# Population health profile of the

# **Eastern Ranges**

# **Division of General Practice: supplement**

Population Profile Series: No. 56a

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

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### Population health profile

### of the Eastern Ranges Division of General Practice: supplement

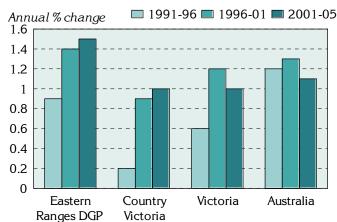
This profile is a supplement to the *Population health profile of the Eastern Ranges Division of General Practice*, dated November 2005, available from <u>www.publichealth.gov.au</u>. This supplement includes an update of the population of the Eastern Ranges Division of General Practice, as well as additional 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 Eastern Ranges Division had an Estimated Resident Population of 219,345 at 30 June 2005.



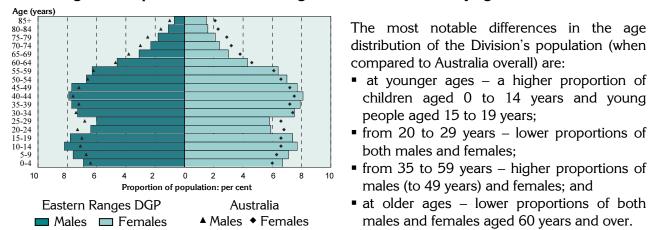
# Figure 1: Annual population change, Eastern Ranges DGP, country Victoria, Victoria and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005

Over the five years from 1991 to 1996, the Division's population increased by 0.9% on average each year, higher than in country Victoria (0.2%) and Victoria (0.6%). From 1996 to 2001, the annual percentage increase in the Division was 1.4%, again higher than in country Victoria (0.9%) and Victoria (1.2%). The growth rate of 1.5% per year from 2001 to 2005 was also higher than the annual increases for country Victoria and country Victoria (1.0%) and Australia (1.1%).

Table 1: Population by age, Eastern	Ranges DGP and Australia, 2005
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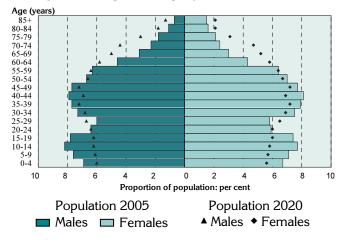
Age group (years)	· ·					ia
			No.	%		
0-14	48,538	22.1	3,978,221	19.6		
15-24	30,118	13.7	2,819,834	13.9		
25-44	63,738	29.1	5,878,107	28.9		
45-64	55,474	25.3	4,984,446	24.5		
65-74	11,820	5.4	1,398,831	6.9		
75-84	7,206	3.3	954,143	4.7		
85+	2,452	1.1	315,027	1.5		
Total	219,345	100.0	20,328,609	100.0		

As shown in the accompanying table and the age-sex pyramid below (Figure 2), the Eastern Ranges DGP had more children aged 0 to 14 years (22.1%) compared to Australia as a whole (19.6%) (Table 1). Conversely, the Division had lower proportions of the population aged 65 years and over compared to Australia.



#### Figure 2: Population in Eastern Ranges DGP and Australia, by age and sex, 2005

### Figure 3: Population projections for Eastern Ranges DGP, by age and sex, 2005 and 2020

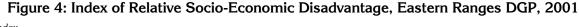


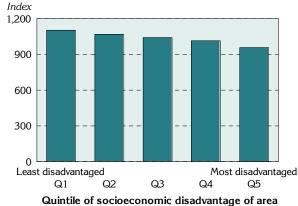
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages lower proportions of children and young people, aged 0 to 19 years;
- from 25 to 29 years higher proportions of males and females;
- from 30 to 54 years lower proportions of both males and females; and
- at older ages higher proportions of both males (from 55 years) and females (from 60 years).

# Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Eastern Ranges Division of General Practice*, dated November 2005, available from <u>www.publichealth.gov.au</u>, for other socio-demographic indicators.





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

The Eastern Ranges DGP has an index score of 1037, above the score for Australia of 1000: this score varies across the Division, from 957 in the most disadvantaged areas to 1102 in the least disadvantaged areas.

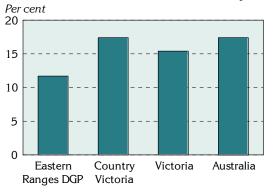
Note: each 'quintile' comprises approximately 20% of the population of the Division.

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 fewer jobless families in the Eastern Ranges DGP (11.7%), compared to country Victoria as a whole (17.4%) (Figure 5, Table 2).

With the introduction of the 30% rebate for private health insurance premiums, there was a once-off registration process, providing information of the postcode and residence of those who had such insurance (these data are not available at this area level for later dates). In 2001, the Division had a notably higher proportion of people with private health insurance (49.4%), compared to country Victoria (43.0%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, Eastern Ranges DGP, country Victoria, Victoria and Australia, 2001

Jobless families with children under 15 years old



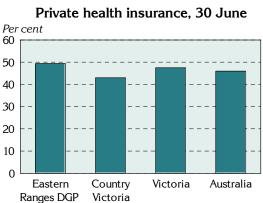


 Table 2: Socio-demographic indicators, Eastern Ranges DGP, country Victoria, Victoria

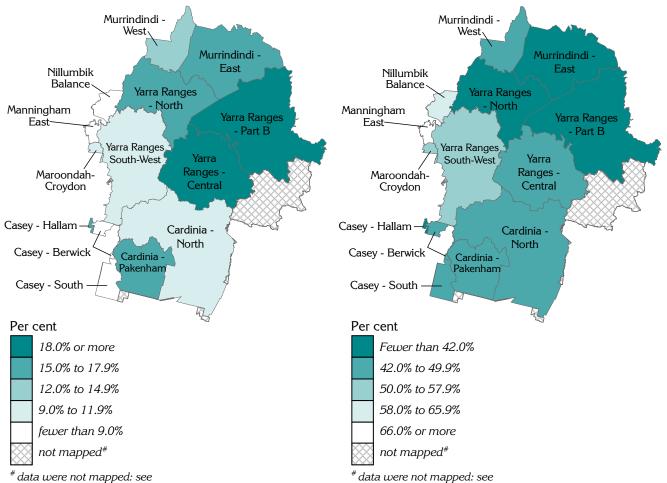
 and Australia, 2001

Indicator	Eastern Ranges DGP		Country Victoria		Victori	a	Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	2,891	11.7	24,724	17.4	77,142	15.4	357,563	17.4
Private health insurance (30 June)	98,146	49.4	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, Eastern Ranges DGP, 2001

#### Map 2: People covered by private health insurance by SLA, Eastern Ranges DGP, 30 June 2001



'Mapping' note under Methods

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

### GP services to residents of the Eastern Ranges 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.

Less than two thirds (63.3%) of all unreferred attendances to residents of Eastern Ranges DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 570,095 GP unreferred attendances (Table 3). A further 11.4% of unreferred attendances to residents were provided by GPs with a provider number in Knox DGP, with 9.0% provided by GPs in Dandenong District DGP.

Division		Unreferred a	ttendances
Number	Name	No.	<b>%</b> <sup>3</sup>
320	Eastern Ranges DGP	570,095	63.3
314	Knox DGP	102,253	11.4
315	Dandenong District DGP	80,898	9.0
310	Whitehorse DGP	67,310	7.5
311	Greater South Eastern DGP	11,742	1.3
301	Melbourne DGP	10,798	1.2
303	Inner Eastern Melbourne DGP	9,820	1.1
Other		47,228	5.2
Total		900,144	100.0

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

<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 320 by Division in which attendance occurred

Almost four fifths (79.7%) of unreferred attendances provided by GPs with a provider number in Eastern Ranges DGP were to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 8.6% of unreferred attendances provided by GPs in the Division were to residents of Knox DGP, with 3.6% to people living in Dandenong District DGP.

Division		Unreferred attendance			
Number	Name	No.	% <sup>3</sup>		
320	Eastern Ranges DGP	570,095	79.7		
314	Knox DGP	61,768	8.6		
315	Dandenong District DGP	25,591	3.6		
310	Whitehorse DGP	21,393	3.0		
322	South Gippsland DGP	7,372	1.0		
323	Central West Gippsland DGP	5,114	0.7		
Other		24,184	3.4		
Total		715,517	100.0		

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

<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 320 by Division of patient address

# Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier *Population health profile of the Eastern Ranges Division of General Practice*, dated November 2005, available from <u>www.publichealth.gov.au</u>, 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 Eastern Ranges DGP who had asthma and were smokers, compared to country Victoria as a whole (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were lower. However, the rate is slightly above that in Australia. There were fewer people in Eastern Ranges 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, Eastern Ranges DGP, country Victoria and Australia, 2001



# Table 5: Estimates of selected chronic diseases and risk factors, Eastern Ranges DGP,country Victoria, Victoria and Australia, 2001

Variable	Eastern Ranges DGP		5 5		Victo	oria	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>	4,200	21.4	29,424	24.6	95,664	19.9	397,734	20.8
Had type 2 diabetes & were overweight/ obese <sup>4</sup>	2,266	13.3	19,136	14.1	69,192	15.1	283,176	15.2

<sup>1</sup> No. is a weighted estimate of the number of people in Eastern Ranges 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 <u>www.publichealth.gov.au</u>.

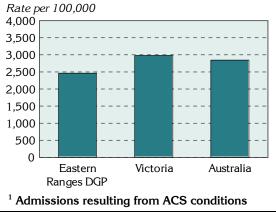
In 2001 to 2002, the 4,535 admissions from ambulatory care sensitive (ACS) conditions accounted for 8.0% of all hospitalisations in the Eastern Ranges DGP (Table 6, Figure 7), below the levels in Victoria (8.8%) and Australia (8.7%).

# Table 6: Avoidable<sup>1</sup> and unavoidable hospitalisations, Eastern Ranges DGP, Victoria, and Australia, 2001/02

Category	Easte	ern Ranges DGP		Victoria			Australia			
	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	
Avoidable <sup>1</sup>	4,535	2,463.9	8.0	145,135	2,983.2	8.8	552,786	2,847.5	8.7	
Unavoidable	52,482	27,684.2	92.0	1,510,437	31,088.3	91.2	5,818,199	29,970.7	91.3	
Total	57,016	30,152.5	100.0	1,655,572	34,071.5	100.0	6,370,985	32,818.2	100.0	

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

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



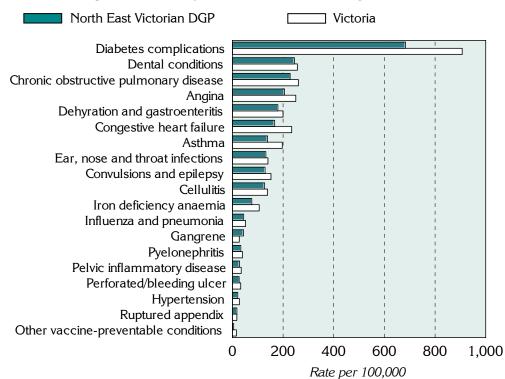
### Figure 7: Avoidable hospitalisations<sup>1</sup>, Eastern Ranges DGP, Victoria and Australia, 2001/02

The rate of avoidable hospitalisations in Eastern Ranges DGP is notably lower, a rate of 2,463.9 admissions per 100,000 population, than in Victoria (a rate of 2,983.2) and Australia (2,847.5).

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

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

#### Figure 8: Avoidable hospitalisations<sup>1</sup> by condition, Eastern Ranges 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, Eastern Ranges DGP, Victoria
and Australia, 2001/02

Sub-category/ condition	Eastern Rai	nges DGP	Victo	oria	Austr	alia
	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>
Vaccine-preventable	94	49.8	3,293	68.0	16,573	85.4
Influenza and pneumonia	84	44.7	2,525	52.0	13,021	67.1
Other vaccine preventable	10	5.1	768	16.0	3,552	18.3
Chronic <sup>3</sup>	2,619	1,521.2	97,133	1,982.6	352,545	1,816
Diabetes complications	1,175	683.7	44,409	906.9	141,345	728.1
Iron deficiency anaemia	136	76.5	5,196	105.9	16,451	84.7
Hypertension	37	21.4	1,362	27.7	6,354	32.7
Congestive heart failure	259	166.8	11,655	234.1	42,447	218.6
Angina	348	206.0	12,285	250.4	49,963	257.4
Chronic obstructive pulmonary disease	368	227.9	12,850	260.7	54,853	282.6
Asthma	296	138.9	9,376	196.9	41,009	211.3
Acute	1,939	964.2	50,153	1,041.7	200,913	1,035
Dehydration and gastroenteritis	335	179.6	9,761	200.0	37,766	194.5
Convulsions and epilepsy	267	129.2	7,297	152.4	31,137	160.4
Ear, nose and throat infections	288	132.4	6,653	140.5	32,075	165.2
Dental conditions	525	245.1	12,235	256.7	43,667	224.9
Perforated/bleeding ulcer	45	26.8	1,618	32.9	5,795	29.9
Ruptured appendix	38	17.9	855	17.9	3,866	19.9
Pyelonephritis	66	33.3	1,948	40.2	7,386	38.0
Pelvic inflammatory disease	59	28.5	1,693	34.8	6,547	33.7
Cellulitis	240	127.4	6,751	139.0	28,204	145.3
Gangrene	76	44.0	1,342	27.3	4,470	23.0
Total avoidable hospitalisations <sup>4</sup>	4,535	2,463.9	145,135	2,983.2	552,786	2,847.5

<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.

Over two-thirds (71.0%) of all deaths in Eastern Ranges DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, consistent with the proportion for country Victoria (70.8%) (Table 8). However, the rate in the Division is notably (16%) lower than that in country Victoria.

Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 28.7% of all deaths at ages 0 to 74 years in Eastern Ranges DGP, consistent with the 28.7% in country Victoria.

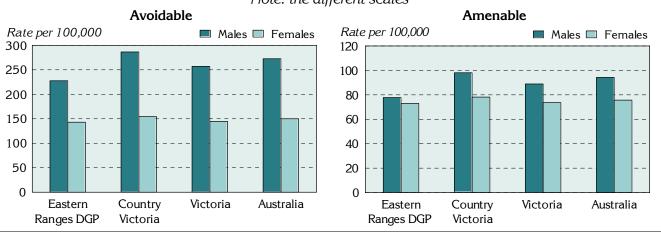
Mortality category	Eastern Ranges DGP		Country	Country Victoria		Victoria		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	
Avoidable	1,555	185.6	14,812	221.0	45,466	201.3	189,845	211.8	
% of total	71.0	••	70.8	••	70.9	••	71.5		
(Amenable)	(628)	(75.4)	(6,001)	(88.2)	(18,406)	(81.4)	(76,249)	(85.1)	
(% of total)	(28.7)	()	(28.7)	()	(28.7)	()	(28.7)	()	
Unavoidable	635	76.2	6,100	90.0	18,617	82.4	75,582	84.3	
% of total	29.0		29.2		29.1		28.5		
Total mortality	2,190	261.7	20,912	311.0	64,083	283.7	265,427	296.1	
%	100.0		100.0		100.0		100.0		

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

<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. Eastern Ranges DGP's rate of avoidable mortality for males was 227.6 deaths per 100,000 males, higher than the rate of 143.0 for females. The rate of amenable mortality for males in the Division was also higher, 77.8, compared to 73.0 for females, a rate ratio of 1.07 (Figure 9, Table 9).

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



Note: the different scales

Mortality category and sex	y Eastern Ranges DGP		Country	Country Victoria		Victoria		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	
Avoidable									
Males	963	227.6	9,664	286.5	29,042	257.0	123,026	272.6	
Females	592	143.0	5,148	154.5	16,424	144.8	66,819	150.1	
Total	1,555	185.6	14,812	221.0	45,466	201.3	189,845	211.8	
Rate ratio–M:F <sup>2</sup>	••	1.59**	••	1.85**	••	1.77**		1.82**	
Amenable									
Males	324	77.8	3,386	98.1	10,052	88.9	42,568	94.3	
Females	304	73.0	2,615	78.2	8,354	73.7	33,681	75.7	
Total	628	75.4	6,001	88.2	18,406	81.4	76,249	85.1	
Rate ratio–M:F <sup>2</sup>	••	1.07	••	1.25**	••	1.21**	••	1.25**	

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

<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 <sup>\*</sup> p <0.05; <sup>\*\*</sup> 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 Eastern Ranges DGP, country Victoria, 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 71.7% of total YLL (0 to 74 years) for Eastern Ranges DGP, marginally higher than the proportion for country Victoria. The proportion of YLL from amenable mortality for Eastern Ranges DGP (28.2%) was consistent with that for country Victoria (28.1%).

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

Mortality category	Eastern Ranges DGP		Country Victoria		Victoria		Australia	
	No.	% of	No.	% of	No.	% of	No.	% of
		total		total		total		total
Avoidable	28,792	71.7	253,666	71.2	790,054	71.5	3,327,375	71.9
(Amenable)	(11,338)	(28.2)	(100,131)	(28.1)	(310,758)	(28.1)	(1,298,430)	(28.0)
Unavoidable	11,388	28.3	102,576	28.8	315,555	28.5	1,303,289	28.1
Total	40,180	100.0	356,242	100.0	1,105,610	100.0	4,630,664	100.0

<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 1,213.2 deaths per 100,000 population in the Eastern Ranges 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 248.1 in the Eastern Ranges Division.

Mortality category and age (years)	Eastern DC	•	Country	Country Victoria		oria	Austr	Australia		
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>		
Avoidable										
0-14	61	26.1	416	29.9	1,290	27.1	5,669	28.8		
15-24	94	66.6	507	61.8	1,627	49.3	7,045	52.8		
25-44	237	73.1	1,615	88.6	5,705	78.9	24,356	83.9		
45-64	536	248.1	4,881	320.7	15,004	286.9	64,282	304.9		
65-74	627	1,213.2	7,393	1396.1	21,840	1306.6	88,493	1,358.1		
Total	1,555	185.6	14,812	221.0	45,466	201.3	189,845	211.8		
Amenable										
0-24	65	16.9	352	15.5	1,189	14.9	5,083	15.4		
25-44	58	17.5	419	22.3	1,382	19.1	5,946	20.5		
45-64	239	110.9	2,091	137.4	6,489	123.8	27,464	130.3		
65-74	265	513.5	3,139	593.1	9,348	558.6	37,756	579.4		
Total	628	75.4	6,001	88.2	18,406	81.4	76,249	85.1		

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

<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 Eastern Ranges DGP were for cancer, with a rate of 65.4 deaths per 100,000 population, and cardiovascular diseases, 51.9 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 37.8 per 100,000 population and 20.1 per 100,000, respectively.

Condition group/ selected cause	Eastern Ranges DGP		Country	Country Victoria Victoria Australia			alia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Cancer	537	65.4	5,074	74.2	15,813	69.8	62,338	69.5
Colorectal cancer	103	12.6	1,133	16.5	3,351	14.8	13,008	14.5
Lung cancer	160	20.1	1,739	25.0	5,244	23.1	21,208	23.7
Cardiovascular diseases	411	51.9	4,666	67.0	13,612	60.0	59,945	66.9
Ischaemic heart disease	300	37.8	3,432	49.3	9,809	43.3	43,712	48.8
Cerebrovascular diseases	85	10.8	934	13.4	2,947	12.9	12,558	14.0
Respiratory system diseases	76	9.9	977	13.9	2,621	11.5	11,612	13.0
Chronic obstructive pulmonary disease	68	9.0	888	12.5	2,339	10.2	10,395	11.6
Unintentional injuries	157	16.4	1,142	19.3	3,536	15.9	14,224	15.9
Road traffic injuries	104	10.9	739	12.5	1,931	8.7	8,138	9.1
Intentional injuries Suicide and self inflicted injuries	<b>139</b> 133	<b>14.5</b> 13.9	<b>946</b> 875	<b>16.2</b> 15.0	<b>3,020</b> 2,752	<b>13.6</b> 12.3	<b>13,891</b> 12,393	<b>15.5</b> 13.8

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

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

Rates in the Division were generally below those in country Victoria and Australia for the condition groups and selected causes shown, apart from the injury categories, where they were higher, or consistent with, the comparators (Figure 10).

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

North East Victorian DGP		Co	ountry	Victo	ria			Austra	lia
Condition group/ selected cause		Rate per 100,000				)			
Cancer									
Colorectal cancer									
Lung cancer									
Cardiovascular diseases		1	·	i	1				
Ischaemic heart disease			1	1					
Cerebrovascular diseases							     		
Respiratory system diseases									
Chronic obstructive pulmonary disease							     		
		   		- - - -	   	   	     		
Unintentional injuries			0						
Road traffic injuries									
Intentional injuries			]						
Suicide and self inflicted injuries									
	0	10	20	30	40	50	60	70	80

### 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-demograp	hic 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 estim	ates: 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)			

#### Table 13: Data sources

<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 Eastern Ranges DGP

For information on the postcodes in the Division, please refer the Department of Health and Ageing website <u>http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm;</u> 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, Local Government Areas (LGAs) have been split into SLAS. For example, Yarra Ranges has four SLAs, Central, North, South – West (part in the Division) and Part B. These SLAs and parts of other SLAs comprise the Division (Table 14).

SLA code	SLA name	Per cent of the SLA's population in the Division <sup>*</sup>	Estimate of the SLA's 2005 population in the Division
21452	Cardinia - North	100.0	24,212
21453	Cardinia - Pakenham	100.0	27,563
21612	Casey - Berwick	10.4	9,162
21616	Casey - Hallam	2.5	1,303
21618	Casey - South	11.7	1,466
24211	Manningham - East	22.5	3,507
24411	Maroondah - Croydon	36.4	21,417
24412	Maroondah - Ringwood	0.9	383
25621	Murrindindi - East	16.3	1,043
25622	Murrindindi - West	11.9	912
25718	Nillumbik Balance	5.3	492
27451	Yarra Ranges - Central	100.0	15,339
27454	Yarra Ranges - North	100.0	13,020
27455	Yarra Ranges - South-West	86.4	98,951
27458	Yarra Ranges - Part B	100.0	576

#### Table 14: SLAs and population in Eastern Ranges DGP, 2005 on 2001 boundaries

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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