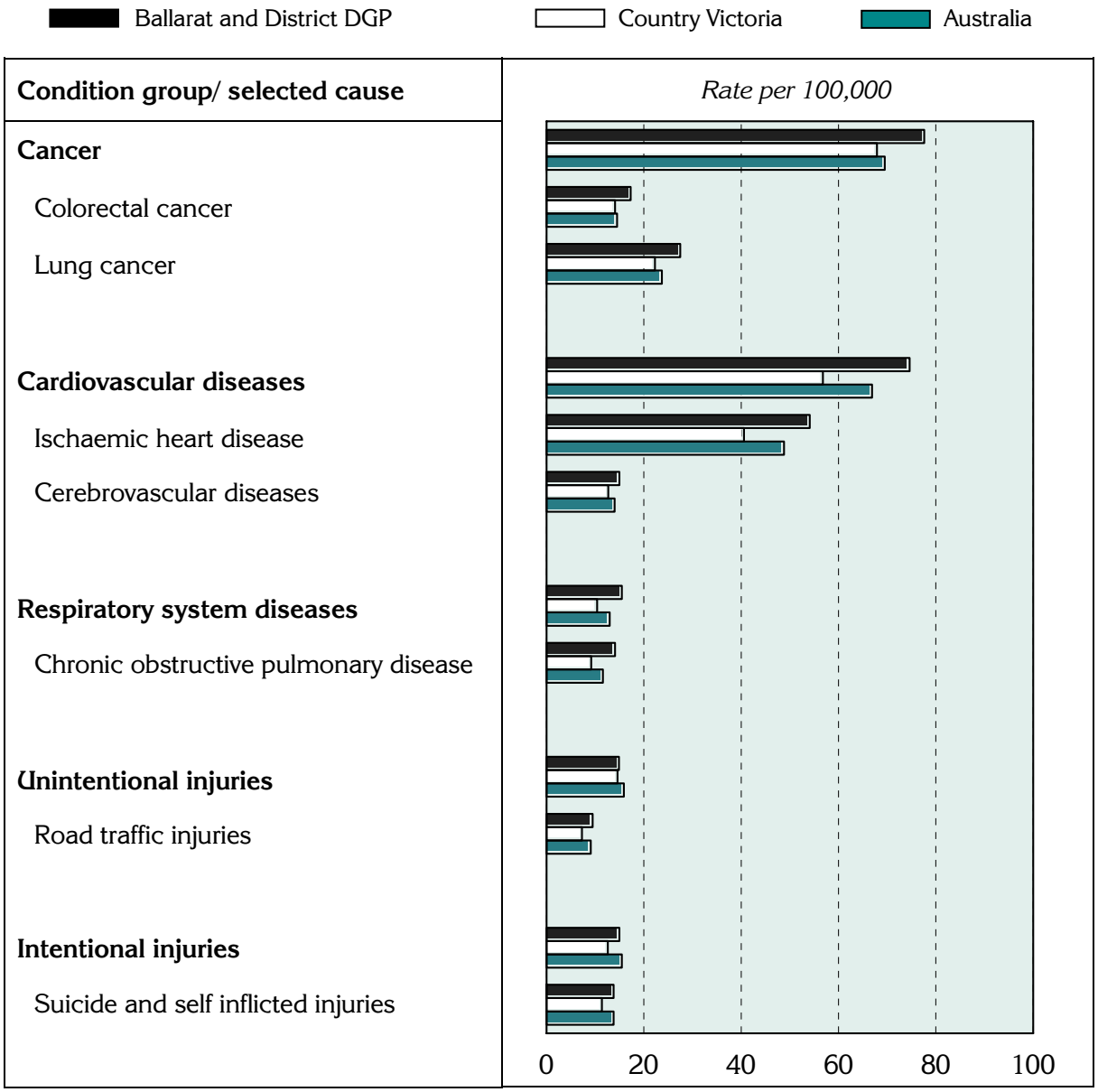
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Ballarat and District DGP, country Victoria, Victoria and Australia, 1997 to 2001

Condition group/ selected cause	Ballarat and District DGP		Country Victoria		Victoria		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Cancer	**425**	**77.6**	**5,074**	**74.2**	**15,813**	**69.8**	**62,338**	**69.5**
Colorectal cancer	95	17.3	1,133	16.5	3,351	14.8	13,008	14.5
Lung cancer	151	27.5	1,739	25.0	5,244	23.1	21,208	23.7
Cardiovascular diseases	**412**	**74.6**	**4,666**	**67.0**	**13,612**	**60.0**	**59,945**	**66.9**
Ischaemic heart disease	298	54.1	3,432	49.3	9,809	43.3	43,712	48.8
Cerebrovascular diseases	83	15.0	934	13.4	2,947	12.9	12,558	14.0
Respiratory system diseases	**86**	**15.5**	**977**	**13.9**	**2,621**	**11.5**	**11,612**	**13.0**
Chronic obstructive pulmonary disease	79	14.1	888	12.5	2,339	10.2	10,395	11.6
Unintentional injuries	**78**	**14.9**	**1,142**	**19.3**	**3,536**	**15.9**	**14,224**	**15.9**
Road traffic injuries	50	9.5	739	12.5	1,931	8.7	8,138	9.1
Intentional injuries	**77**	**15.0**	**946**	**16.2**	**3,020**	**13.6**	**13,891**	**15.5**
Suicide and self inflicted injuries	71	13.8	875	15.0	2,752	12.3	12,393	13.8

[1] **Rate is the indirectly age-standardised rate per 100,000 population**

Rates in the Division were above those in country Victoria and above or consistent with those for Australia for the condition groups and selected causes shown: the exception was Unintentional injuries, with a higher rate for Australia (Figure 10).

Figure 10: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Ballarat and District DGP, country Victoria and Australia, 1997 to 2001



Notes on the data

Data sources and limitations

General

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

Data sources

Table 13 details the data sources for the material presented in this profile.

Table 13: Data sources

Section	Source
Population	
Figures 1 and 2; Table 1	Estimated Resident Population, ABS, 30 June for the periods shown
Figure 3	Estimated Resident Population, ABS, 30 June 2005; Population Projections, ABS, 30 June 2020 (unpublished)[1]
Additional socio-demographic indicators	
Figure 4	ABS SEIFA package, Census 2001
Table 2; Figure 5; Map 1	Jobless families, ABS, 2001 (unpublished)
Table 2; Figure 5; Map 2	Private health insurance, from Hansard
GP services – patient flow/ GP catchment	
Tables 3 and 4	Medicare Australia, 2003/04
Additional prevalence estimates: chronic diseases and risk factors combined	
Figure 6; Table 5	Estimated from 2001 National Health Survey (NHS), ABS (unpublished)
Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions	
Tables 6 and 7; Figures 7 and 8	National Hospital Morbidity Database at Australian Institute of Health & Welfare, 2001/02; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)
Avoidable mortality	
Tables 8, 9, 10, 11 and 12; Figures 9 and 10	ABS Deaths 1997-2001; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)

[1] **The projected population at June 2020 is based on the 2002 ERP. As such, it is somewhat dated, and does not take into account more recent demographic trends: it is however the only projection series available at the SLA level for the whole of Australia.**

Methods

For background information on the additional prevalence estimates presented in this profile, please refer to the 'Notes on the data' section of the *Population health profile*, November 2005 (www.publichealth.gov.au).

Please also refer to the November 2005 profile for information on the data converters.

Mapping

In some Divisions the maps may include a very small part of an SLA which has not been allocated any population; or has a population of less than 100 or has less than 1% of the SLAs total population; or there were less than five cases (i.e. jobless families, people with health insurance): these areas are mapped with a pattern.

Statistical geography of the Ballarat and District DGP

For information on the postcodes in the Division, please refer the Department of Health and Ageing website http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm; also included in table format in the 'Notes on the data' section of the *Population health profile*, November 2005 (www.publichealth.gov.au).

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, most Local Government Areas (LGAs) have been split into SLAs. For example, the LGA of Ballarat has four SLAs – Central, Inner North, North and South. All of these SLAs, and all or parts of the other SLAs in Table 14 comprise the Division.

Table 14: SLAs and population in Ballarat and District DGP, 2005 on 2001 boundaries

SLA code	SLA name	Per cent of the SLA's population in the Division*	Estimate of the SLA's 2005 population in the Division
20260	Ararat	6.4	738
20571	Ballarat - Central	100.0	34,103
20572	Ballarat - Inner North	100.0	29,952
20573	Ballarat - North	100.0	1,084
20574	Ballarat - South	100.0	23,638
21674	Central Goldfields Balance	19.0	1,012
21831	Corangamite - North	7.0	661
22491	Golden Plains - North-West	100.0	7,685
22492	Golden Plains - South-East	12.1	1,117
22911	Hepburn - East	41.4	3,245
22912	Hepburn - West	100.0	6,964
25154	Moorabool - Ballan	94.6	6,012
25155	Moorabool - West	100.0	3,667
25434	Mount Alexander - Balance	2.5	248
25991	Pyrenees - North	24.5	831
25994	Pyrenees - South	46.7	1,475

* **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**

Acknowledgements

Funding for these profiles was provided by the Population Health Division of the Department of Health and Ageing (DoHA).

Further developments and updates

When the re-aligned boundaries are released and DoHA have made known their geographic composition, PHIDU will examine the need to revise and re-publish these profiles (*Population health profile*, dated November 2005, and the *Population health profile: supplement*, dated March 2007).

PHIDU contact details

For general comments, data issues or enquiries re information on the web site, please contact PHIDU:

Phone: 08-8303 6236 or e-mail: PHIDU@publichealth.gov.au