

# Population health profile of the Inner Eastern Melbourne

## Division of General Practice: supplement

Population Profile Series: No. 40a

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Australian Government

Australian Institute of  
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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 Inner Eastern Melbourne Division of General Practice: supplement

This profile is a supplement to the *Population health profile of the Inner Eastern 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 Inner Eastern 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:

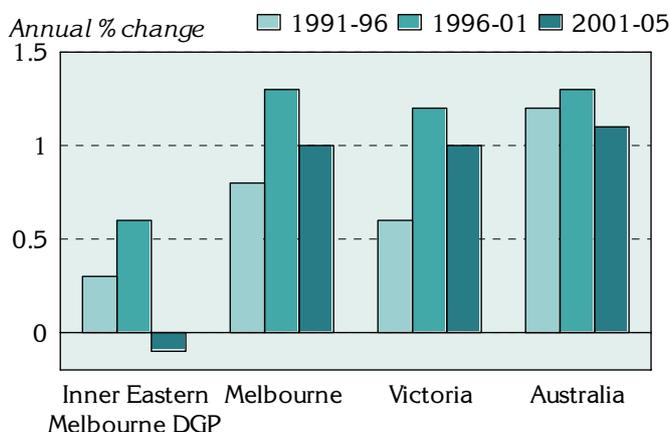
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive 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 Inner Eastern Melbourne Division had an Estimated Resident Population of 202,709 at 30 June 2005.

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



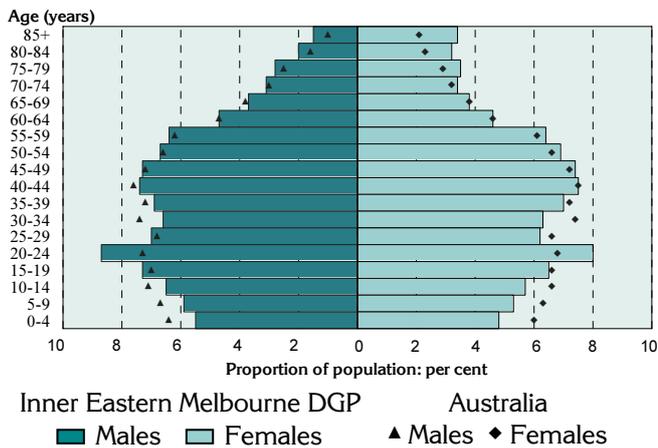
Over the five years from 1991 to 1996, the Division's population increased by 0.3% on average each year, lower than in Melbourne (0.8%), Victoria (0.6%) and Australia as a whole (1.2%). From 1996 to 2001, the annual percentage increase was 0.6%, lower than for Melbourne (1.3%), Victoria (1.2%), and Australia (1.3%). The Division's population decreased by 0.1% from 2001 to 2005, compared to annual increases of 1.0% for Melbourne and Victoria.

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

Age group (years)	Inner Eastern Melbourne DGP		Australia	
	No.	%	No.	%
0-14	34,079	16.8	3,978,221	19.6
15-24	30,821	15.2	2,819,834	13.9
25-44	55,720	27.5	5,878,107	28.9
45-64	51,118	25.2	4,984,446	24.5
65-74	14,265	7.0	1,398,831	6.9
75-84	11,658	5.8	954,143	4.7
85+	5,049	2.5	315,027	1.5
<b>Total</b>	<b>202,709</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 Inner Eastern Melbourne DGP had relatively fewer children at ages 0 to 14 years, 16.8% compared to 19.6% for Australia (Table 1). Conversely, the 15-24 years, 75-84 years and 85 years and over age groups had higher proportions compared to Australia as a whole.

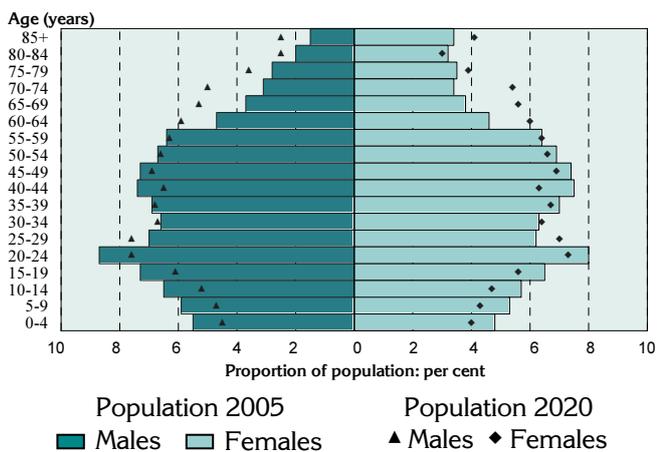
**Figure 2: Population in Inner Eastern Melbourne DGP and Australia, by age and sex, 2005**



The age distribution of the Division's population is similar to that for Australia. The most notable differences are:

- at younger ages – a lower proportion of children aged 0 to 14 years and a notably higher proportion of young adults at ages 20 to 24 years;
- from 25 to 39 years – lower proportions of females and males (30 to 39 years); and
- at older ages – higher proportions, increasing with age, in particular for females.

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



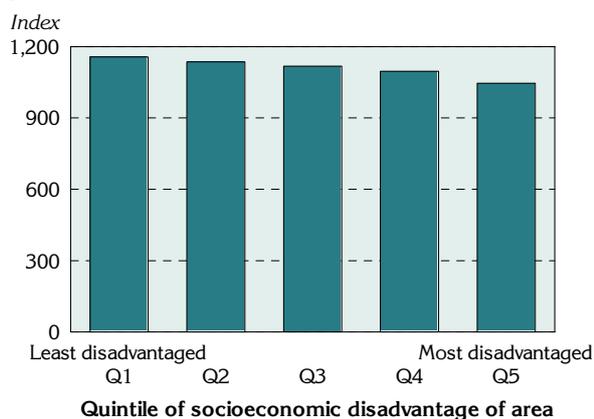
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages – lower proportions of children & young adults aged 0 to 24 years;
- from 25 to 29 years – higher proportions of males and females;
- from 35 to 54 years – lower proportions of males (from 40 years) and females; and
- from 60 years onwards – higher proportions of both males and females (excluding 80 to 84 year old females).

## Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Inner Eastern 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, Inner Eastern 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 Inner Eastern Melbourne DGP has an index score of 1111, markedly above the score for Australia of 1000: this score varies across the Division, from a (still high) score of 1045 in the most disadvantaged areas to 1157 in the least disadvantaged areas.

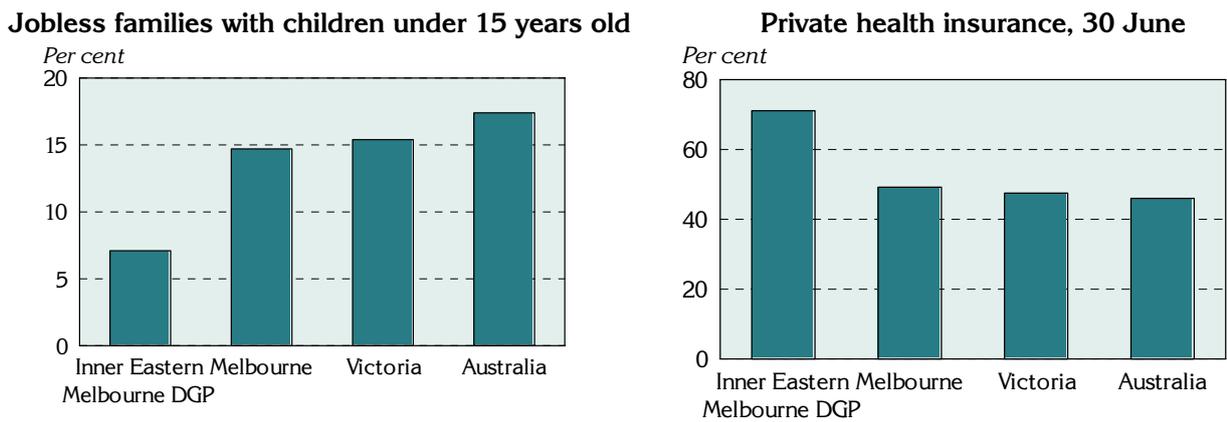
Note: each 'quintile' comprises approximately 20% of the population of the Division.

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 substantially fewer jobless families in the Inner Eastern Melbourne DGP (7.1%), 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 higher proportion of people with private health insurance (71.1%), compared to Melbourne (49.2%) (Figure 5, Table 2).

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

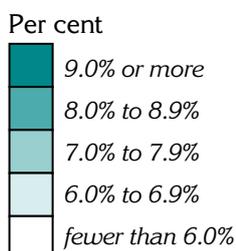
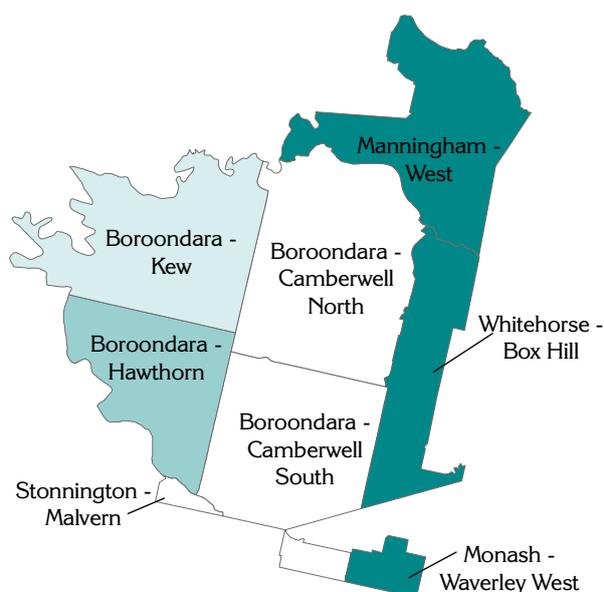


**Table 2: Socio-demographic indicators, Inner Eastern Melbourne DGP, Melbourne, Victoria and Australia, 2001**

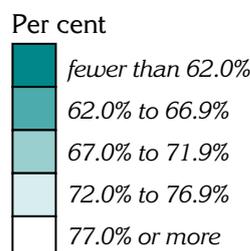
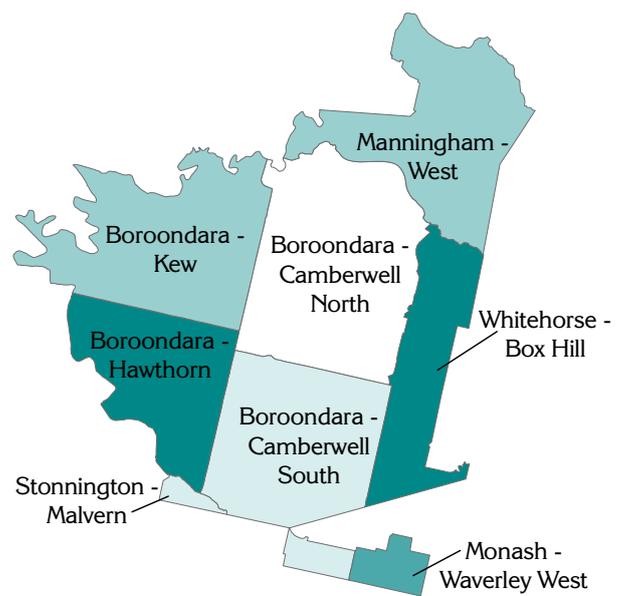
Indicator	Inner Eastern Melbourne DGP		Melbourne		Victoria		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	1,308	7.1	52,418	14.7	77,142	15.4	357,563	17.4
Private health insurance (30 June)	137,417	71.1	1,653,598	49.2	2,196,890	47.5	8,671,106	46.0

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, Inner Eastern Melbourne DGP, 2001**



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



## GP services to residents of the Inner Eastern 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.

Only just over half (59.9%) of all unreferred attendances to residents of Inner Eastern Melbourne DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 543,685 GP unreferred attendances (Table 3). A further 12.3% of unreferred attendances to residents were provided by GPs with a provider number in Whitehorse DGP, with 8.8% provided by GPs in Melbourne DGP.

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

Division		Unreferred attendances	
Number	Name	No.	% <sup>3</sup>
303	Inner Eastern Melbourne DGP	543,685	59.9
310	Whitehorse DGP	111,511	12.3
301	Melbourne DGP	79,794	8.8
304	Southcity DGP	49,639	5.5
302	North-East Valley DGP	43,603	4.8
311	Greater South Eastern DGP	26,732	2.9
308	Northern Melbourne DGP	6,817	0.8
312	Monash DGP	5,828	0.6
314	Knox DGP	4,406	0.5
Other	..	31,911	3.9
<b>Total</b>	..	<b>907,545</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 303 by Division in which attendance occurred

Just over half (56.4%) of unreferred attendances provided by GPs with a provider number in Inner Eastern Melbourne DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). This low relatively proportion reflects the movement of people into the Division during the day to work, some of whom use GPs in the Division. A further 15.6% of unreferred attendances provided by GPs in the Division were to residents of Whitehorse DGP, with 6.6% to people living in Greater South Eastern DGP.

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

Division		Unreferred attendances	
Number	Name	No.	% <sup>3</sup>
303	Inner Eastern Melbourne DGP	543,685	56.4
310	Whitehorse DGP	150,764	15.6
311	Greater South Eastern DGP	63,301	6.6
302	North-East Valley DGP	33,862	3.5
304	Southcity DGP	31,087	3.2
301	Melbourne DGP	28,915	3.0
308	Northern Melbourne DGP	18,268	1.9
314	Knox DGP	15,460	1.6
320	Eastern Ranges DGP	9,820	1.0
Other	..	59,883	7.1
<b>Total</b>	..	<b>963,406</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 303 Division of patient address

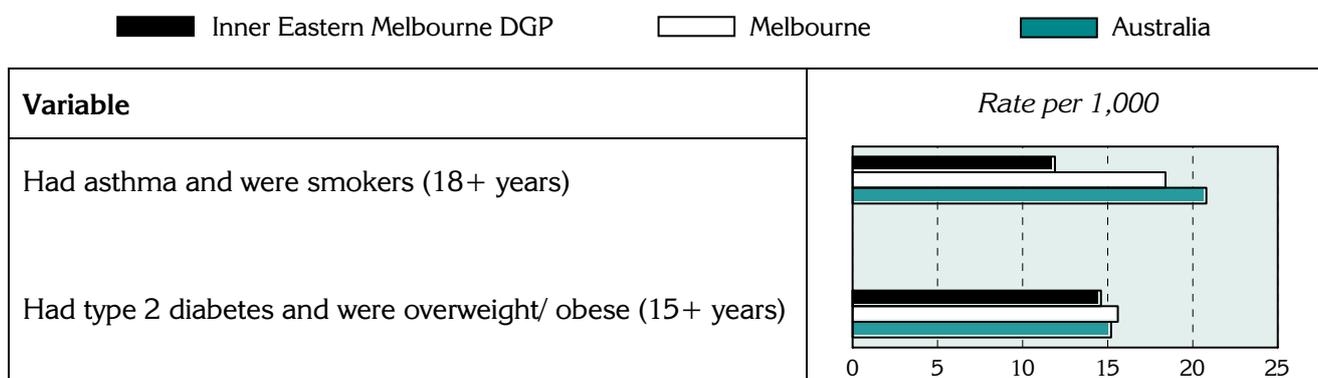
## Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier *Population health profile of the Inner Eastern 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 markedly fewer people in Inner Eastern Melbourne DGP who had asthma and were smokers, compared to Melbourne or Australia as a whole (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were lower. There were also relatively fewer people in Inner Eastern 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, Inner Eastern Melbourne DGP, Melbourne and Australia, 2001**



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

Variable	Inner Eastern 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>	2,418	11.9	66,240	18.4	95,664	19.9	397,734	20.8
Had type 2 diabetes & were overweight/ obese <sup>4</sup>	2,966	14.6	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 Inner Eastern 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 4,507 admissions from ambulatory care sensitive (ACS) conditions accounted for 6.6% of all admissions in the Inner Eastern Melbourne DGP (Table 6, Figure 7), markedly lower than levels in Victoria (8.8%) and Australia (8.7%).

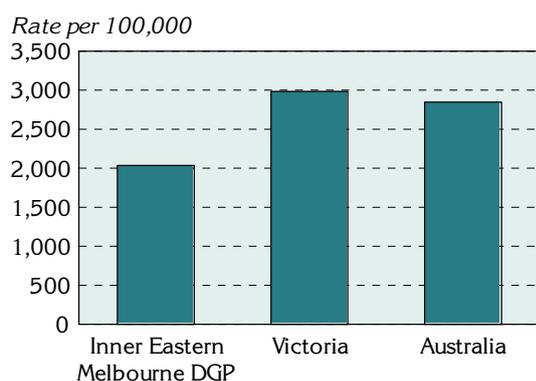
**Table 6: Avoidable<sup>1</sup> and unavoidable hospitalisations, Inner Eastern Melbourne DGP, Victoria, and Australia, 2001/02**

Category	Inner Eastern Melbourne DGP			Victoria			Australia		
	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%
Avoidable <sup>1</sup>	4,507	2,035.3	6.6	145,135	2,983.2	8.8	552,786	2,847.5	8.7
Unavoidable	64,042	29,689.0	93.4	1,510,437	31,088.3	91.2	5,818,199	29,970.7	91.3
<b>Total</b>	<b>68,549</b>	<b>31,705.3</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>, Inner Eastern Melbourne DGP, Victoria and Australia, 2001/02**



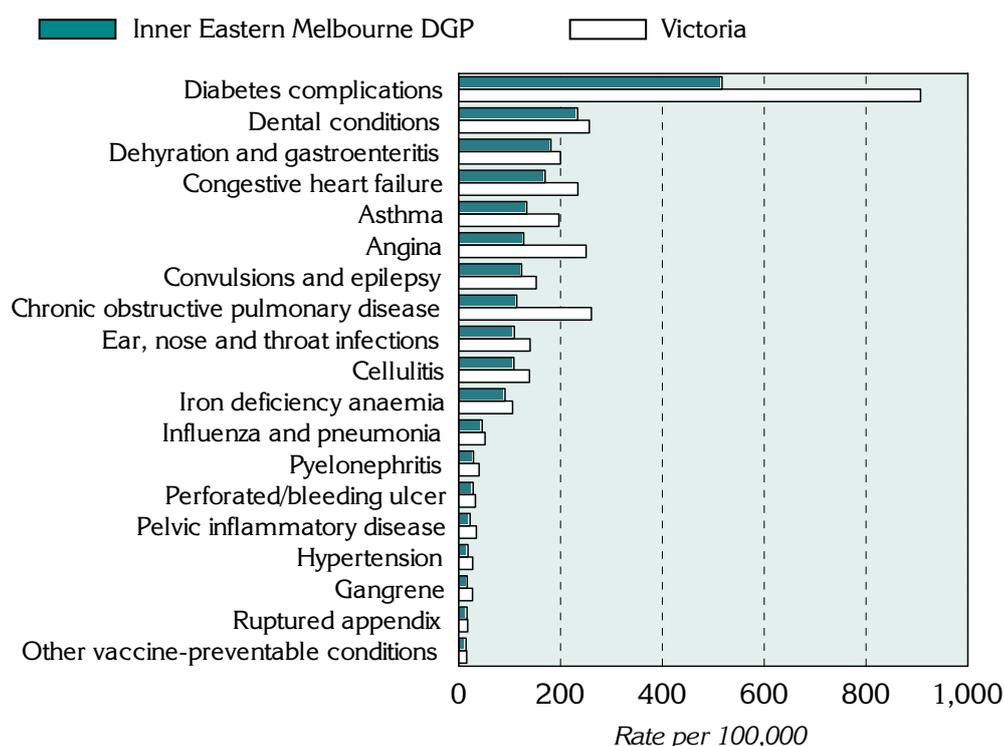
The rate of avoidable hospitalisations in Inner Eastern Melbourne DGP, 2,035.3 admissions per 100,000 population, is markedly lower than the rates for Victoria (a rate of 2,983.2) and for Australia (2,847.5).

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

Diabetes complications, dental conditions, dehydration and gastroenteritis, and congestive heart failure were the four conditions with the highest rates of avoidable hospitalisations in the Inner Eastern Melbourne DGP (Figure 8, Table 7): however, the rate for diabetes complications is substantially below the Victorian rate.

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<sup>1</sup> by condition, Inner Eastern 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, Inner Eastern Melbourne DGP, Victoria and Australia, 2001/02**

Sub-category/ condition	Inner Eastern Melbourne DGP		Victoria		Australia	
	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>
<b>Vaccine-preventable</b>	<b>131</b>	<b>61.1</b>	<b>3,293</b>	<b>68.0</b>	<b>16,573</b>	<b>85.4</b>
Influenza and pneumonia	102	46.5	2,525	52.0	13,021	67.1
Other vaccine preventable	29	14.6	768	16.0	3,552	18.3
<b>Chronic<sup>3</sup></b>	<b>2,725</b>	<b>1,172.8</b>	<b>97,133</b>	<b>1,982.6</b>	<b>352,545</b>	<b>1,816</b>
Diabetes complications	1,181	517.3	44,409	906.9	141,345	728.1
Iron deficiency anaemia	215	91.1	5,196	105.9	16,451	84.7
Hypertension	44	18.5	1,362	27.7	6,354	32.7
Congestive heart failure	455	169.9	11,655	234.1	42,447	218.6
Angina	304	127.9	12,285	250.4	49,963	257.4
Chronic obstructive pulmonary disease	271	114.3	12,850	260.7	54,853	282.6
Asthma	255	133.8	9,376	196.9	41,009	211.3
<b>Acute</b>	<b>1,789</b>	<b>871.0</b>	<b>50,153</b>	<b>1,041.7</b>	<b>200,913</b>	<b>1,035</b>
Dehydration and gastroenteritis	407	181.2	9,761	200.0	37,766	194.5
Convulsions and epilepsy	243	123.8	7,297	152.4	31,137	160.4
Ear, nose and throat infections	200	109.6	6,653	140.5	32,075	165.2
Dental conditions	445	233.6	12,235	256.7	43,667	224.9
Perforated/bleeding ulcer	70	28.6	1,618	32.9	5,795	29.9
Ruptured appendix	33	16.7	855	17.9	3,866	19.9
Pyelonephritis	62	29.1	1,948	40.2	7,386	38.0
Pelvic inflammatory disease	47	22.6	1,693	34.8	6,547	33.7
Cellulitis	241	108.7	6,751	139.0	28,204	145.3
Gangrene	41	17.1	1,342	27.3	4,470	23.0
<b>Total avoidable hospitalisations<sup>4</sup></b>	<b>4,507</b>	<b>2,035.3</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).

Over two-thirds (68.2%) of all deaths in Inner Eastern Melbourne DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, lower than the proportion for Melbourne (71.0%) (Table 8). The rate in the Division is markedly (20%) lower than that in Melbourne.

Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 30.0% of all deaths at ages 0 to 74 years in Inner Eastern Melbourne DGP, compared to 28.7% in Melbourne.

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

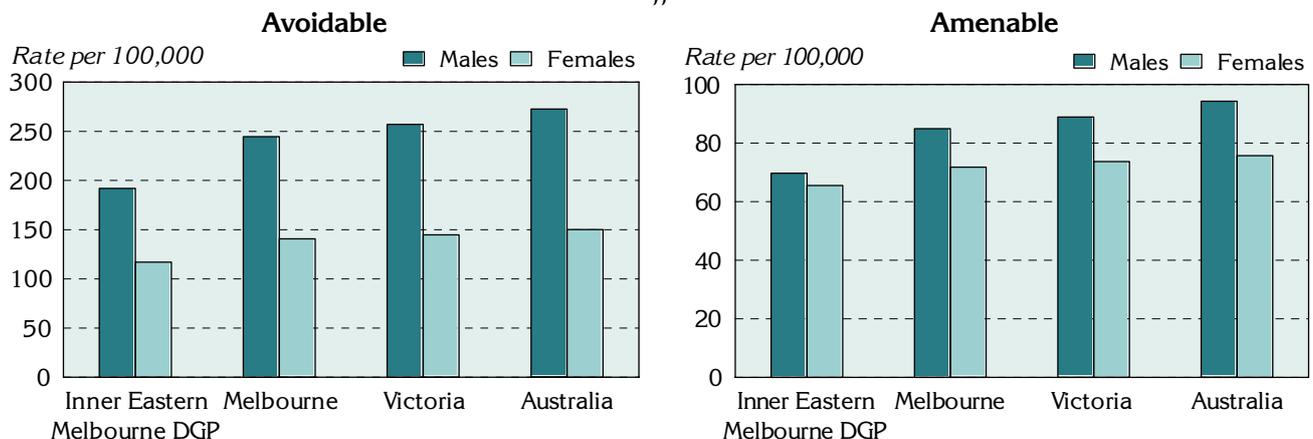
Mortality category	Inner Eastern Melbourne DGP		Melbourne		Victoria		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable	1,541	155.1	30,654	193.0	45,466	201.3	189,845	211.8
% of total	<b>68.2</b>	..	<b>71.0</b>	..	<b>70.9</b>	..	<b>71.5</b>	..
(Amenable)	(677)	(67.9)	(12,406)	(78.4)	(18,406)	(81.4)	(76,249)	(85.1)
(% of total)	<b>(30.0)</b>	(..)	<b>(28.7)</b>	(..)	<b>(28.7)</b>	(..)	<b>(28.7)</b>	(..)
Unavoidable	718	72.3	12,517	79.1	18,617	82.4	75,582	84.3
% of total	<b>31.8</b>	..	<b>29.0</b>	..	<b>29.1</b>	..	<b>28.5</b>	..
<b>Total mortality</b>	<b>2,259</b>	<b>227.4</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. Inner Eastern Melbourne DGP's rate of avoidable mortality for males was 192.0 deaths per 100,000 males, higher than the rate of 117.0 for females. The rate of amenable mortality for males in the Division was slightly higher, 69.7, compared to 65.5 for females, a rate ratio of 1.06 (Figure 9, Table 9).

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

Mortality category and sex	Inner Eastern 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	929	192.0	19,378	244.5	29,042	257.0	123,026	272.6
Females	612	117.0	11,276	140.7	16,424	144.8	66,819	150.1
<b>Total</b>	<b>1,541</b>	<b>155.1</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>..</b>	<b>1.64**</b>	<b>..</b>	<b>1.74**</b>	<b>..</b>	<b>1.77**</b>	<b>..</b>	<b>1.82**</b>
<b>Amenable</b>								
Males	336	69.7	6,667	84.9	10,052	88.9	42,568	94.3
Females	341	65.5	5,739	71.8	8,354	73.7	33,681	75.7
<b>Total</b>	<b>677</b>	<b>67.9</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>..</b>	<b>1.06</b>	<b>..</b>	<b>1.18**</b>	<b>..</b>	<b>1.21**</b>	<b>..</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 Inner Eastern 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 69.0% of total YLL (0 to 74 years) for Inner Eastern Melbourne DGP, slightly lower than the proportion for Melbourne. The proportion of YLL from amenable mortality for Inner Eastern Melbourne DGP (29.9%) was slightly higher than for Melbourne (28.1%).

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

Mortality category	Inner Eastern Melbourne DGP		Melbourne		Victoria		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	26,483	69.0	536,388	71.6	790,054	71.5	3,327,375	71.9
(Amenable)	(11,473)	(29.9)	(210,627)	(28.1)	(310,758)	(28.1)	(1,298,430)	(28.0)
Unavoidable	11,883	31.0	212,979	28.4	315,555	28.5	1,303,289	28.1
<b>Total</b>	<b>38,366</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 1,024.1 deaths per 100,000 population in the Inner Eastern 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 209.1 in the Inner Eastern Melbourne Division.

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

Mortality category and age (years)	Inner Eastern 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	35	21.2	874	26.0	1,290	27.1	5,669	28.8
15-24	54	34.9	1,120	45.2	1,627	49.3	7,045	52.8
25-44	197	67.2	4,090	75.6	5,705	78.9	24,356	83.9
45-64	488	209.1	10,123	273.0	15,004	286.9	64,282	304.9
65-74	767	1,024.1	14,447	1265.1	21,840	1306.6	88,493	1,358.1
<b>Total</b>	<b>1,541</b>	<b>155.1</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	39	13.5	836	14.6	1,189	14.9	5,083	15.4
25-44	64	21.5	963	18.0	1,382	19.1	5,946	20.5
45-64	239	101.8	4,398	118.2	6,489	123.8	27,464	130.3
65-74	335	444.3	6,209	542.7	9,348	558.6	37,756	579.4
<b>Total</b>	<b>677</b>	<b>67.9</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 Inner Eastern Melbourne DGP were for cancer, with a rate of 60.1 deaths per 100,000 population, and cardiovascular diseases, 43.8 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 29.4 per 100,000 population and 15.5 per 100,000, respectively.

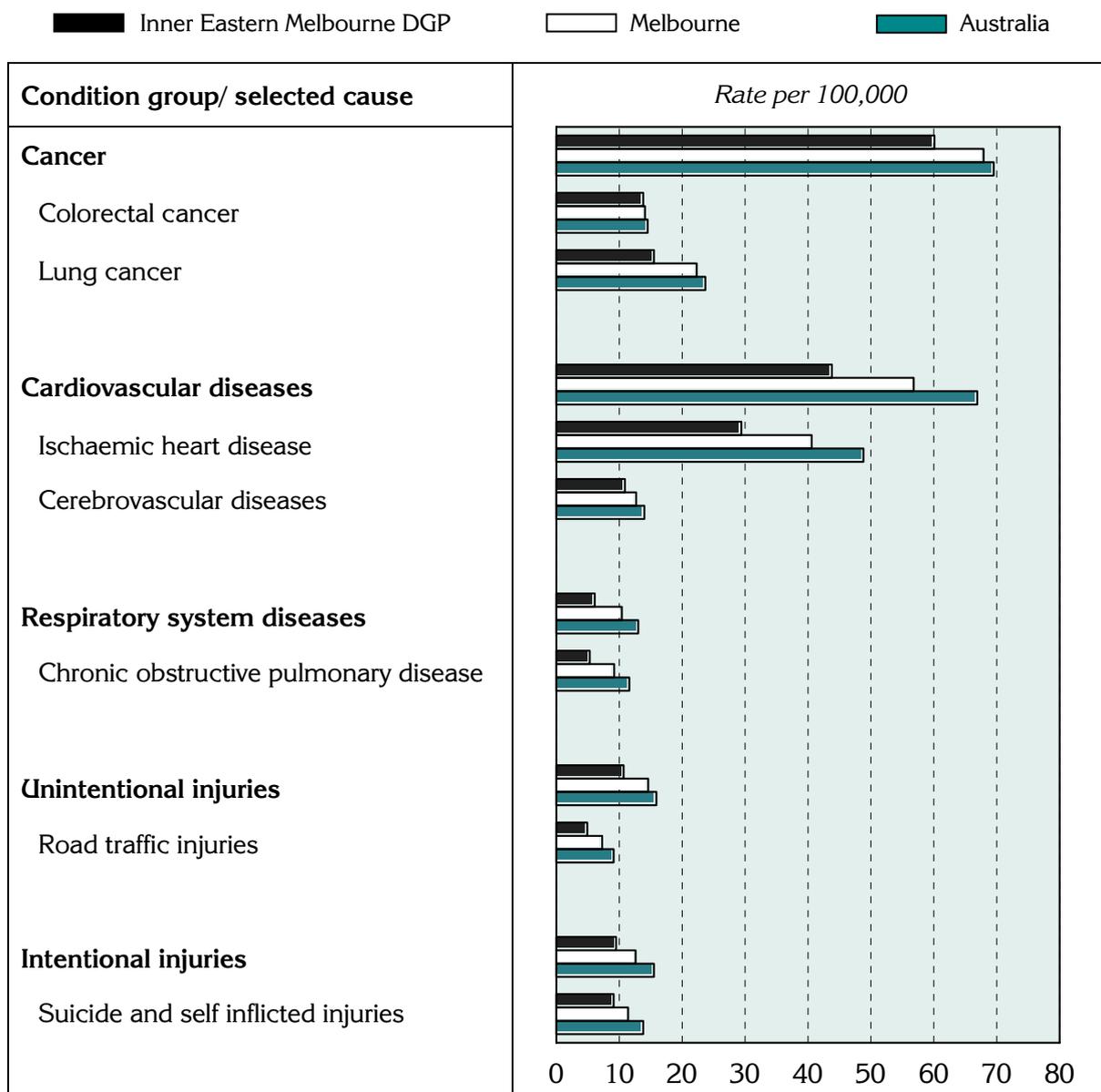
**Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Inner Eastern Melbourne DGP, Melbourne, Victoria and Australia, 1997 to 2001**

Condition group/ selected cause	Inner Eastern 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>608</b>	<b>60.1</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	139	13.8	2,218	14.1	3,351	14.8	13,008	14.5
Lung cancer	156	15.5	3,505	22.3	5,244	23.1	21,208	23.7
<b>Cardiovascular diseases</b>	<b>442</b>	<b>43.8</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	295	29.4	6,377	40.6	9,809	43.3	43,712	48.8
Cerebrovascular diseases	112	10.9	2,013	12.7	2,947	12.9	12,558	14.0
<b>Respiratory system diseases</b>	<b>62</b>	<b>6.1</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	54	5.3	1,451	9.2	2,339	10.2	10,395	11.6
<b>Unintentional injuries</b>	<b>102</b>	<b>10.7</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	47	4.9	1,192	7.3	1,931	8.7	8,138	9.1
<b>Intentional injuries</b>	<b>91</b>	<b>9.5</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	86	9.1	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 below those for Melbourne and Australia for all the condition groups and selected causes (Figure 10).

**Figure 10: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Inner Eastern 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 Inner Eastern 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 into SLAs. For example, the LGA of Boroondara has four SLAs - Hawthorn, Kew, Camberwell North (all of which are in the Division) and Camberwell South (a majority of which is in the Division). These SLAs, and parts of other SLAs listed in Table 14 comprise the Division.

**Table 14: SLAs and population in Inner Eastern 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
21111	Boroondara - Camberwell North	99.1	43,650
21112	Boroondara - Camberwell South	74.3	37,232
21113	Boroondara - Hawthorn	99.2	33,155
21114	Boroondara - Kew	100.0	30,420
24214	Manningham - West	28.9	28,370
24975	Monash - Waverley West	6.1	3,777
26352	Stonnington - Malvern	9.1	4,074
26981	Whitehorse - Box Hill	43.9	22,032

\* 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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