

Population health profile of the Geelong

Division of General Practice: supplement

Population Profile Series: No. 53a

PHIDU

March 2007



PHIDU



Australian Government

Australian Institute of
Health and Welfare



THE UNIVERSITY
OF ADELAIDE
AUSTRALIA



© Commonwealth of Australia 2007

This work may be reproduced and used subject to acknowledgement of the source of any material so reproduced.

National Library of Australia Cataloguing in Publication entry

Population health profile of the Geelong Division of General Practice: supplement.

Bibliography.

ISBN 9 78073089 6517 (web).

1. Public health - Victoria - Geelong - Statistics. 2. Health status indicators - Victoria - Geelong - Statistics. 3. Health service areas - Victoria - Geelong. 4. Geelong (Vic.) - Statistics, Medical. I. Public Health Information Development Unit (Australia). (Series : Population profile series ; no. 53a).

362.1099452

ISSN 1833-0452 Population Profile Series

Public Health Information Development Unit, The University of Adelaide
A Collaborating Unit of the Australian Institute of Health and Welfare

This profile was produced by PHIDU, the Public Health Information Development Unit at The University of Adelaide, South Australia. The work was funded under a grant from the Australian Government Department of Health and Ageing. The views expressed in this profile are solely those of the authors and should not be attributed to the Department of Health and Ageing or the Minister for Health and Ageing.

Interpretation of differences between data in this profile and similar data from other sources needs to be undertaken with care, as such differences may be due to the use of different methodology to produce the data.

Suggested citation:

PHIDU. (2007) *Population health profile of the Geelong Division of General Practice: supplement*. Population Profile Series: No. 53a. Public Health Information Development Unit (PHIDU), Adelaide.

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

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

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

Published by Public Health Information Development Unit, The University of Adelaide

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

Population health profile of the Geelong Division of General Practice: supplement

This profile is a supplement to the *Population health profile of the Geelong Division of General Practice*, dated November 2005, available from www.publichealth.gov.au. This supplement includes an update of the population of the Geelong 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:

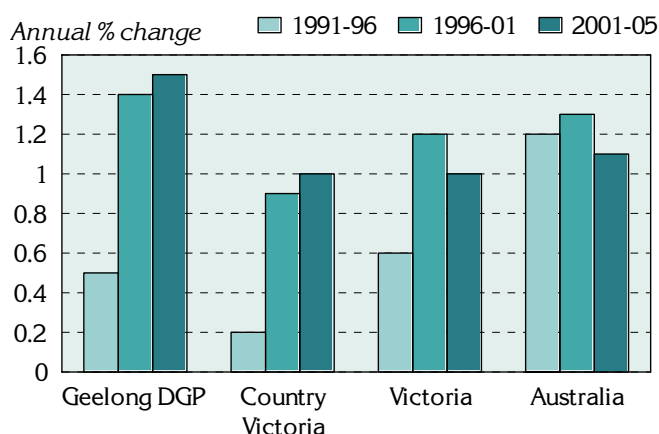
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive 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 Geelong Division had an Estimated Resident Population of 233,602 at 30 June 2005.

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



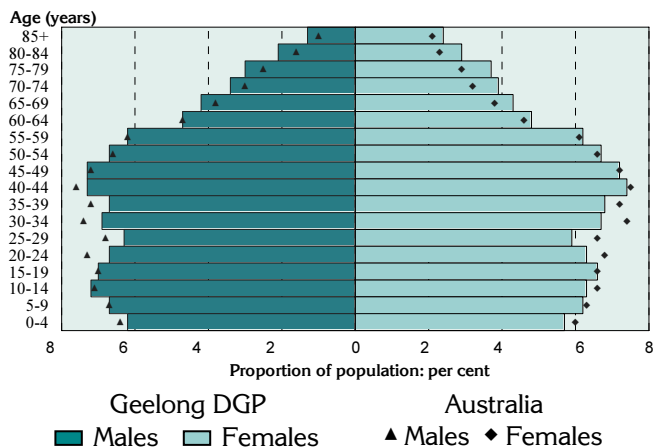
Over the five years from 1991 to 1996, the Division's population increased by 0.5% on average each year, higher than for country Victoria (0.2%), but lower than for Victoria (0.6%), and Australia as a whole (1.2%). From 1996 to 2001, the annual percentage increase in the Division (1.4%) was greater than for country Victoria (0.9%), Victoria (1.2%), and Australia (1.3%). The growth rate of 1.5% per year from 2001 to 2005 was again above the annual increases of 1.0% for country Victoria, and Victoria, and 1.1% for Australia.

Table 1: Population by age, Geelong DGP and Australia, 2005

Age group (years)	Geelong DGP		Australia	
	No.	%	No.	%
0-14	44,736	19.2	3,978,221	19.6
15-24	31,035	13.3	2,819,834	13.9
25-44	63,154	27.0	5,878,107	28.9
45-64	58,242	24.9	4,984,446	24.5
65-74	18,381	7.9	1,398,831	6.9
75-84	13,698	5.9	954,143	4.7
85+	4,356	1.9	315,027	1.5
Total	233,602	100.0	20,328,609	100.0

As shown in the accompanying table and the age-sex pyramid below (Figure 2), the Geelong DGP had similar proportions in each age group to those in Australia (Table 1). The main differences were at ages 25 to 44 (fewer people), and 75 to 84 and 85+ years (more people).

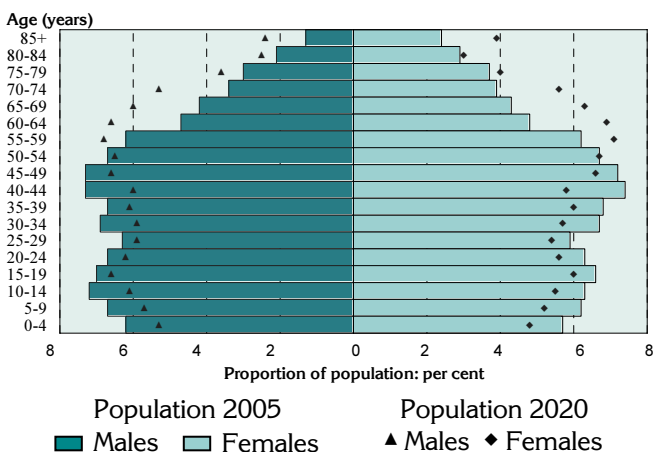
Figure 2: Population in Geelong DGP and Australia, by age and sex, 2005



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

- at younger ages – slightly lower proportions of male children aged 0 to 4 years and females aged 0 to 14 years;
- from 20 to 44 years – lower proportions of both males and females; and
- at older ages – higher proportions of males aged 65 years and over and females aged 60 years and above.

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



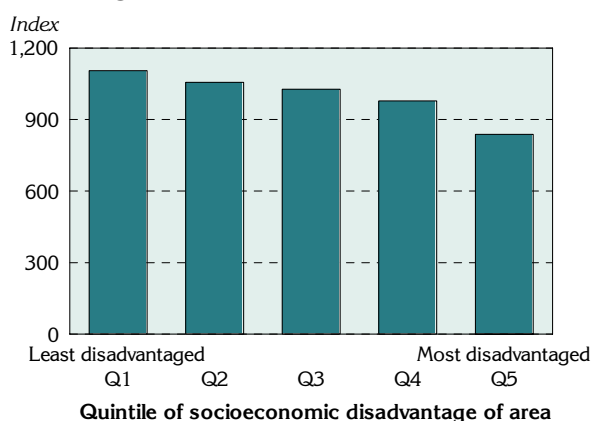
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages – lower proportions of children and young people, aged 0 to 19 years;
- from 20 to 49 years – lower proportions of both males and females; and
- from 55 years onwards – higher proportions of both males and females.

Additional socio-demographic indicators

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

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



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

The Geelong DGP has an index score of 1001, consistent with the score for Australia of 1000: this score varies across the Division, from a low of 838 in the most disadvantaged areas to 1105 in the least disadvantaged areas.

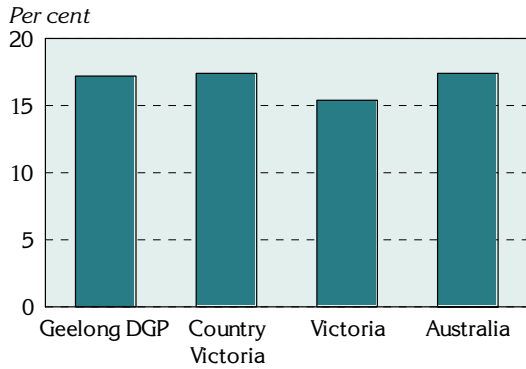
Note: each 'quintile' comprises approximately 20% of the population of the Division.

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 was a similar proportion of jobless families in the Geelong DGP (17.2%), 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 markedly higher proportion of people with private health insurance (55.3%), compared to country Victoria (43.0%) (Figure 5, Table 2).

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

Jobless families with children under 15 years old



Private health insurance, 30 June

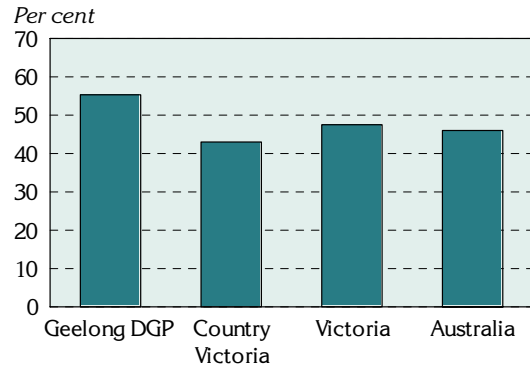
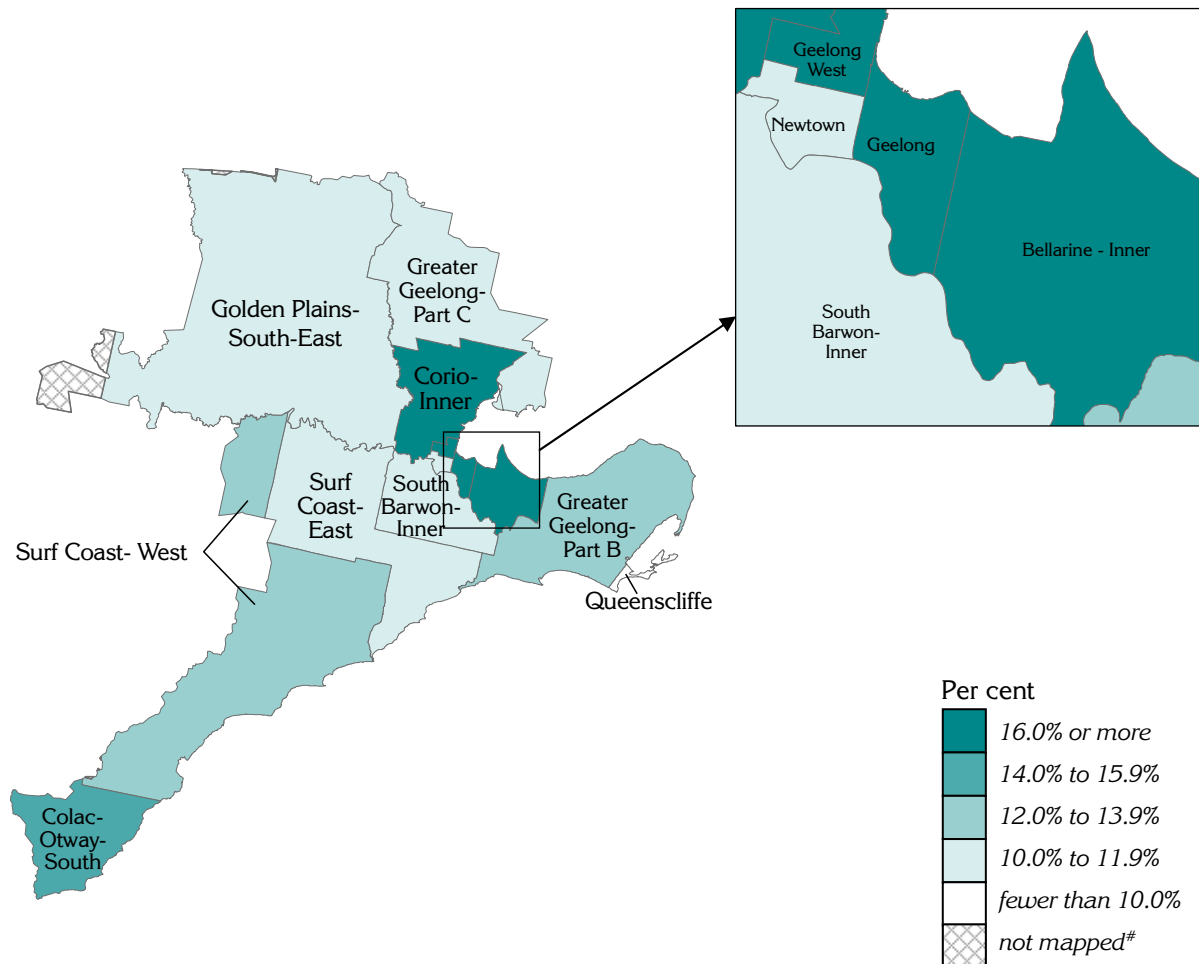


Table 2: Socio-demographic indicators, Geelong DGP, country Victoria, Victoria and Australia, 2001

Indicator	Geelong DGP		Country Victoria		Victoria		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	3,908	17.2	24,724	17.4	77,142	15.4	357,563	17.4
Private health insurance (30 June)	114,788	55.3	543,292	43.0	2,196,890	47.5	8,671,106	46.0

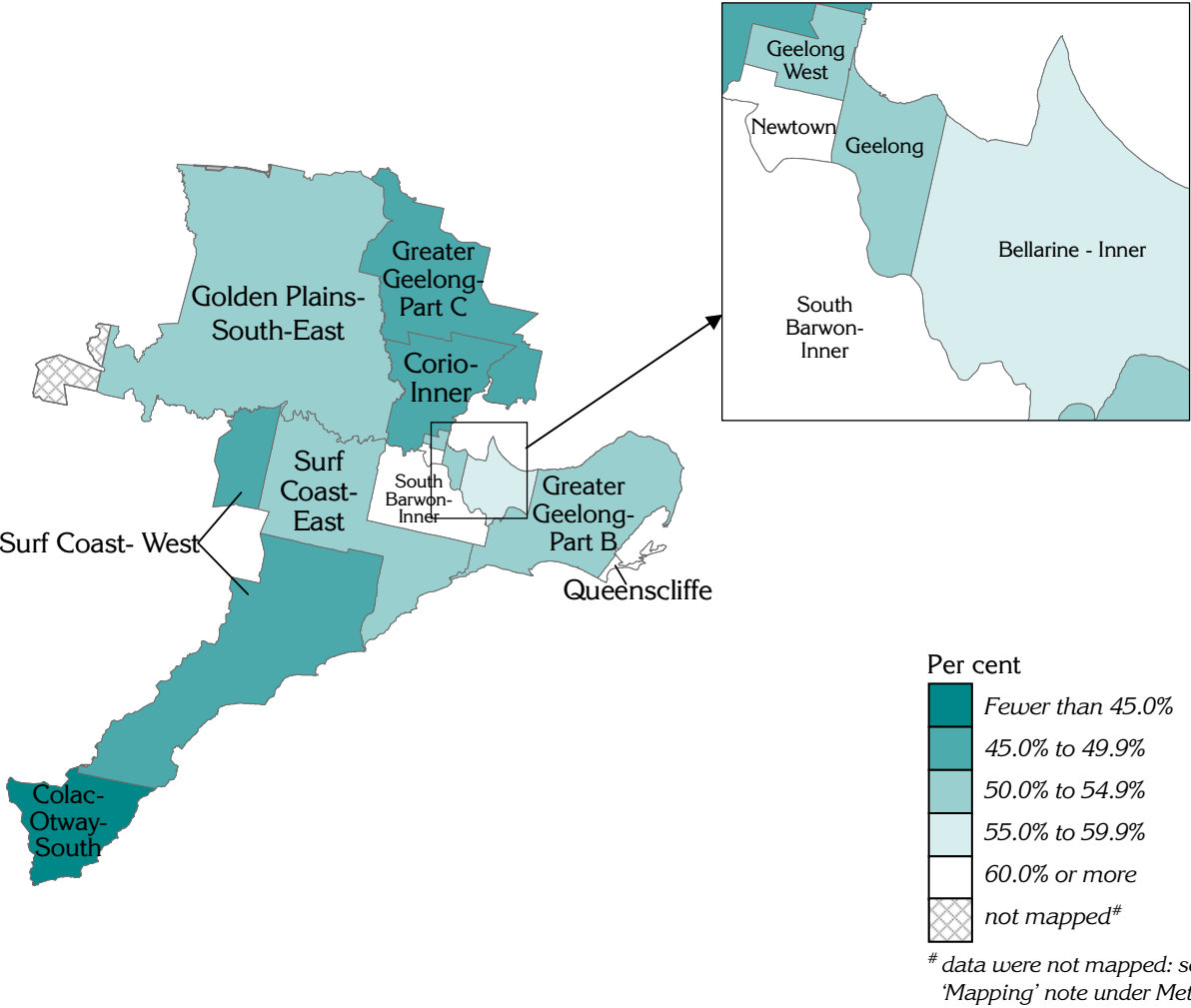
Details of the distribution of jobless families and of the population covered by private health insurance are shown by Statistical Local Area (SLA) in Maps 1 and 2, respectively.

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



[#] data were not mapped: see 'Mapping' note under Methods

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



GP services to residents of the Geelong 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 unreferral attendances recorded under Medicare: unreferral attendances not included are those for which the cost is met by the Department of Veterans' Affairs or a compensation scheme; or are provided by salaried medical officers in hospitals, community health services or Aboriginal Medical Services, and which are not billed to Medicare. At any attendance, one or more services may have been provided.

The majority (93.9%) of all unreferral attendances to residents of Geelong DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 920,028 GP unreferral attendances (Table 3). A further 1.0% of unreferral attendances to residents were provided by GPs with a provider number in Melbourne DGP.

Table 3: Patient flow – People living¹ in Geelong DGP by Division where attendance occurred², 2003/04

Division		Unreferral attendances	
Number	Name	No.	% ³
317	Geelong DGP	920,028	93.9
301	Melbourne DGP	9,472	1.0
324	Otway DGP	5,488	0.6
305	Westgate DGP	4,858	0.5
304	Southcity DGP	4,107	0.4
306	Western Melbourne DGP	3,873	0.4
Other	..	31,979	3.2
Total	..	979,805	100.0

¹ Based on address in Medicare records

² Division of GP based on provider number

³ Proportion of all unreferral attendances of patients with an address in Division 317 by Division in which attendance occurred

The majority (95.0%) of unreferral attendances provided by GPs with a provider number in Geelong DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 0.8% of unreferral attendances provided by GPs in the Division were to residents of Otway DGP.

Table 4: GP catchment – Unreferral attendances provided by GPs¹ in Geelong DGP by Division of patient address², 2003/04

Division		Unreferral attendances	
Number	Name	No.	% ³
317	Geelong DGP	920,028	95.0
324	Otway DGP	8,088	0.8
305	Westgate DGP	5,320	0.5
325	Ballarat and District DGP	3,579	0.4
301	Melbourne DGP	2,744	0.3
Other	..	28,548	2.9
Total	..	968,307	100.0

¹ Division of GP based on provider number

² Based on address in Medicare records

³ Proportion of all unreferral attendances to GPs with a provider number in Division 317 by Division of patient address

Additional prevalence estimates: chronic diseases and risk factors combined

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

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

It is estimated that there were relatively fewer people in Geelong DGP who had asthma and were smokers, compared to country Victoria (Figure 6, Table 5): however, the rates in the Division were above those for Australia as a whole. In contrast, there were more people in Geelong DGP who had type 2 diabetes and were overweight/ obese, compared to country Victoria: the rate in the Division was consistent with that for Australia.

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



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

Variable	Geelong DGP		Country Victoria		Victoria		Australia	
	No. ¹	Rate ²	No. ¹	Rate ²	No. ¹	Rate ²	No. ¹	Rate ¹
Had asthma & smoked ³	4,508	22.0	29,424	24.6	95,664	19.9	397,734	20.8
Had type 2 diabetes & were overweight/ obese ⁴	3,367	15.4	19,136	14.1	69,192	15.1	283,176	15.2

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

² Rate is the indirectly age-standardised rate per 1,000 population

³ Population aged 18 years and over

⁴ Population aged 15 years and over

Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions

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

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

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

In 2001 to 2002, the 6,592 admissions from ambulatory care sensitive (ACS) conditions accounted for 8.8% of all hospitalisations in the Geelong DGP (Table 6, Figure 7), consistent with the levels in Victoria (8.8%) and Australia (8.7%).

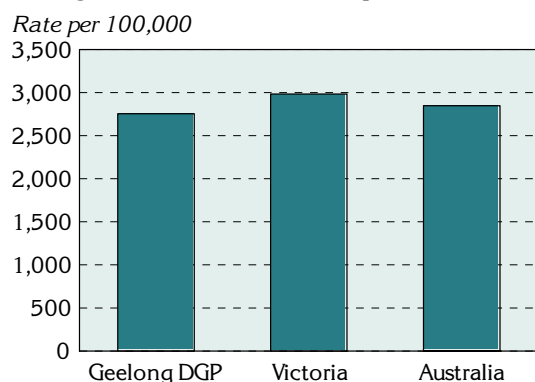
Table 6: Avoidable¹ and unavoidable hospitalisations, Geelong DGP, Victoria, and Australia, 2001/02

Category	Geelong DGP			Victoria			Australia		
	No.	Rate ²	%	No.	Rate ²	%	No.	Rate ²	%
Avoidable ¹	6,592	2,754.2	8.8	145,135	2,983.2	8.8	552,786	2,847.5	8.7
Unavoidable	68,488	29,605.4	91.2	1,510,437	31,088.3	91.2	5,818,199	29,970.7	91.3
Total	75,080	32,357.7	100.0	1,655,572	34,071.5	100.0	6,370,985	32,818.2	100.0

¹ Admissions resulting from ACS conditions

² Rate is the indirectly age-standardised rate per 100,000 population

Figure 7: Avoidable hospitalisations¹, Geelong DGP, Victoria and Australia, 2001/02



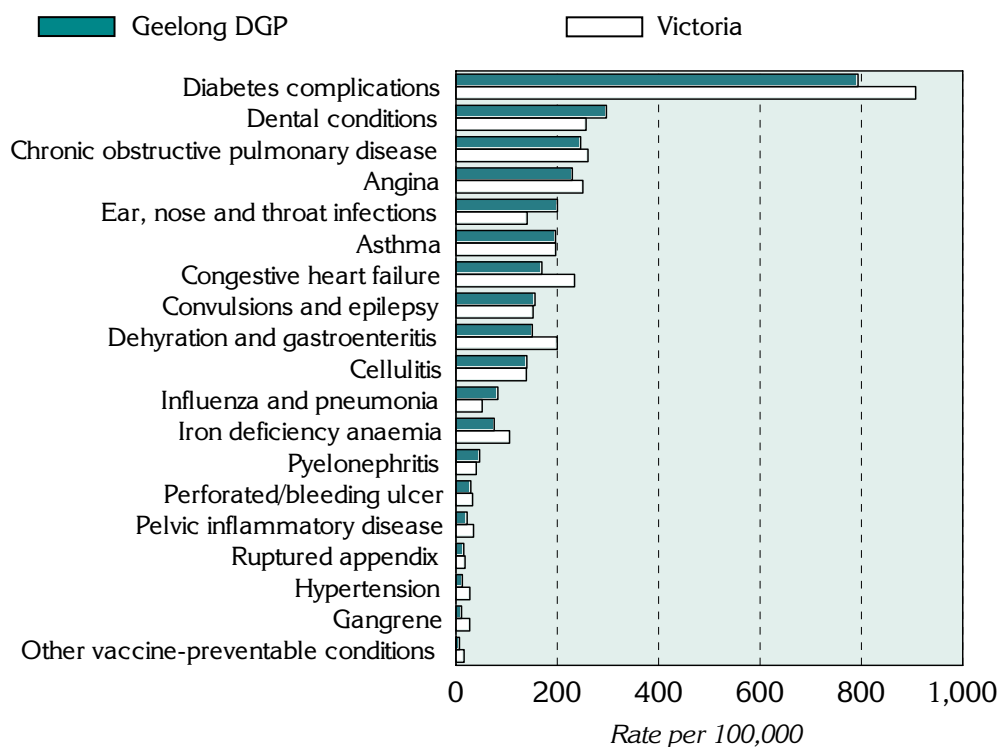
The rate of avoidable hospitalisations in Geelong DGP is lower, a rate of 2,754.2 admissions per 100,000 population, compared to both Victoria (a rate of 2,983.2), and Australia (2,847.5).

¹ Admissions resulting from ACS conditions

Diabetes complications, dental conditions, chronic obstructive pulmonary disease and angina were the four conditions with the highest rates of avoidable hospitalisations in the Geelong 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 ear, nose and throat infections, have the highest rates of avoidable hospitalisations for the acute conditions.

Figure 8: Avoidable hospitalisations¹ by condition, Geelong DGP and Victoria, 2001/02



¹ Admissions resulting from ACS conditions: excludes nutritional deficiencies as less than ten admissions

Table 7: Avoidable hospitalisations¹ by condition, Geelong DGP, Victoria and Australia, 2001/02

Sub-category/ condition	Geelong DGP		Victoria		Australia	
	No.	Rate ²	No.	Rate ²	No.	Rate ²
Vaccine-preventable	213	90.1	3,293	68.0	16,573	85.4
Influenza and pneumonia	197	83.0	2,525	52.0	13,021	67.1
Other vaccine preventable	16	7.1	768	16.0	3,552	18.3
Chronic³	4,278	1,723.4	97,133	1,982.6	352,545	1,816
Diabetes complications	1,968	793.3	44,409	906.9	141,345	728.1
Iron deficiency anaemia	186	75.7	5,196	105.9	16,451	84.7
Hypertension	32	12.7	1,362	27.7	6,354	32.7
Congestive heart failure	449	169.5	11,655	234.1	42,447	218.6
Angina	577	229.7	12,285	250.4	49,963	257.4
Chronic obstructive pulmonary disease	634	246.0	12,850	260.7	54,853	282.6
Asthma	432	196.5	9,376	196.9	41,009	211.3
Acute	2,391	1,069.6	50,153	1,041.7	200,913	1,035
Dehydration and gastroenteritis	351	150.7	9,761	200.0	37,766	194.5
Convulsions and epilepsy	343	156.1	7,297	152.4	31,137	160.4
Ear, nose and throat infections	434	200.4	6,653	140.5	32,075	165.2
Dental conditions	647	296.8	12,235	256.7	43,667	224.9
Perforated/bleeding ulcer	74	29.3	1,618	32.9	5,795	29.9
Ruptured appendix	34	15.6	855	17.9	3,866	19.9
Pyelonephritis	105	46.9	1,948	40.2	7,386	38.0
Pelvic inflammatory disease	48	22.4	1,693	34.8	6,547	33.7
Cellulitis	327	140.1	6,751	139.0	28,204	145.3
Gangrene	28	11.3	1,342	27.3	4,470	23.0
Total avoidable hospitalisations⁴	6,592	2,754.2	145,135	2,983.2	552,786	2,847.5

¹ Admissions resulting from ACS conditions

² Rate is the indirectly age-standardised rate per 100,000 population

³ Excludes nutritional deficiencies as less than ten admissions

⁴ Sub-category and condition numbers and rates do not add to the reported total avoidable admissions: five conditions (influenza & pneumonia, other vaccine preventable, diabetes complications, ruptured appendix and gangrene) are counted in 'any diagnosis', so may be included in more than one condition group

Avoidable mortality

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

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

Over two-thirds (70.9%) of all deaths in Geelong DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, consistent with the proportion for country Victoria (70.8%) (Table 8). Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 28.6% of all deaths at ages 0 to 74 years in Geelong DGP, also consistent with the 28.7% in country Victoria.

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

Mortality category	Geelong DGP		Country Victoria		Victoria		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable	2,298	209.5	14,812	221.0	45,466	201.3	189,845	211.8
% of total	70.9	..	70.8	..	70.9	..	71.5	..
(Amenable)	(927)	(83.4)	(6,001)	(88.2)	(18,406)	(81.4)	(76,249)	(85.1)
(% of total)	(28.6)	(..)	(28.7)	(..)	(28.7)	(..)	(28.7)	(..)
Unavoidable	941	85.0	6,100	90.0	18,617	82.4	75,582	84.3
% of total	29.1	..	29.2	..	29.1	..	28.5	..
Total mortality	3,239	294.5	20,912	311.0	64,083	283.7	265,427	296.1
%	100.0	..	100.0	..	100.0	..	100.0	..

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

Rates of avoidable mortality were higher for males than for females in each of the comparator areas. Geelong DGP's rate of avoidable mortality for males was 265.6 deaths per 100,000 males, higher than the rate of 152.4 for females. The rate of amenable mortality for males in the Division was also higher, 90.6, compared to 76.1 for females, a rate ratio of 1.19 (Figure 9, Table 9).

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

Note: the different scales

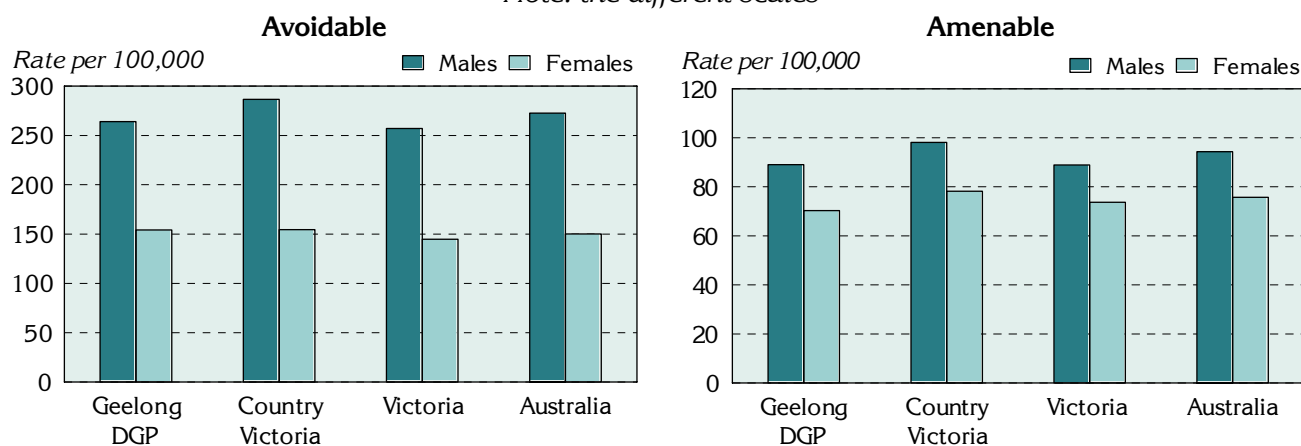


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, Geelong DGP, country Victoria, Victoria and Australia, 1997 to 2001

Mortality category and sex	Geelong DGP		Country Victoria		Victoria		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable								
Males	1,442	265.6	9,664	286.5	29,042	257.0	123,026	272.6
Females	857	152.4	5,148	154.5	16,424	144.8	66,819	150.1
Total	2,298	209.5	14,812	221.0	45,466	201.3	189,845	211.8
Rate ratio–M:F²	..	1.74**	..	1.85**	..	1.77**	..	1.82**
Amenable								
Males	500	90.6	3,386	98.1	10,052	88.9	42,568	94.3
Females	427	76.1	2,615	78.2	8,354	73.7	33,681	75.7
Total	927	83.4	6,001	88.2	18,406	81.4	76,249	85.1
Rate ratio–M:F²	..	1.19**	..	1.25**	..	1.21**	..	1.25**

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

² Rate ratio (M:F) is the ratio of male to female rates; rate ratios differing significantly from 1.0 are shown with

* p <0.05; ** p <0.01

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

The numbers of YLL for Geelong 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 71.3% of total YLL (0 to 74 years) for Geelong DGP, consistent with the proportion for country Victoria. The proportion of YLL from amenable mortality for Geelong DGP (27.9%) was also consistent with that for country Victoria (28.1%).

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

Mortality category	Geelong DGP		Country Victoria		Victoria		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	38,963	71.3	253,666	71.2	790,054	71.5	3,327,375	71.9
(Amenable)	(15,247)	(27.9)	(100,131)	(28.1)	(310,758)	(28.1)	(1,298,430)	(28.0)
Unavoidable	15,709	28.7	102,576	28.8	315,555	28.5	1,303,289	28.1
Total	54,673	100.0	356,242	100.0	1,105,610	100.0	4,630,664	100.0

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

In each of the areas in Table 11, the majority of avoidable mortality at ages 0 to 74 years occurred in the 65 to 74 year age group (Table 11), with 1,365.8 deaths per 100,000 population in the Geelong 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 289.3 in the Geelong Division.

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

Mortality category and age (years)	Geelong DGP		Country Victoria		Victoria		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable								
0-14	62	28.8	416	29.9	1,290	27.1	5,669	28.8
15-24	69	46.6	507	61.8	1,627	49.3	7,045	52.8
25-44	269	88.8	1,615	88.6	5,705	78.9	24,356	83.9
45-64	692	289.3	4,881	320.7	15,004	286.9	64,282	304.9
65-74	1,206	1,365.8	7,393	1396.1	21,840	1306.6	88,493	1,358.1
Total	2,298	209.5	14,812	221.0	45,466	201.3	189,845	211.8
Amenable								
0-24	53	14.8	352	15.5	1,189	14.9	5,083	15.4
25-44	66	21.5	419	22.3	1,382	19.1	5,946	20.5
45-64	283	117.6	2,091	137.4	6,489	123.8	27,464	130.3
65-74	524	592.0	3,139	593.1	9,348	558.6	37,756	579.4
Total	927	83.4	6,001	88.2	18,406	81.4	76,249	85.1

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

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

The highest rates of avoidable mortality for the selected major condition groups in the Geelong DGP were for cancer, with a rate of 74.3 deaths per 100,000 population, and cardiovascular diseases, 63.7 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 45.9 per 100,000 population and 25.6 per 100,000, respectively.

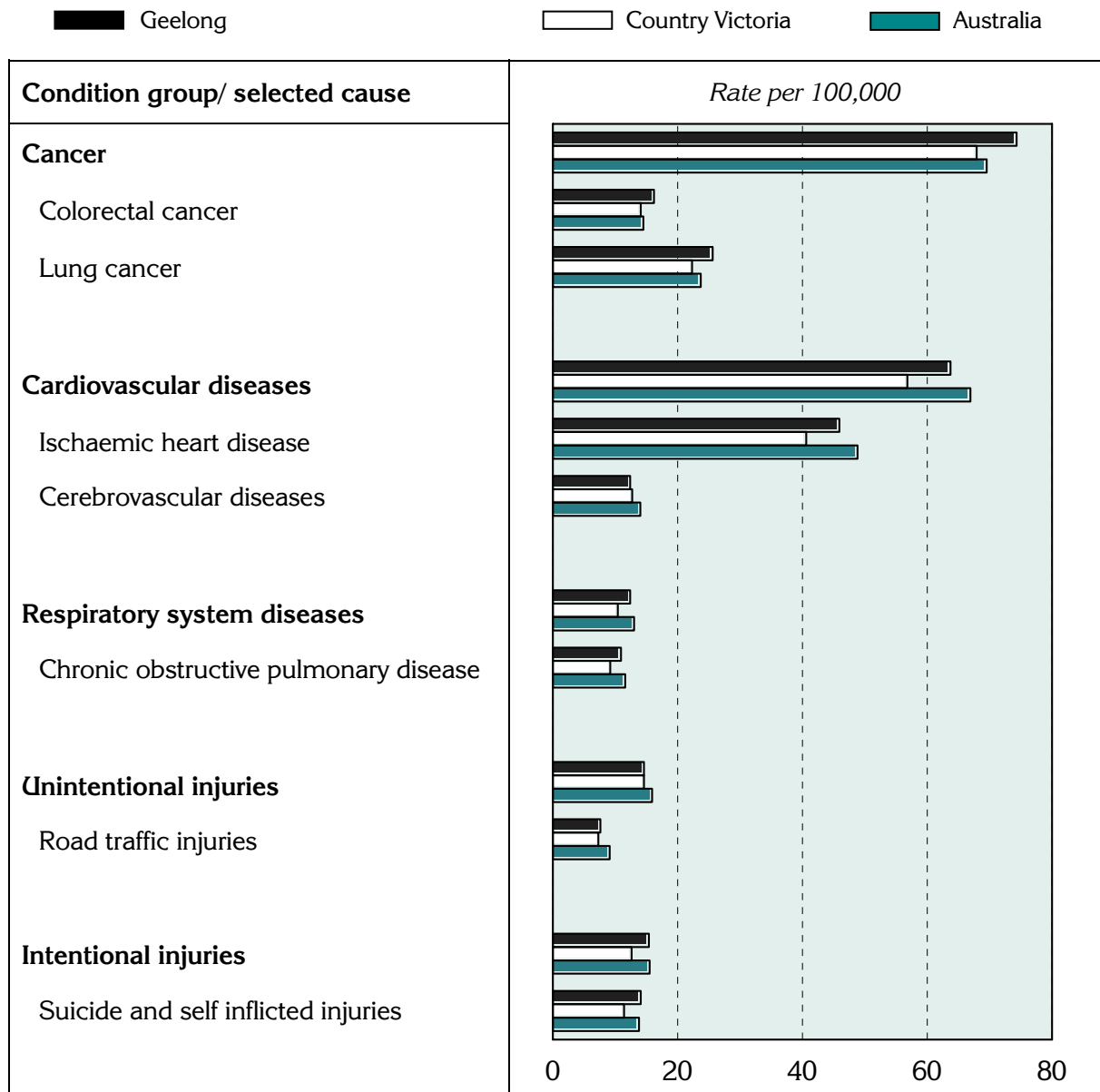
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Geelong DGP, country Victoria, Victoria and Australia, 1997 to 2001

Condition group/ selected cause	Geelong DGP		Country Victoria		Victoria		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Cancer	828	74.3	5,074	74.2	15,813	69.8	62,338	69.5
Colorectal cancer	181	16.2	1,133	16.5	3,351	14.8	13,008	14.5
Lung cancer	289	25.6	1,739	25.0	5,244	23.1	21,208	23.7
Cardiovascular diseases	724	63.7	4,666	67.0	13,612	60.0	59,945	66.9
Ischaemic heart disease	520	45.9	3,432	49.3	9,809	43.3	43,712	48.8
Cerebrovascular diseases	142	12.4	934	13.4	2,947	12.9	12,558	14.0
Respiratory system diseases	144	12.4	977	13.9	2,621	11.5	11,612	13.0
Chronic obstructive pulmonary disease	128	10.9	888	12.5	2,339	10.2	10,395	11.6
Unintentional injuries	144	14.6	1,142	19.3	3,536	15.9	14,224	15.9
Road traffic injuries	75	7.6	739	12.5	1,931	8.7	8,138	9.1
Intentional injuries	150	15.4	946	16.2	3,020	13.6	13,891	15.5
Suicide and self inflicted injuries	137	14.1	875	15.0	2,752	12.3	12,393	13.8

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

Rates in the Division were generally above or consistent with those in Australia – the exceptions were the lower rates for cardiovascular diseases – total, Ischaemic heart disease and Cerebrovascular diseases and unintentional injuries – total and road traffic injuries; and generally above those in country Victoria (Figure 10).

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



Notes on the data

Data sources and limitations

General

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

Data sources

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

Table 13: Data sources

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

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

Methods

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

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

Mapping

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

Statistical geography of the Geelong DGP

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

Statistical Local Areas (SLAs) are defined by the Australian Bureau of Statistics to produce areas for the presentation and analysis of data. In this Division, Local Government Areas (LGAs) have been split into SLAs. For example, the LGA of Surf Coast has two SLAs – East and West. All or part of these SLAs and the other SLAs in Table 14 comprise the Division.

Table 14: SLAs and population in Geelong 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
21755	Colac-Otway - South	3.8	161
22492	Golden Plains - South-East	87.9	8,085
22751	Bellarine - Inner	100.0	24,142
22752	Corio - Inner	100.0	56,725
22753	Geelong	100.0	11,889
22754	Geelong West	100.0	13,901
22755	Newtown	100.0	9,846
22756	South Barwon - Inner	100.0	49,258
22757	Greater Geelong - Part B	100.0	36,410
22758	Greater Geelong - Part C	60.3	1,641
26080	Queenscliffe	100.0	3,191
26493	Surf Coast - East	100.0	13,711
26495	Surf Coast - West	49.5	4,642

* Proportions are approximate and are known to be incorrect in some cases, due to errors in the concordance used to allocate CDs to form postal areas

Acknowledgements

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

Further developments and updates

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

PHIDU contact details

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

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