# Population health profile of the West Vic

# Division of General Practice: supplement

Population Profile Series: No. 65a

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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.

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# Population health profile of the West Vic Division of General Practice: supplement

This profile is a supplement to the *Population health profile of the West Vic Division of General Practice*, dated November 2005, available from <a href="www.publichealth.gov.au">www.publichealth.gov.au</a>. This supplement includes an update of the population of the West Vic 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:

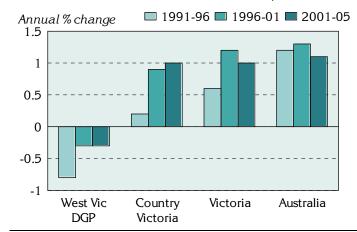
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions
- 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 West Vic Division had an Estimated Resident Population of 80,735 at 30 June 2005.

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



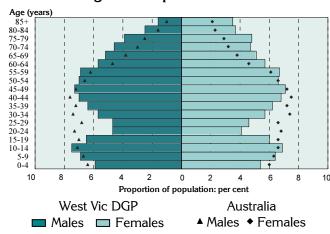
Over the five years from 1991 to 1996, the Division's population decreased by 0.8% on average each year, compared to increases in country Victoria (0.2%), Victoria (0.6%) and Australia as a whole (1.2%). From 1996 to 2001, the Division's population decreased (0.3% each year), compared to increases in country Victoria (0.9%) and Victoria (1.2%). From 2001 to 2005, the decline in the Division's population was again 0.3% per year, compared to annual increases for country Victoria and Victoria (1.0%).

Table 1: Population by age, West Vic DGP and Australia, 2005

Age group	West Vi	c DGP	Australia
(years)	No.	%	No. %
0-14	15,728	19.5	3,978,221 19.6
15-24	8,571	10.6	2,819,834 13.9
25-44	19,045	23.6	5,878,107 28.9
45-64	21,411	26.5	4,984,446 24.5
65-74	7,893	9.8	1,398,831 6.9
75-84	5,998	7.4	954,143 4.7
85+	2,088	2.6	315,027 1.5
Total	80,735	100.0	20,328,609 100.0

As shown in the accompanying table and the age-sex pyramid below (Figure 2), the West Vic DGP had fewer people aged 15 to 44 years (10.6% and 23.6%) compared to Australia as a whole (13.9% and 28.9%) (Table 1). Conversely, the proportions of the Division's population in the age groups from 45 years were higher, and in some cases markedly so, than those for Australia.

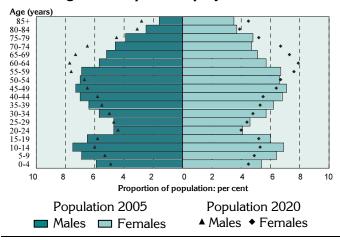
Figure 2: Population in West Vic DGP and Australia, by age and sex, 2005



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

- at younger ages relatively fewer children aged 0 to 4 years, and a higher proportion of young people aged 5 to 14 years;
- from 20 to 44 years relatively fewer males and females, most pronounced at ages 20 to 34 years); and
- at older ages relatively more males and females aged 50 years and over.

Figure 3: Population projections for West Vic DGP, by age and sex, 2005 and 2020



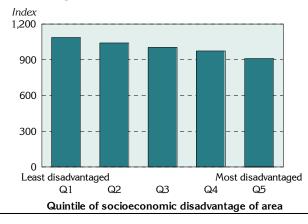
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages relatively fewer children and young people aged 0 to 19 years;
- from 20 to 54 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 West Vic 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, West Vic DGP, 2001



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

The West Vic DGP has an index score of 1004, slightly above the score for Australia of 1000: this score varies across the Division, from 910 in the most disadvantaged areas to 1086 in the least disadvantaged areas.

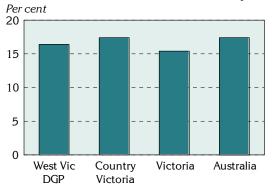
Note: each 'quintile' comprises approximately 20% of the population of the Division.

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 slightly fewer jobless families in the West Vic DGP (16.4%), 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 lower proportion of people with private health insurance (37.5%), compared to country Victoria (43.0%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, West Vic DGP, country Victoria, Victoria and Australia, 2001

### Jobless families with children under 15 years old



### Private health insurance, 30 June

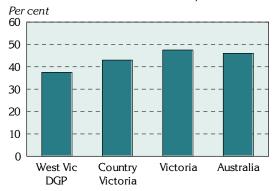
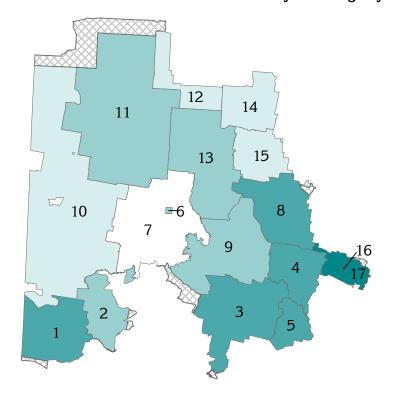


Table 2: Socio-demographic indicators, West Vic DGP, country Victoria, Victoria and Australia, 2001

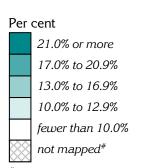
Indicator	West Vic DGP		Country Vi	ctoria	Victori	a	Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	1,339	16.4	24,724	17.4	77,142	15.4	357,563	17.4
Private health insurance (30 June)	29,119	37.5	543,292	43.0	2,196,890	47.5	8,671,106	46.0

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, West Vic DGP, 2001

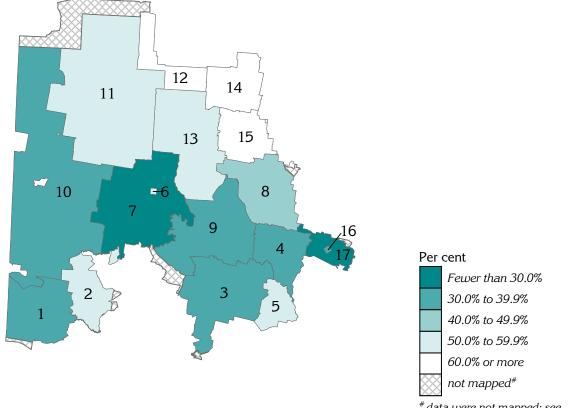


For map labels: see next page



<sup>#</sup> data were not mapped: see 'Mapping' note under Methods

Map 2: People covered by private health insurance by SLA, West Vic DGP, 30 June 2001



<sup>#</sup> data were not mapped: see 'Mapping' note under Methods

Alphabetical key to S	tatistica	l Local Areas, West Vic DGP, 2001	
Ararat	3	Northern Grampians - St Arnaud	8
Buloke - North	14	Northern Grampians - Stawell	9
Buloke - South	15	Pyrenees - North	4
Central Goldfields - Maryborough	16	Pyrenees - South	5
Central Goldfields Balance	17	Southern Grampians - Wannon	2
Glenelg - North	1	West Wimmera	10
Hindmarsh	11	Yarriambiack - North	12
Horsham - Central	6	Yarriambiack - South	13
Horsham Balance	7		

### GP services to residents of the West Vic 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 all unreferred attendances to residents of West Vic DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 359,414 GP unreferred attendances (Table 3). A further 2.1% of unreferred attendances to residents were provided by GPs with a provider number in Ballarat and District DGP.

Table 3: Patient flow – People living<sup>1</sup> in West Vic DGP by Division where attendance occurred<sup>2</sup>, 2003/04

Division		Unreferred a	ttendances
Number	Name	No.	% <sup>3</sup>
330	West Vic DGP	359,414	90.9
325	Ballarat & District	8,253	2.1
324	Otway DGP	2,899	0.7
326	Bendigo & District DGP	2,064	0.5
301	Melbourne DGP	1,837	0.5
332	Mallee DGP	1,807	0.5
510	Limestone Coast DGP	1,630	0.4
Other		17,491	4.4
Total		395,395	100.0

<sup>&</sup>lt;sup>1</sup> Based on address in Medicare records

The majority (92.7%) of unreferred attendances provided by GPs with a provider number in West Vic DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 1.4% of unreferred attendances provided by GPs in the Division were to residents of Bendiqo and District DGP, with the same percent by GPs in Ballarat and District DGP.

Table 4: GP catchment – Unreferred attendances provided by GPs<sup>1</sup> in West Vic DGP by Division of patient address<sup>2</sup>, 2003/04

Division		Unreferred a	ttendances
Number	Name	No.	%³
330	West Vic DGP	359,414	92.7
326	Bendigo & District DGP	5,479	1.4
325	Ballarat & District DGP	5,311	1.4
324	Otway DGP	3,191	8.0
332	Mallee DGP	2,293	0.6
301	Melbourne DGP	1,559	0.4
331	Murray-Plains DGP	1,003	0.3
Other		9,513	2.5
Total		387,763	100.0

<sup>&</sup>lt;sup>1</sup> Division of GP based on provider number

<sup>&</sup>lt;sup>2</sup> Division of GP based on provider number

<sup>&</sup>lt;sup>3</sup> Proportion of all unreferred attendances of patients with an address in Division 330 by Division in which attendance occurred

<sup>&</sup>lt;sup>2</sup> Based on address in Medicare records

<sup>&</sup>lt;sup>3</sup> Proportion of all unreferred attendances to GPs with a provider number in Division 330 by Division of patient address

# Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier *Population health profile of the West Vic Division of General Practice*, dated November 2005, available from <a href="www.publichealth.gov.au">www.publichealth.gov.au</a>, 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 West Vic DGP who had asthma and were smokers, compared to country Victoria or Australia as a whole (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were higher. In contrast, there fewer people in West Vic 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, West Vic DGP, country Victoria and Australia, 2001



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

Variable	West Vic DGP		Country	Country Victoria		ria	Australia	
	No.1	Rate <sup>2</sup>	No.1	Rate <sup>2</sup>	No. <sup>1</sup>	Rate <sup>2</sup>	No.1	Rate <sup>1</sup>
Had asthma & smoked <sup>3</sup>	1,796	26.4	29,424	24.6	95,664	19.9	397,734	20.8
Had type 2 diabetes & were overweight/ obese <sup>4</sup>	1,213	12.6	19,136	14.1	69,192	15.1	283,176	15.2

<sup>&</sup>lt;sup>1</sup> No. is a weighted estimate of the number of people in West Vic DGP reporting these chronic conditions/ with these risk factors and is derived from synthetic predictions from the 2001 NHS

<sup>&</sup>lt;sup>2</sup> Rate is the indirectly age-standardised rate per 1,000 population

<sup>&</sup>lt;sup>3</sup> Population aged 18 years and over

<sup>&</sup>lt;sup>4</sup> 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 <a href="https://www.publichealth.gov.au">www.publichealth.gov.au</a>.

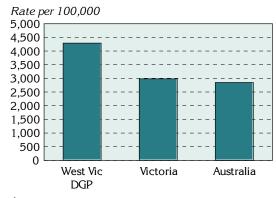
In 2001 to 2002, the 4,258 admissions from ambulatory care sensitive (ACS) conditions accounted for 12.8% of all admissions in the West Vic DGP (Table 6, Figure 7), substantially above the levels in Victoria (8.8%) and Australia (8.7%).

Table 6: Avoidable<sup>1</sup> and unavoidable hospitalisations, West Vic DGP, Victoria, and Australia, 2001/02

Category	W	est Vic DG	P	,	Victoria		Australia	stralia	
	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%
Avoidable <sup>1</sup>	4,258	4,289.1	12.8	145,135	2,983.2	8.8	552,786	2,847.5	8.7
Unavoidable	29,087	31,631.8	87.2	1,510,437	31,088.3	91.2	5,818,199	29,970.7	91.3
Total	33,346	36,013.7	100.0	1,655,572	34,071.5	100.0	6,370,985	32,818.2	100.0

<sup>&</sup>lt;sup>1</sup> Admissions resulting from ACS conditions

Figure 7: Avoidable hospitalisations<sup>1</sup>, West Vic DGP, Victoria and Australia, 2001/02



The rate of avoidable hospitalisations in West Vic DGP is markedly higher, a rate of 4,289.1 admissions per 100,000 population, compared to both Victoria (a rate of 2,983.2),and Australia (2,847.5).

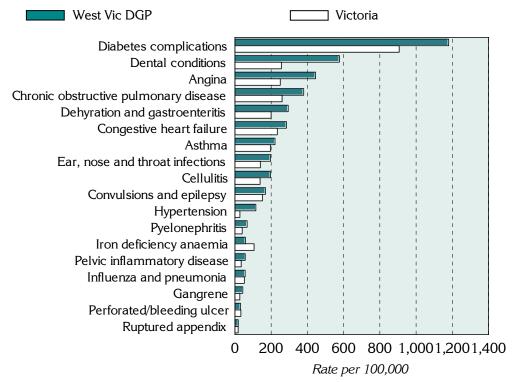
Diabetes complications, dental conditions, angina and chronic obstructive pulmonary disease were the four conditions with the highest rates of avoidable hospitalisations in the West Vic DGP (Figure 8, Table 7).

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.

<sup>&</sup>lt;sup>2</sup> Rate is the indirectly age-standardised rate per 100,000 population

<sup>&</sup>lt;sup>1</sup> Admissions resulting from ACS conditions

Figure 8: Avoidable hospitalisations<sup>1</sup> by condition, West Vic DGP and Victoria, 2001/02



<sup>&</sup>lt;sup>1</sup> 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<sup>1</sup> by condition, West Vic DGP, Victoria and Australia, 2001/02

Sub-category/ condition	West Vi	c DGP	Victo	oria	Austr	alia
	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>
Vaccine-preventable	55	56.3	3,293	68.0	16,573	85.4
Influenza and pneumonia	55	56.3	2,525	52.0	13,021	67.1
Other vaccine preventable	#		768	16.0	3,552	18.3
Chronic <sup>3</sup>	2,913	2,684.6	97,133	1,982.6	352,545	1,816
Diabetes complications	1,274	1,179.7	44,409	906.9	141,345	728.1
Iron deficiency anaemia	60	57.8	5,196	105.9	16,451	84.7
Hypertension	123	115.5	1,362	27.7	6,354	32.7
Congestive heart failure	344	285.1	11,655	234.1	42,447	218.6
Angina	496	445.5	12,285	250.4	49,963	257.4
Chronic obstructive pulmonary disease	435	379.7	12,850	260.7	54,853	282.6
Asthma	181	221.3	9,376	196.9	41,009	211.3
Acute	1,409	1,651.0	50,153	1,041.7	200,913	1,035
Dehydration and gastroenteritis	271	293.9	9,761	200.0	37,766	194.5
Convulsions and epilepsy	139	168.9	7,297	152.4	31,137	160.4
Ear, nose and throat infections	155	197.2	6,653	140.5	32,075	165.2
Dental conditions	467	576.7	12,235	256.7	43,667	224.9
Perforated/bleeding ulcer	34	31.0	1,618	32.9	5,795	29.9
Ruptured appendix	15	18.4	855	17.9	3,866	19.9
Pyelonephritis	54	67.6	1,948	40.2	7,386	38.0
Pelvic inflammatory disease	40	57.0	1,693	34.8	6,547	33.7
Cellulitis	187	196.6	6,751	139.0	28,204	145.3
Gangrene	47	43.7	1,342	27.3	4,470	23.0
Total avoidable hospitalisations <sup>4</sup>	4,258	4,289.1	145,135	2,983.2	552,786	2,847.5

<sup>&</sup>lt;sup>1</sup> Admissions resulting from ACS conditions

<sup>&</sup>lt;sup>2</sup> Rate is the indirectly age-standardised rate per 100,000 population

<sup>&</sup>lt;sup>3</sup> Excludes nutritional deficiencies as less than ten admissions

<sup>&</sup>lt;sup>4</sup> 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

<sup>#</sup> 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 <a href="https://www.publichealth.gov.au">www.publichealth.gov.au</a>.

Over two-thirds (72.1%) of all deaths in West Vic DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, higher than the proportion for country Victoria (70.8%) (Table 8). Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 28.3% of all deaths at ages 0 to 74 years in West Vic DGP, consistent with the 28.7% in country Victoria.

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

Mortality category	West Vic DGP		Country '	Victoria	Victo	ria	Austr	alia
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable	1,030	213.5	14,812	221.0	45,466	201.3	189,845	211.8
% of total	72.1	••	70.8	••	70.9		71.5	
(Amenable)	(404)	(81.9)	(6,001)	(88.2)	(18,406)	(81.4)	(76,249)	(85.1)
(% of total)	(28.3)	()	(28.7)	()	(28.7)	()	(28.7)	()
Unavoidable	398	81.2	6,100	90.0	18,617	82.4	75,582	84.3
% of total	27.9	••	29.2	••	29.1	••	28.5	••
Total mortality	1,428	294.6	20,912	311.0	64,083	283.7	265,427	296.1
%	100.0	••	100.0		100.0		100.0	

<sup>&</sup>lt;sup>1</sup> 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. West Vic DGP's rate of avoidable mortality for males was 275.2 deaths per 100,000 males, higher than the rate of 150.8 for females. The rate of amenable mortality for males in the Division was also higher, 88.2, compared to 75.8 for females, a rate ratio of 1.16 (Figure 9, Table 9).

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

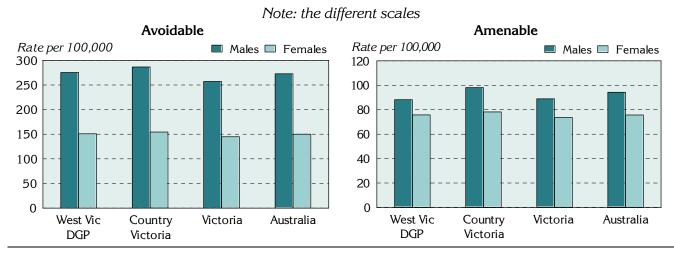


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, West Vic DGP, country Victoria, Victoria and Australia, 1997 to 2001

Mortality category	West Vi	ic DGP	Country	Victoria	Victo	oria	Austr	alia
and sex	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable								
Males	675	275.2	9,664	286.5	29,042	257.0	123,026	272.6
Females	355	150.8	5,148	154.5	16,424	144.8	66,819	150.1
Total	1,030	213.5	14,812	221.0	45,466	201.3	189,845	211.8
Rate ratio-M:F <sup>2</sup>	••	1.82**	••	1.85**		1.77**		1.82**
Amenable								
Males	225	88.2	3,386	98.1	10,052	88.9	42,568	94.3
Females	179	75.8	2,615	78.2	8,354	73.7	33,681	75.7
Total	404	81.9	6,001	88.2	18,406	81.4	76,249	85.1
Rate ratio-M:F <sup>2</sup>	••	1.16	••	1.25**	••	1.21**	••	1.25**

<sup>&</sup>lt;sup>1</sup> Rate is the indirectly age-standardised rate per 100,000 population

Another way of measuring premature mortality is to calculate the number of years of life lost (YLL)<sup>1</sup>, 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 West Vic 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 72.3% of total YLL (0 to 74 years) for West Vic DGP, slightly higher than the proportion for country Victoria. The proportion of YLL from amenable mortality for West Vic DGP (27.7%) was lower than that for country Victoria (28.1%).

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

Mortality category	West Vic DGP		Country V	/ictoria	Victoria		Australia	
	No.	% of	No.	% of	No.	% of	No.	% of
		total		total		total		total
Avoidable	16,965	72.3	253,666	71.2	790,054	71.5	3,327,375	71.9
(Amenable)	(6,505)	(27.7)	(100, 131)	(28.1)	(310,758)	(28.1)	(1,298,430)	(28.0)
Unavoidable	6,514	27.7	102,576	28.8	315,555	28.5	1,303,289	28.1
Total	23,479	100.0	356,242	100.0	1,105,610	100.0	4,630,664	100.0

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<sup>&</sup>lt;sup>2</sup> 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

<sup>&</sup>lt;sup>1</sup> 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 1,338.9 deaths per 100,000 population in the West Vic 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 317.1 in the West Vic Division.

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

Mortality category	West V	ic DGP	Country	Victoria	Victo	oria	Austr	alia
and age (years)	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable								
0-14	21	25.8	416	29.9	1,290	27.1	5,669	28.8
15-24	31	71.4	507	61.8	1,627	49.3	7,045	52.8
25-44	89	81.7	1,615	88.6	5,705	78.9	24,356	83.9
45-64	335	317.1	4,881	320.7	15,004	286.9	64,282	304.9
65-74	553	1,338.9	7,393	1396.1	21,840	1306.6	88,493	1,358.1
Total	1,030	213.5	14,812	221.0	45,466	201.3	189,845	211.8
Amenable								
0-24	12	8.7	352	15.5	1,189	14.9	5,083	15.4
25-44	29	25.5	419	22.3	1,382	19.1	5,946	20.5
45-64	143	135.5	2,091	137.4	6,489	123.8	27,464	130.3
65-74	221	536.7	3,139	593.1	9,348	558.6	37,756	579.4
Total	404	81.9	6,001	88.2	18,406	81.4	76,249	85.1

<sup>&</sup>lt;sup>1</sup> 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 West Vic DGP were for cardiovascular disease, with a rate of 68.6 deaths per 100,000 population, and cancer, 68.3 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 50.9 per 100,000 population and 23.7 per 100,000, respectively.

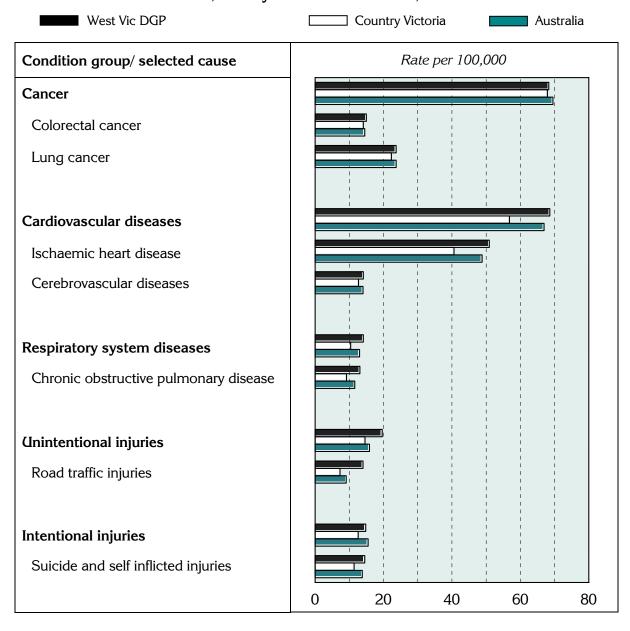
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, West Vic DGP, country Victoria, Victoria and Australia, 1997 to 2001

	-		•		•			
Condition group/	West Vic DGP		Country Victoria		Victoria		Australia	
selected cause	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Cancer	342	68.3	5,074	74.2	15,813	69.8	62,338	69.5
Colorectal cancer	76	15.0	1,133	16.5	3,351	14.8	13,008	14.5
Lung cancer	123	23.7	1,739	25.0	5,244	23.1	21,208	23.7
Cardiovascular diseases	358	68.6	4,666	67.0	13,612	60.0	59,945	66.9
Ischaemic heart disease	266	50.9	3,432	49.3	9,809	43.3	43,712	48.8
Cerebrovascular diseases	74	14.1	934	13.4	2,947	12.9	12,558	14.0
Respiratory system diseases	75	14.1	977	13.9	2,621	11.5	11,612	13.0
Chronic obstructive pulmonary disease	72	13.1	888	12.5	2,339	10.2	10,395	11.6
Unintentional injuries	72	19.6	1,142	19.3	3,536	15.9	14,224	15.9
Road traffic injuries	51	14.0	739	12.5	1,931	8.7	8,138	9.1
Intentional injuries	54	14.8	946	16.2	3,020	13.6	13,891	15.5
Suicide and self inflicted injuries	53	14.5	875	15.0	2,752	12.3	12,393	13.8

<sup>&</sup>lt;sup>1</sup> Rate is the indirectly age-standardised rate per 100,000 population

Rates in the Division were consistent with, or above, those in country Victoria and Australia for the condition groups and selected causes shown (Figure 10).

Figure 10: Avoidable mortality (0 to 74 years) by major condition group and selected cause, West Vic 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) <sup>1</sup>					
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)					

<sup>&</sup>lt;sup>1</sup> 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 West Vic DGP

For information on the postcodes in the Division, please refer the Department of Health and Ageing website <a href="http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm">http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm</a>; 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, a majority of the Local Government Areas (LGAs) have been split into SLAs. For example, Horsham has two SLAs, Central (wholly in this Division) and Balance (largely in this Division). These SLAs, and all or parts of other SLAs listed, comprise the Division (Table 14).

Table 14: SLAs and population in West Vic DGP, 2005 on 2001 boundaries

SLA code	SLA name	Per cent of SLA population in the	Estimate of the SLA's 2005 population in
		Division*	the Division
20260	Ararat	93.6	10,706
21271	Buloke - North	29.9	1,034
21272	Buloke - South	57.9	2,059
21671	Central Goldfields - Maryborough	100.0	7,652
21674	Central Goldfields Balance	40.5	2,163
22412	Glenelg - North	71.9	2,457
22980	Hindmarsh	100.0	6,392
23191	Horsham - Central	100.0	13,951
23194	Horsham Balance	100.0	5,226
25811	Northern Grampians - St Arnaud	100.0	3,692
25814	Northern Grampians - Stawell	100.0	8,995
25991	Pyrenees - North	75.5	2,564
25994	Pyrenees - South	53.3	1,682
26264	Southern Grampians - Wannon	76.1	1,782
26890	West Wimmera	91.1	4,291
27631	Yarriambiack - North	15.0	323
27632	Yarriambiack - South	100.0	5,764

<sup>\*</sup> 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:

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