

# Population health profile of the Melbourne

## Division of General Practice: supplement

Population Profile Series: No. 38a

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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 Melbourne Division of General Practice: supplement

This profile is a supplement to the *Population health profile of the Melbourne Division of General Practice*, dated November 2005, available from [www.publichealth.gov.au](http://www.publichealth.gov.au). This supplement includes an update of the population of the Melbourne 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:

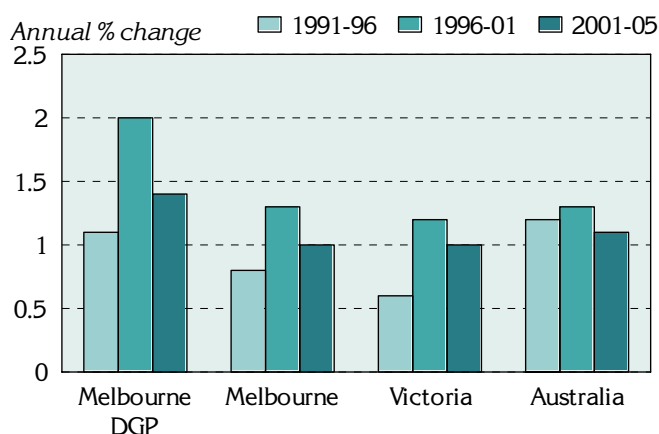
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive 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](http://www.publichealth.gov.au)).

## Population

The Melbourne Division had an Estimated Resident Population of 182,905 at 30 June 2005.

**Figure 1: Annual population change, Melbourne DGP, Melbourne, Victoria and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005**



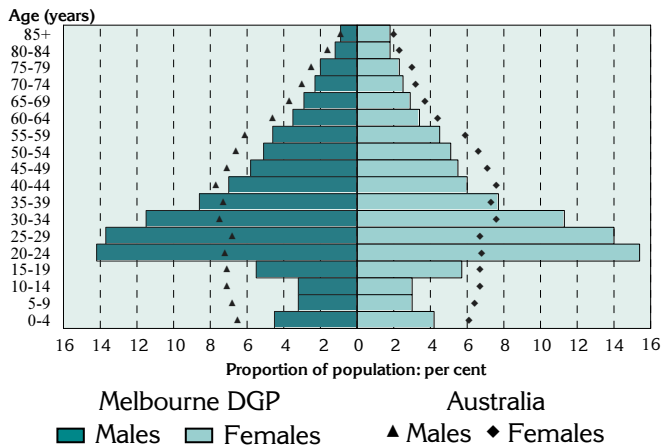
Over the five years from 1991 to 1996, the Division's population increased by 1.1% on average each year, higher than in Melbourne (0.8%) and Victoria (0.6%) but similar to Australia (1.2%). From 1996 to 2001, the annual percentage increase was 2.0%, substantially above the level in Melbourne (1.3%) and Victoria (1.2%). From 2001 to 2005 the increase was lower, at 1.4%, higher but remained above the annual increases of 1.0% for Melbourne and Victoria.

**Table 1: Population by age, Melbourne DGP and Australia, 2005**

Age group (years)	Melbourne DGP		Australia	
	No.	%	No.	%
0-14	19,391	10.6	3,978,221	19.6
15-24	37,371	20.4	2,819,834	13.9
25-44	72,936	39.9	5,878,107	28.9
45-64	34,431	18.8	4,984,446	24.5
65-74	9,663	5.3	1,398,831	6.9
75-84	6,667	3.6	954,143	4.7
85+	2,446	1.3	315,027	1.5
<b>Total</b>	<b>182,905</b>	<b>100.0</b>	<b>20,328,609</b>	<b>100.0</b>

As shown in the accompanying table and the age-sex pyramid (Figure 2), the Melbourne DGP had relatively fewer children than Australia as a whole, with 10.6% at ages 0 to 14 years (compared to 19.6%), but more young people aged 15 to 24 years (20.4%, compared to 13.9%) (Table 1). The proportion of the Division's population aged 25 to 44 years (39.9%) was substantially higher than for Australia (28.9%), while there were comparatively fewer people in the 45 years and over age groups.

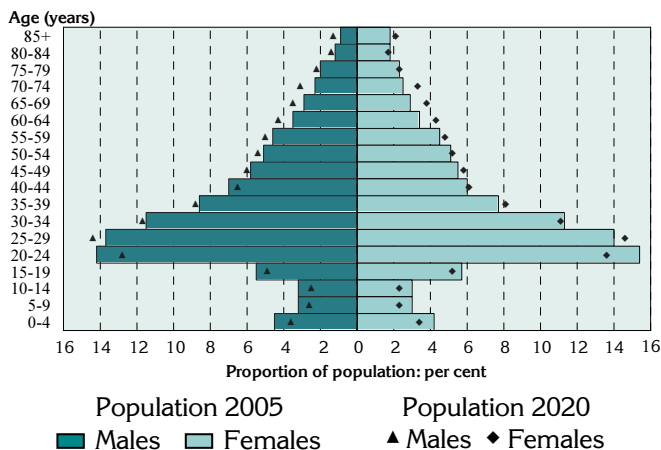
**Figure 2: Population in Melbourne DGP and Australia, by age and sex, 2005**



The age distribution of the Division's population is markedly different from that of Australia overall, with a population living in and around the Melbourne CBD. The main differences are:

- at younger ages – markedly fewer children and young people aged 0 to 19 years;
- from 20 to 39 years – substantially higher proportions of both males and females; and
- from age 40 years and over – somewhat lower proportions of both males and females.

**Figure 3: Population projections for Melbourne DGP, by age and sex, 2005 and 2020**



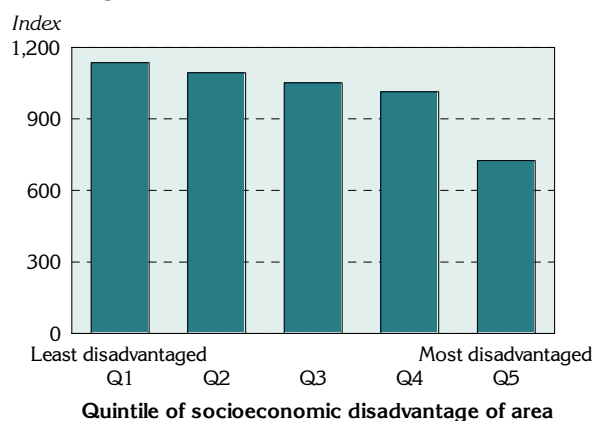
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages – even lower proportions of children and young people aged 0 to 19 years;
- from 20 to 24 years – lower proportions of both males and females; and
- from age 25 years – slightly higher proportions of both males and females.

## Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Melbourne Division of General Practice*, dated November 2005, available from [www.publichealth.gov.au](http://www.publichealth.gov.au), for other socio-demographic indicators.

**Figure 4: Index of Relative Socio-Economic Disadvantage, Melbourne DGP, 2001**



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

The Melbourne DGP has an index score of 1004, above the score for Australia of 1000: this score varies widely across the Division, from a score of 724 in the most disadvantaged areas to 1135 in the least disadvantaged areas.

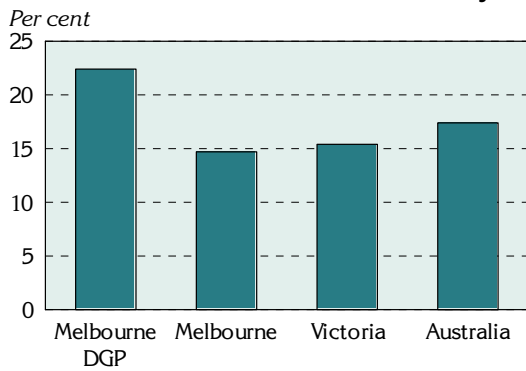
Note: each 'quintile' comprises approximately 20% of the population of the Division.

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 markedly more jobless families in the Melbourne DGP (22.4%), compared to Melbourne as a whole (14.7%) (Figure 5, Table 2).

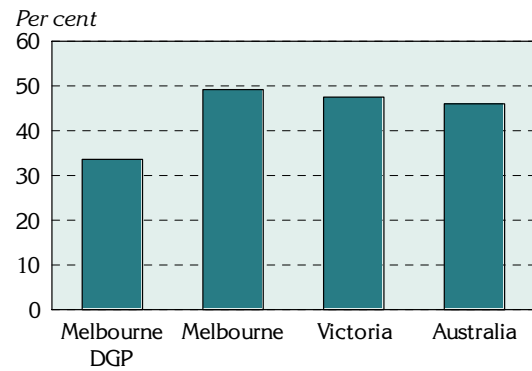
With the introduction of the 30% rebate for private health insurance premiums, there was a once-off registration process, providing information of the postcode and residence of those who had such insurance (these data are not available at this area level for later dates). In 2001, the Division had a substantially lower proportion of people with private health insurance (33.6%), compared to Melbourne (49.2%) (Figure 5, Table 2).

**Figure 5: Socio-demographic indicators, Melbourne DGP, Melbourne, Victoria and Australia, 2001**

**Jobless families with children under 15 years old**



**Private health insurance, 30 June**



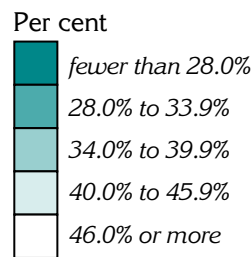
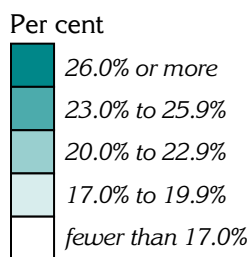
**Table 2: Socio-demographic indicators, Melbourne DGP, Melbourne, Victoria and Australia, 2001**

Indicator	Melbourne DGP		Melbourne		Victoria		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	2,364	22.4	52,418	14.7	77,142	15.4	357,563	17.4
Private health insurance (30 June)	61,856	33.6	1,653,598	49.2	2,196,890	47.5	8,671,106	46.0

Details of the distribution of jobless families (Map 1) and of the population covered by private health insurance (Map 2) 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, Melbourne DGP, 2001**

**Map 2: People covered by private health insurance by SLA, Melbourne DGP, 30 June 2001**



## GP services to residents of the Melbourne 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.

Almost two-thirds (62.8%) of all unreferred attendances to residents of the Melbourne DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 557,348 GP unreferred attendances (Table 3). A further 8.0% of unreferred attendances to residents were provided by GPs with a provider number in Southcity DGP, with 5.5% provided by GPs in North West Melbourne DGP.

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

Division		Unreferred attendances	
Number	Name	No.	% <sup>3</sup>
301	Melbourne DGP	557,348	62.8
304	Southcity DGP	71,104	8.0
307	North West Melbourne DGP	48,682	5.5
308	Northern DGP	33,529	3.8
306	Western Melbourne DGP	30,946	3.5
302	North East Valley DGP	30,636	3.4
303	Inner Eastern Melbourne DGP	28,915	3.3
310	Whitehorse DGP	10,944	1.2
Other	..	75,932	8.6
<b>Total</b>	<b>..</b>	<b>888,036</b>	<b>100.0</b>

<sup>1</sup> Based on address in Medicare records

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

<sup>3</sup> Proportion of all unreferred attendances of patients with an address in Division 301 by Division in which attendance occurred

A relatively low proportion (38.4%) of unreferred attendances provided by GPs with a provider number in Melbourne DGP, were to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 9.9% of unreferred attendances by GPs in the Division were to people living in North West Melbourne DGP, with 8.4% to residents of Northern DGP. The relatively low proportion of patients represented by residents of the Division (38.4%) reflects the relatively large number of people coming into the Division during the day to work (in particular in the city centre), some of whom use GPs in the Division.

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

Division		Unreferred attendances	
Number	Name	No.	% <sup>3</sup>
301	Melbourne DGP	557,348	38.4
307	North West Melbourne DGP	143,815	9.9
308	Northern DGP	121,673	8.4
302	North East Valley DGP	91,859	6.3
306	Western Melbourne DGP	84,637	5.8
303	Inner Eastern Melbourne DGP	79,794	5.5
304	Southcity DGP	76,762	5.3
310	Whitehorse DGP	46,280	3.2
305	Westgate DGP	37,241	2.6
Other	..	213,499	14.7
<b>Total</b>	<b>..</b>	<b>1,452,908</b>	<b>100.0</b>

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

<sup>2</sup> Based on address in Medicare records

<sup>3</sup> Proportion of all unreferred attendances to GPs with a provider number in Division 301 by Division of patient address

## Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier *Population health profile of the Melbourne Division of General Practice*, dated November 2005, available from [www.publichealth.gov.au](http://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 fewer people in Melbourne DGP who had asthma and were smokers, compared to Australia as a whole (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were lower than the national rates (although slightly above those for Melbourne as a whole). However, there were more people in Melbourne DGP who had type 2 diabetes and were overweight/obese, compared to Melbourne or Australia.

**Figure 6: Estimates of selected chronic diseases and risk factors, Melbourne DGP, Melbourne and Australia, 2001**



**Table 5: Estimates of selected chronic diseases and risk factors, Melbourne DGP, Melbourne, Victoria and Australia, 2001**

Variable	Melbourne DGP		Melbourne		Victoria		Australia	
	No. <sup>1</sup>	Rate <sup>2</sup>	No. <sup>1</sup>	Rate <sup>2</sup>	No. <sup>1</sup>	Rate <sup>2</sup>	No. <sup>1</sup>	Rate <sup>1</sup>
Had asthma & smoked <sup>3</sup>	4,666	18.7	66,240	18.4	95,664	19.9	397,734	20.8
Had type 2 diabetes & were overweight/ obese <sup>4</sup>	2,753	18.5	50,057	15.6	69,192	15.1	283,176	15.2

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

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

<sup>3</sup> Population aged 18 years and over

<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 [www.publichealth.gov.au](http://www.publichealth.gov.au).

In 2001 to 2002, the 4,537 admissions from ambulatory care sensitive (ACS) conditions accounted for 7.6% of all admissions in the Melbourne DGP (Table 6, Figure 7), notably lower than the levels in Victoria (8.6%) and Australia (8.7%).

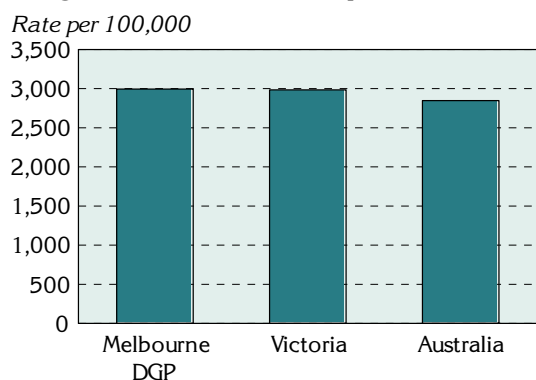
**Table 6: Avoidable<sup>1</sup> and unavoidable hospitalisations, Melbourne DGP, Victoria, and Australia, 2001/02**

Category	Melbourne DGP			Victoria			Australia		
	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%
Avoidable <sup>1</sup>	4,537	2,994.8	7.6	145,135	2,983.2	8.8	552,786	2,847.5	8.7
Unavoidable	55,511	32,936.7	92.4	1,510,437	31,088.3	91.2	5,818,199	29,970.7	91.3
<b>Total</b>	<b>60,048</b>	<b>35,944.1</b>	<b>100.0</b>	<b>1,655,572</b>	<b>34,071.5</b>	<b>100.0</b>	<b>6,370,985</b>	<b>32,818.2</b>	<b>100.0</b>

<sup>1</sup> Admissions resulting from ACS conditions

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

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



The rate of avoidable hospitalisations in Melbourne DGP, 2,994.8 admissions per 100,000 population, is consistent with the rate in Victoria (a rate of 2,983.2), and higher than the rate for Australia (2,847.5).

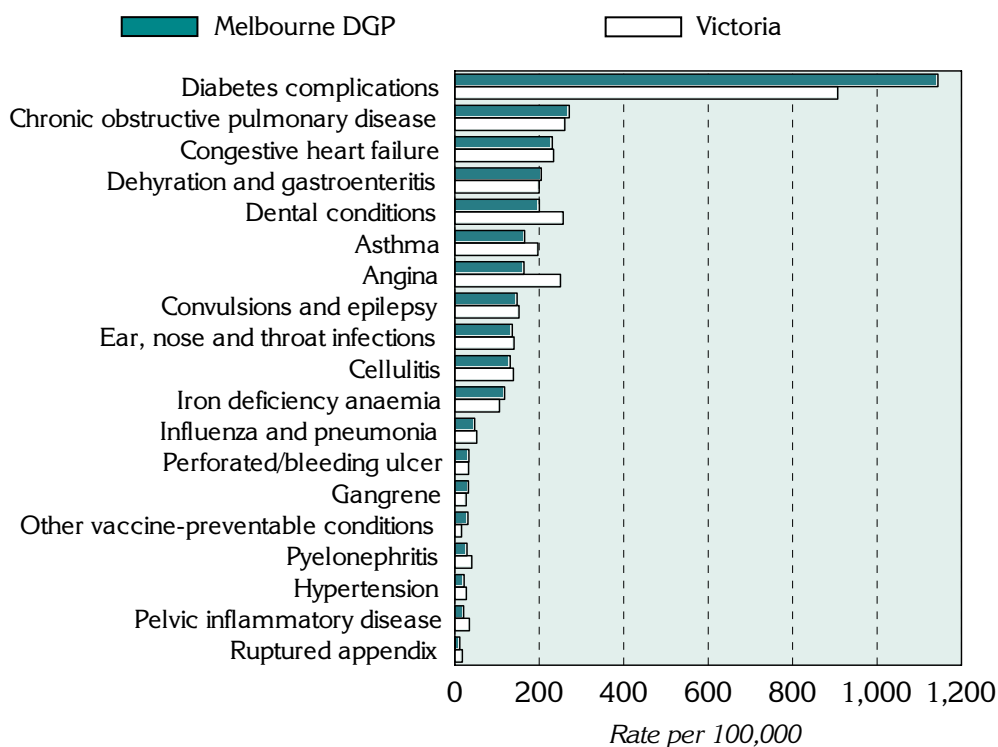
<sup>1</sup> Admissions resulting from ACS conditions

Diabetes complications, chronic obstructive pulmonary disease, congestive heart failure, dehydration and gastroenteritis, and dental conditions were the five conditions with the highest rates of avoidable hospitalisations in the Melbourne 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. Two-thirds 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. Dehydration and gastroenteritis, and dental conditions have the highest rates of avoidable hospitalisations for the acute conditions.



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



<sup>1</sup> Admissions resulting from ACS conditions: excludes nutritional deficiencies as less than ten admissions

**Table 7: Avoidable hospitalisations<sup>1</sup> by condition, Melbourne DGP, Victoria and Australia, 2001/02**

Sub-category/ condition	Melbourne DGP		Victoria		Australia	
	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>
<b>Vaccine-preventable</b>	<b>127</b>	<b>78.7</b>	<b>3,293</b>	<b>68.0</b>	<b>16,573</b>	<b>85.4</b>
Influenza and pneumonia	73	47.4	2,525	52.0	13,021	67.1
Other vaccine preventable	54	31.3	768	16.0	3,552	18.3
<b>Chronic<sup>3</sup></b>	<b>3,081</b>	<b>2,115.8</b>	<b>97,133</b>	<b>1,982.6</b>	<b>352,545</b>	<b>1,816</b>
Diabetes complications	1,678	1,144.1	44,409	906.9	141,345	728.1
Iron deficiency anaemia	178	118.2	5,196	105.9	16,451	84.7
Hypertension	33	22.2	1,362	27.7	6,354	32.7
Congestive heart failure	333	230.8	11,655	234.1	42,447	218.6
Angina	234	163.9	12,285	250.4	49,963	257.4
Chronic obstructive pulmonary disease	385	271.2	12,850	260.7	54,853	282.6
Asthma	240	165.4	9,376	196.9	41,009	211.3
<b>Acute</b>	<b>1,532</b>	<b>948.5</b>	<b>50,153</b>	<b>1,041.7</b>	<b>200,913</b>	<b>1,035</b>
Dehydration and gastroenteritis	363	205.1	9,761	200.0	37,766	194.5
Convulsions and epilepsy	241	147.7	7,297	152.4	31,137	160.4
Ear, nose and throat infections	195	136.2	6,653	140.5	32,075	165.2
Dental conditions	301	200.3	12,235	256.7	43,667	224.9
Perforated/bleeding ulcer	50	33.4	1,618	32.9	5,795	29.9
Ruptured appendix	21	12.1	855	17.9	3,866	19.9
Pyelonephritis	55	29.0	1,948	40.2	7,386	38.0
Pelvic inflammatory disease	45	21.2	1,693	34.8	6,547	33.7
Cellulitis	212	131.2	6,751	139.0	28,204	145.3
Gangrene	49	32.3	1,342	27.3	4,470	23.0
<b>Total avoidable hospitalisations<sup>4</sup></b>	<b>4,537</b>	<b>2,994.8</b>	<b>145,135</b>	<b>2,983.2</b>	<b>552,786</b>	<b>2,847.5</b>

<sup>1</sup> Admissions resulting from ACS conditions

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

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

<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

## 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](http://www.publichealth.gov.au).

Just over three quarters (76.1%) of all deaths in Melbourne DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, higher than the proportion for Melbourne (71.0%) (Table 8). However, the rate in the Division is markedly higher than that in Melbourne, a differential of 1.26.

Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 27.9% of all deaths at ages 0 to 74 years in Melbourne DGP, compared to 28.7% in Melbourne.

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

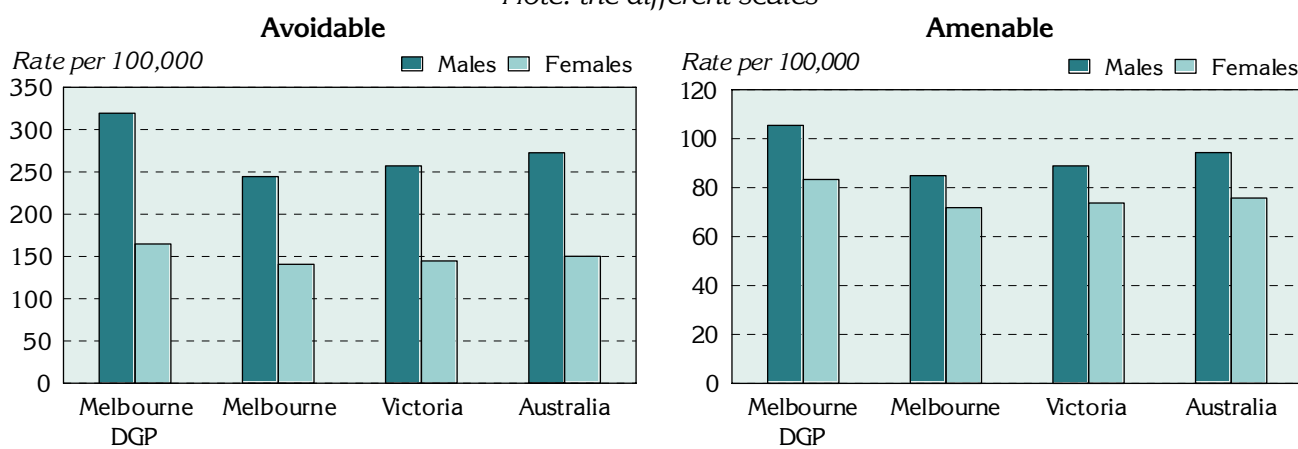
Mortality category	Melbourne DGP		Melbourne		Victoria		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable	1,734	242.8	30,654	193.0	45,466	201.3	189,845	211.8
% of total	<b>76.1</b>	..	<b>71.0</b>	..	<b>70.9</b>	..	<b>71.5</b>	..
(Amenable)	(636)	(94.4)	(12,406)	(78.4)	(18,406)	(81.4)	(76,249)	(85.1)
(% of total)	<b>(27.9)</b>	(..)	<b>(28.7)</b>	(..)	<b>(28.7)</b>	(..)	<b>(28.7)</b>	(..)
Unavoidable	545	79.5	12,517	79.1	18,617	82.4	75,582	84.3
% of total	<b>23.9</b>	..	<b>29.0</b>	..	<b>29.1</b>	..	<b>28.5</b>	..
<b>Total mortality</b>	<b>2,279</b>	<b>322.8</b>	<b>51,477</b>	<b>272.1</b>	<b>64,083</b>	<b>283.7</b>	<b>265,427</b>	<b>296.1</b>
%	<b>100.0</b>	..	<b>100.0</b>	..	<b>100.0</b>	..	<b>100.0</b>	..

<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. Melbourne DGP's rate of avoidable mortality for males was 319.4 deaths per 100,000 males, almost twice the rate of 164.8 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 105.4, compared to 83.3 for females, a rate ratio of 1.27 (Figure 9, Table 9).

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

*Note: the different scales*



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

Mortality category and sex	Melbourne DGP		Melbourne		Victoria		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
<b>Avoidable</b>								
Males	1,173	319.4	19,378	244.5	29,042	257.0	123,026	272.6
Females	562	164.8	11,276	140.7	16,424	144.8	66,819	150.1
<b>Total</b>	<b>1,734</b>	<b>242.8</b>	<b>30,354</b>	<b>193.0</b>	<b>45,466</b>	<b>201.3</b>	<b>189,845</b>	<b>211.8</b>
<b>Rate ratio-M:F<sup>2</sup></b>	..	<b>1.94**</b>	..	<b>1.74**</b>	..	<b>1.77**</b>	..	<b>1.82**</b>
<b>Amenable</b>								
Males	361	105.4	6,667	84.9	10,052	88.9	42,568	94.3
Females	275	83.3	5,739	71.8	8,354	73.7	33,681	75.7
<b>Total</b>	<b>636</b>	<b>94.4</b>	<b>12,406</b>	<b>78.4</b>	<b>18,406</b>	<b>81.4</b>	<b>76,249</b>	<b>85.1</b>
<b>Rate ratio-M:F<sup>2</sup></b>	..	<b>1.27**</b>	..	<b>1.18**</b>	..	<b>1.21**</b>	..	<b>1.25**</b>

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

<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

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 Melbourne DGP, Melbourne, Victoria and Australia over the period of analysis are shown in Table 10 by mortality category. However, given the substantial variation 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 76.8% of total YLL (0 to 74 years) for Melbourne DGP, higher than the 71.6% for Melbourne. Similarly, the proportion of YLL from amenable mortality of 26.9% for Melbourne DGP was lower than the 28.1% for Melbourne.

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

Mortality category	Melbourne DGP		Melbourne		Victoria		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	31,162	76.8	536,388	71.6	790,054	71.5	3,327,375	71.9
(Amenable)	(10,903)	(26.9)	(210,627)	(28.1)	(310,758)	(28.1)	(1,298,430)	(28.0)
Unavoidable	9,409	23.2	212,979	28.4	315,555	28.5	1,303,289	28.1
<b>Total</b>	<b>40,571</b>	<b>100.0</b>	<b>749,368</b>	<b>100.0</b>	<b>1,105,610</b>	<b>100.0</b>	<b>4,630,664</b>	<b>100.0</b>

<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 1,567.9 deaths per 100,000 population in the Melbourne 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 374.2 in the Melbourne Division.

**Table 11: Avoidable and amenable mortality by age, Melbourne DGP, Melbourne, Victoria and Australia, 1997 to 2001**

Mortality category and age (years)	Melbourne DGP		Melbourne		Victoria		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
<b>Avoidable</b>								
0-14	46	40.6	874	26.0	1,290	27.1	5,669	28.8
15-24	55	33.8	1,120	45.2	1,627	49.3	7,045	52.8
25-44	300	93.9	4,090	75.6	5,705	78.9	24,356	83.9
45-64	572	374.2	10,123	273.0	15,004	286.9	64,282	304.9
65-74	762	1,567.9	14,447	1265.1	21,840	1306.6	88,493	1,358.1
<b>Total</b>	<b>1,734</b>	<b>242.8</b>	<b>30,654</b>	<b>193.0</b>	<b>45,466</b>	<b>201.3</b>	<b>189,845</b>	<b>211.8</b>
<b>Amenable</b>								
0-24	48	21.4	836	14.6	1,189	14.9	5,083	15.4
25-44	52	18.2	963	18.0	1,382	19.1	5,946	20.5
45-64	218	142.7	4,398	118.2	6,489	123.8	27,464	130.3
65-74	318	656.8	6,209	542.7	9,348	558.6	37,756	579.4
<b>Total</b>	<b>636</b>	<b>94.4</b>	<b>12,406</b>	<b>78.4</b>	<b>18,406</b>	<b>81.4</b>	<b>76,249</b>	<b>85.1</b>

<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 Melbourne DGP were for cancer, with a rate of 80.7 deaths per 100,000 population, and cardiovascular diseases, 70.6 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 51.2 per 100,000 population and 28.7 per 100,000, respectively.

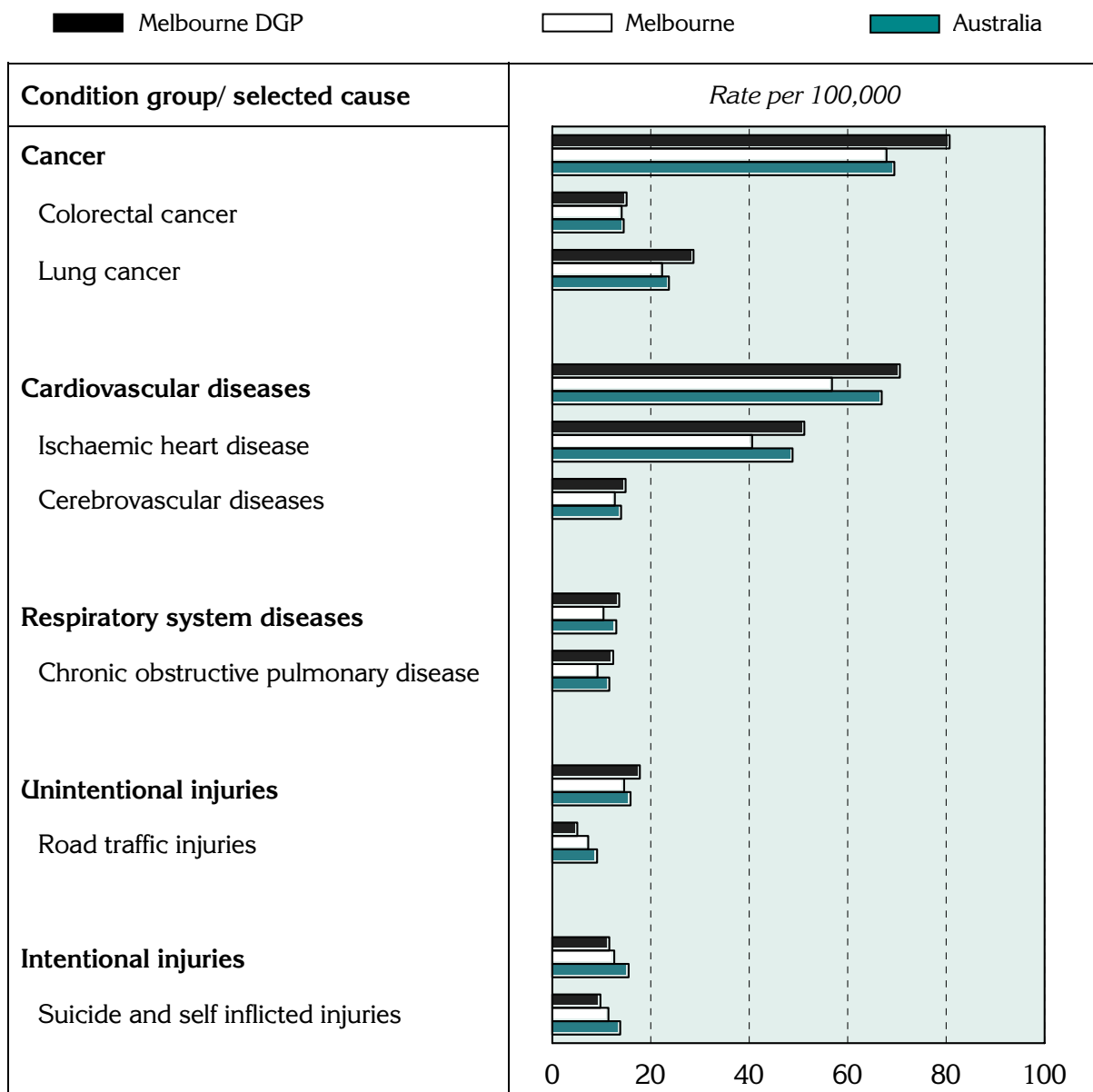
**Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Melbourne DGP, Melbourne, Victoria and Australia, 1997 to 2001**

Condition group/ selected cause	Melbourne DGP		Melbourne		Victoria		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
<b>Cancer</b>	<b>542</b>	<b>80.7</b>	<b>10,739</b>	<b>67.9</b>	<b>15,813</b>	<b>69.8</b>	<b>62,338</b>	<b>69.5</b>
Colorectal cancer	101	15.1	2,218	14.1	3,351	14.8	13,008	14.5
Lung cancer	191	28.7	3,505	22.3	5,244	23.1	21,208	23.7
<b>Cardiovascular diseases</b>	<b>475</b>	<b>70.6</b>	<b>8,946</b>	<b>56.8</b>	<b>13,612</b>	<b>60.0</b>	<b>59,945</b>	<b>66.9</b>
Ischaemic heart disease	344	51.2	6,377	40.6	9,809	43.3	43,712	48.8
Cerebrovascular diseases	101	14.9	2,013	12.7	2,947	12.9	12,558	14.0
<b>Respiratory system diseases</b>	<b>92</b>	<b>13.6</b>	<b>1,644</b>	<b>10.4</b>	<b>2,621</b>	<b>11.5</b>	<b>11,612</b>	<b>13.0</b>
Chronic obstructive pulmonary disease	83	12.4	1,451	9.2	2,339	10.2	10,395	11.6
<b>Unintentional injuries</b>	<b>161</b>	<b>17.8</b>	<b>2,394</b>	<b>14.6</b>	<b>3,536</b>	<b>15.9</b>	<b>14,224</b>	<b>15.9</b>
Road traffic injuries	46	5.1	1,192	7.3	1,931	8.7	8,138	9.1
<b>Intentional injuries</b>	<b>108</b>	<b>11.6</b>	<b>2,074</b>	<b>12.6</b>	<b>3,020</b>	<b>13.6</b>	<b>13,891</b>	<b>15.5</b>
Suicide and self inflicted injuries	92	9.8	1,877	11.4	2,752	12.3	12,393	13.8

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

Rates in the Division were generally above those for Melbourne and Australia for all the condition groups and selected causes, with the exception of the road traffic accidents, the intentional injuries group and suicide and self-inflicted injury (Figure 10).

**Figure 10: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Melbourne DGP, Melbourne and Australia, 1997 to 2001**



# Notes on the data

## Data sources and limitations

### General

References to 'Melbourne' relate to 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
<b>Population</b>	
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>
<b>Additional socio-demographic indicators</b>	
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
<b>GP services – patient flow/ GP catchment</b>	
Tables 3 and 4	Medicare Australia, 2003/04
<b>Additional prevalence estimates: chronic diseases and risk factors combined</b>	
Figure 6; Table 5	Estimated from 2001 National Health Survey (NHS), ABS (unpublished)
<b>Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions</b>	
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)
<b>Avoidable mortality</b>	
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>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](http://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 (ie. jobless families, people with health insurance): these areas are mapped with a pattern.

## Statistical geography of the Melbourne 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](http://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, some Local Government Areas (LGAs) have been split onto SLAs. For example, Melbourne has three SLAs – Inner, Southbank-Docklands and Remainder. Parts of these and all or parts of the other SLAs listed comprise the Division (Table 14).

**Table 14: SLAs and population in Melbourne 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
24601	Melbourne - Inner	100.0	8,893
24605	Melbourne - Southbank-Docklands	64.3	7,390
24608	Melbourne - Remainder	84.8	37,830
25063	Moonee Valley - Essendon	19.2	12,922
25251	Moreland - Brunswick	89.9	36,820
25902	Port Phillip - West	34.3	11,691
27351	Yarra - North	94.9	42,642
27352	Yarra - Richmond	100.0	24,718

\* 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

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