# Population health profile of the GP Coastal Division of General Practice

(formerly Perth Central Coast DGP):

### supplement

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**PHIDU** 

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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 GP Coastal Division of General Practice (formerly Perth Central Coast DGP): supplement

This profile is a supplement to the *Population health profile of the Perth Central Coast Division of General Practice* (now known as GP Coastal DGP), dated November 2005, available from <a href="https://www.publichealth.gov.au">www.publichealth.gov.au</a>. This supplement includes an update of the population of the GP Coastal 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:

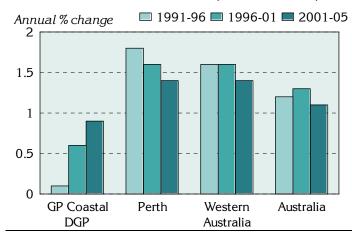
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions
- 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 GP Coastal Division had an Estimated Resident Population of 129,483 at 30 June 2005.

Figure 1: Annual population change, GP Coastal DGP, Perth, Western Australia and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005



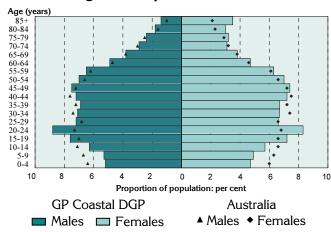
Over the five years from 1991 to 1996, the Division's population increased by 0.1% on average each year, much lower than in Perth (1.8%) and Western Australia (1.6%). From 1996 to 2001, although higher, the annual percentage increase in the Division (0.6%) was still well below the increases for Perth and Western Australia (both 1.6%). The Division's growth rate from 2001 to 2004 (0.9%) was again below the annual increases for Perth and Western Australia (both 1.4%).

Table 1: Population by age, GP Coastal DGP and Australia, 2005

Age group	GP Coast	al DGP	Australia
(years)	No.	%	No. %
0-14	20,853	16.1	3,978,221 19.6
15-24	20,656	16.0	2,819,834 13.9
25-44	35,987	27.8	5,878,107 28.9
45-64	33,201	25.6	4,984,446 24.5
65-74	8,810	6.8	1,398,831 6.9
75-84	6,777	5.2	954,143 4.7
85+	3,198	2.5	315,027 1.5
Total	129,483	100.0	20,328,609 100.0

As shown in the accompanying table and the age-sex pyramid (Figure 2), the GP Coastal DGP had relatively fewer children than in Australia as a whole, with 16.1% at ages 0 to 14 years (compared to 19.6% for Australia) (Table 1). Conversely, the proportion of young people aged 15 to 24 years was higher (16.0%, compared to 13.9%). The 75 to 84 years and 85 years and over age groups also had higher proportions compared to Australia.

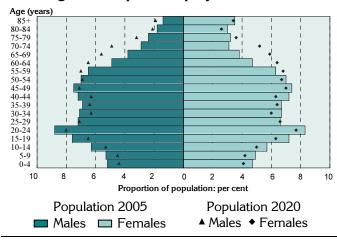
Figure 2: Population in GP Coastal DGP and Australia, by age and sex, 2005



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

- at younger ages relatively fewer children aged 0 to 14 years and relatively more young people aged 15 to 24 years;
- from 30 to 44 years relatively fewer males and females; and
- at older ages relatively more males at ages
  75 years and over, and females from 75 years of age.

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



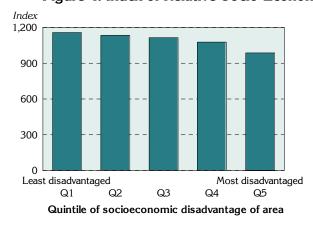
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages relatively fewer children, young people and young adults, aged 0 to 24 years;
- from 30 to 54 years relatively fewer females and males (to 49 years); and
- from 55 years onwards relatively more males and females (other than in the 85+ age group).

### Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Perth Central Coast Division of General Practice* (now known as GP Coastal DGP), dated November 2005, available from <a href="www.publichealth.gov.au">www.publichealth.gov.au</a>, for other socio-demographic indicators.

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



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

The GP Coastal DGP has an index score of 1094, well above the score for Australia of 1000: this score varies across the Division, from 986 (just below the Australian average) in the 'most disadvantaged' areas to 1156 in the least disadvantaged areas.

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

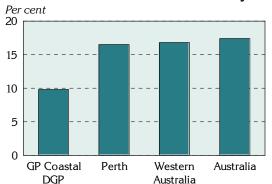
A new indicator, produced for the first time at the 2001 ABS Census, shows the number of jobless families with children under 15 years of age. There were markedly fewer jobless families in the GP Coastal DGP (9.8%), compared to Perth as a whole (16.5%) (Figure 5, Table 2).

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 (48.4%), compared to Perth (42.7%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, GP Coastal DGP, Perth, Western Australia and Australia, 2001

### Jobless families with children under 15 years old



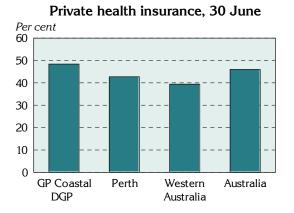


Table 2: Socio-demographic indicators, GP Coastal DGP, Perth, Western Australia and Australia, 2001

Indicator	GP Coastal DGP		Pertl	Perth		stralia	Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	1,043	9.8	24,254	16.5	34,396	16.8	357,563	17.4
Private health insurance (30 June)	58,932	48.4	559,922	42.7	708,743	39.4	8,671,106	46.0

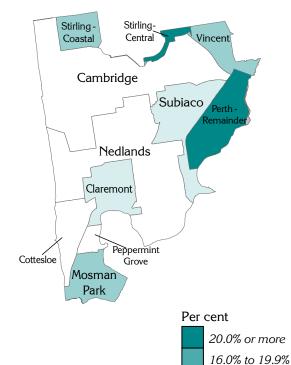
Details of the distribution of jobless families (Map 1) and of the population covered by private health insurance (Map 2) are shown by Statistical Local Area (SLA) in Maps 1 and 2, respectively.

12.0% to 15.9%

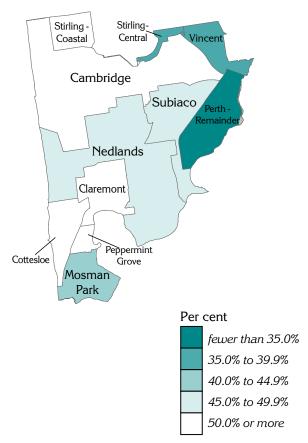
8.0% to 11.9%

fewer than 8.0%

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



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



### GP services to residents of the GP Coastal 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.

Three quarters (75.4%) of all unreferred attendances to residents of GP Coastal DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 394,926 GP unreferred attendances (Table 3). A further 9.6% of unreferred attendances to residents were provided by GPs with a provider number in Osborne DGP, with 7.5% provided by GPs in Perth & Hills DGP.

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

Division		Unreferred	Unreferred attendances			
Number	Name	No.	<b>%</b> <sup>3</sup>			
602	GP Coastal DGP	394,926	75.4			
603	Osborne DGP	50,232	9.6			
601	Perth & Hills DGP	39,061	7.5			
605	Fremantle Region DGP	15,069	2.9			
604	Canning DGP	10,015	1.9			
Other		14,500	2.8			
Total		523,803	100.0			

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

Only just over half (54.5%)of unreferred attendances provided by GPs with a provider number in GP Coastal DGP were to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 17.1% of unreferred attendances by GPs in the Division were to people living in Osborne DGP, and 10.7% to people living in Perth and Hills DGP.

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

Division		Unreferred a	ttendances
Number	Name	No.	$% ^{3}$
602	GP Coastal DGP	394,926	54.5
603	Osborne DGP	124,269	17.1
601	Perth & Hills DGP	77,808	10.7
605	Fremantle Regional DGP	48,224	6.6
604	Canning DGP	44,155	6.1
607	GP Down South DGP	6,338	0.9
Other		29,559	4.1
Total		725,299	100.0

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

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

<sup>&</sup>lt;sup>3</sup> Proportion of all unreferred attendances of patients with an address in Division 602 by Division in which attendance occurred

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

<sup>&</sup>lt;sup>3</sup> Proportion of all unreferred attendances to GPs with a provider number in Division 602 by Division of patient address

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

Please refer to the earlier *Population health profile of the Perth Central Coast Division of General Practice* (now known as GP Coastal DGP), dated November 2005, available from <a href="https://www.publichealth.gov.au">www.publichealth.gov.au</a>, for the separate prevalence estimates of chronic disease; measures of self-reported health and risk factors. The process by which the estimates have been made, and details of their limitations, are also described in the 'Notes on the data' section of this earlier profile.

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

It is estimated that there were markedly fewer people in GP Coastal DGP who had asthma and were smokers, compared to Perth or Australia as a whole (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were lower. Similarly, there were fewer people in GP Coastal DGP who had type 2 diabetes and were overweight/ obese, compared to Perth or Australia.

Figure 6: Estimates of selected chronic diseases and risk factors, GP Coastal DGP, Perth and Australia, 2001



Table 5: Estimates of selected chronic diseases and risk factors, GP Coastal DGP, Perth, Western Australia and Australia, 2001

Variable	GP Coastal DGP		Per	Perth		Western Australia		alia
	No. <sup>1</sup>	Rate <sup>2</sup>	No.1	Rate <sup>2</sup>	No.1	Rate <sup>2</sup>	No.1	Rate <sup>1</sup>
Had asthma & smoked <sup>3</sup>	1,957	15.3	27,686	19.8	38,731	21.1	397,734	20.8
Had type 2 diabetes & were overweight/ obese <sup>4</sup>	1,752	13.9	19,421	15.6	25,290	15.0	283,176	15.2

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

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

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

<sup>&</sup>lt;sup>4</sup> Population aged 15 years and over

### Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions

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

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

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

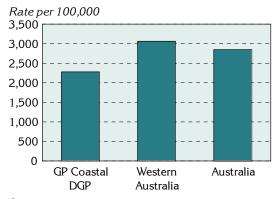
In 2001 to 2002, the 3,055 admissions from ambulatory care sensitive (ACS) conditions accounted for 6.9% of all admissions in the GP Coastal DGP (Table 6, Figure 7), markedly lower than in Western Australia (8.8) and Australia (8.7%).

Table 6: Avoidable<sup>1</sup> and unavoidable hospitalisations, GP Coastal DGP, Western Australia, and Australia, 2001/02

Category	GP Coastal DGP			West	tern Austral	ia	Australia			
	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	
Avoidable <sup>1</sup>	3,055	2,278.4	6.9	55,102	3,062.4	8.8	552,786	2,847.5	8.7	
Unavoidable	41,244	31,326.9	93.1	568,402	31,010.0	91.2	5,818,199	29,970.7	91.3	
Total	44,300	33,593.6	100.0	623,504	34,070.5	100.0	6,370,985	32,818.2	100.0	

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

Figure 7: Avoidable hospitalisations<sup>1</sup>, GP Coastal DGP, Western Australia and Australia, 2001/02



The rate of avoidable hospitalisations in GP Coastal DGP is markedly lower, a rate of 2,278.4 admissions per 100,000 population, compared to both Western Australia (a rate of 3,062.4) and Australia (2,847.5).

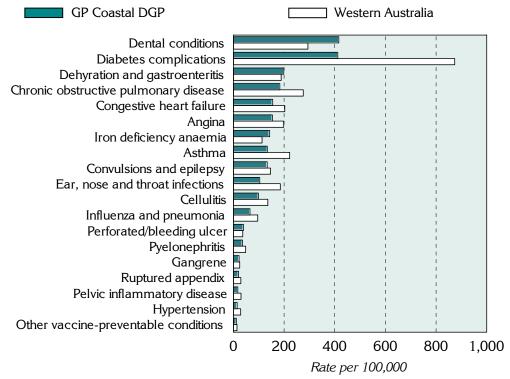
Dental conditions, diabetes complications, dehydration and gastroenteritis, and chronic obstructive pulmonary disease, were the four conditions with the highest rates of avoidable hospitalisations in the GP Coastal DGP (Figure 8, Table 7).

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

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

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

Figure 8: Avoidable hospitalisations<sup>1</sup> by condition, GP Coastal DGP and Western Australia, 2001/02



<sup>&</sup>lt;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, GP Coastal DGP, Western Australia and Australia, 2001/02

Sub-category/ condition	GP Coast	tal DGP	Western A	Australia	Austr	alia
	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>
Vaccine-preventable	101	77.3	2,018	110.7	16,573	85.4
Influenza and pneumonia	87	65.7	1,743	96.2	13,021	67.1
Other vaccine preventable	14	11.6	275	14.5	3,552	18.3
Chronic <sup>3</sup>	1,677	1,196.1	33,628	1,915.6	352,545	1,816
Diabetes complications	567	411.9	15,323	873.6	141,345	728.1
Iron deficiency anaemia	204	143.1	2,009	113.4	16,451	84.7
Hypertension	22	15.1	510	29.0	6,354	32.7
Congestive heart failure	251	155.2	3,400	202.9	42,447	218.6
Angina	221	153.9	3,452	198.5	49,963	257.4
Chronic obstructive pulmonary disease	258	183.2	4,707	275.9	54,853	282.6
Asthma	154	133.7	4,227	222.3	41,009	211.3
Acute	1,351	1,088.0	21,021	1,121.4	200,913	1,035
Dehydration and gastroenteritis	273	198.8	3,443	188.7	37,766	194.5
Convulsions and epilepsy	161	133.5	2,779	146.7	31,137	160.4
Ear, nose and throat infections	114	104.0	3,550	185.3	32,075	165.2
Dental conditions	481	416.1	5,623	294.3	43,667	224.9
Perforated/bleeding ulcer	59	39.7	645	37.1	5,795	29.9
Ruptured appendix	26	20.7	566	29.4	3,866	19.9
Pyelonephritis	47	36.2	914	48.7	7,386	38.0
Pelvic inflammatory disease	22	17.5	577	30.2	6,547	33.7
Cellulitis	135	98.8	2,484	135.9	28,204	145.3
Gangrene	33	22.7	440	25.1	4,470	23.0
Total avoidable hospitalisations <sup>4</sup>	3,055	2,278.4	55,102	3,062.4	552,786	2,847.5

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

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

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

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

### Avoidable mortality

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

For information on the avoidable and amenable mortality conditions and ICD codes included in the analysis in this section, please refer to the *Australian and New Zealand Atlas of Avoidable Mortality*, available from <a href="https://www.publichealth.gov.au">www.publichealth.gov.au</a>.

Just over two thirds (67.4%) of all deaths in GP Coastal DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, lower than the proportion for Perth (70.6%) (Table 8). Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 27.7% of all deaths at ages 0 to 74 years in GP Coastal DGP, compared to 28.1% in Perth.

Table 8: Avoidable and unavoidable mortality (0 to 74 years) by area, GP Coastal DGP, Perth, Western Australia and Australia, 1997 to 2001

Mortality category	GP Coastal DGP		Per	th	Western A	Australia	Austr	alia
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable	1,005	172.3	11,480	189.1	16,602	201.0	189,845	211.8
% of total	67.4	••	70.6		71.2	••	71.5	
(Amenable)	(412)	(71.0)	(4,574)	(75.9)	(6,517)	(79.6)	(76,249)	(85.1)
(% of total)	(27.7)	()	(28.1)	()	(28.0)	()	(28.7)	()
Unavoidable	485	83.6	4,783	79.3	6,708	81.6	75,582	84.3
% of total	32.6	••	29.4	••	28.8	••	28.5	••
Total mortality	1,490	255.8	16,263	268.4	23,310	282.6	265,427	296.1
%	100.0		100.0		100.0		100.0	

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

Rates of avoidable mortality were higher for males than for females in each of the comparator areas. GP Coastal DGP's rate of avoidable mortality for males was 224.3 deaths per 100,000 males, higher than the rate of 119.6 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 77.9, compared to 63.9 for females, a rate ratio of 1.22 (Figure 9, Table 9).

Figure 9: Avoidable and amenable mortality by sex (0 to 74 years), GP Coastal DGP, Perth, Western Australia and Australia, 1997 to 2001

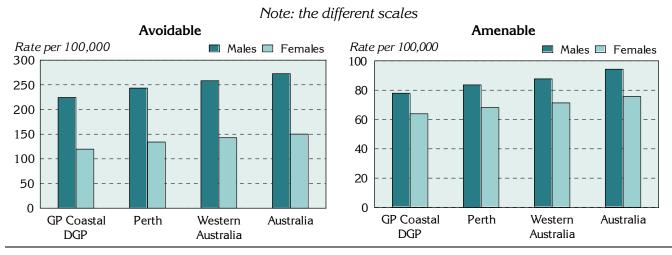


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, GP Coastal DGP, Perth, Western Australia and Australia, 1997 to 2001

Mortality category	GP Coas	tal DGP	Per	th	Western A	Australia	Austr	alia
and sex	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable								
Males	648	224.3	7,424	243.4	10,850	258.3	123,026	272.6
Females	357	119.6	4,056	134.1	5,752	142.9	66,819	150.1
Total	1,005	172.3	11,480	189.1	16,602	201.0	189,845	211.8
Rate ratio-M:F <sup>2</sup>	••	1.88**	••	1.82**	••	1.81**		1.82**
Amenable								
Males	222	77.9	2,516	83.6	3,646	87.7	42,568	94.3
Females	189	63.9	2,058	68.1	2,871	71.3	33,681	75.7
Total	412	71.0	4,574	75.9	6,517	79.6	76,249	85.1
Rate ratio-M:F <sup>2</sup>		1.22*		1.23**		1.23**		1.25**

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

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

The numbers of YLL for GP Coastal DGP, Perth, Western Australia 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 68.2% of total YLL (0 to 74 years) for GP Coastal DGP, lower than the 71.0% for Perth. The proportion of YLL from amenable mortality of 26.7% for GP Coastal DGP was lower than the 27.2% for Perth.

Table 10: Years of life lost from avoidable mortality (0 to 74 years), GP Coastal DGP, Perth, Western Australia and Australia, 1997 to 2001

Mortality category	GP Coastal DGP		Pert	Perth Western		ustralia	Australia	
	No.	% of	No.	% of	No.	% of	No.	% of
		total		total		total		total
Avoidable	17,541	68.2	204,435	71.0	300,008	71.7	3,327,375	71.9
(Amenable)	(6,866)	(26.7)	(78,352)	(27.2)	(113,010)	(27.0)	(1,298,430)	(28.0)
Unavoidable	8,193	31.8	83,597	29.0	118,618	28.3	1,303,289	28.1
Total	25,734	100.0	288,033	100.0	418,625	100.0	4,630,664	100.0

<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.

<sup>&</sup>lt;sup>2</sup> Rate ratio (M:F) is the ratio of male to female rates; rate ratios differing significantly from 1.0 are shown with p < 0.05; \*\* p < 0.01

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 1,133.6 deaths per 100,000 population in the GP Coastal 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 230.5 in the GP Coastal Division.

Table 11: Avoidable and amenable mortality by age, GP Coastal DGP, Perth, Western Australia and Australia, 1997 to 2001

Mortality category	GP Coas	tal DGP	Per	th	Western A	Australia	Aust	ralia
and age (years)	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable								
0-14	18	18.8	352	25.9	548	27.9	5,669	28.8
15-24	43	44.2	517	49.7	826	60.7	7,045	52.8
25-44	140	77.2	1,596	75.9	2,479	85.3	24,356	83.9
45-64	328	230.5	3,828	257.4	5,546	275.2	64,282	304.9
65-74	476	1,133.6	5,187	1254.8	7,203	1282.7	88,493	1,358.1
Total	1,005	172.3	11,480	189.1	16,602	201.0	189,845	211.8
Amenable								
0-24	19	11.1	301	13.0	454	13.8	5,083	15.4
25-44	33	18.2	371	17.6	594	20.5	5,946	20.5
45-64	151	106.0	1,675	112.7	2,381	118.5	27,464	130.3
65-74	209	494.9	2,228	538.5	3,088	550.9	37,756	579.4
Total	412	71.0	4,574	75.9	6,517	79.6	76,249	85.1

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

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

The highest rates of avoidable mortality for the selected major condition groups in the GP Coastal DGP were for cancer, with a rate of 60.4 deaths per 100,000 population, and cardiovascular diseases, 49.8 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 35.7 per 100,000 population and 17.0 per 100,000, respectively.

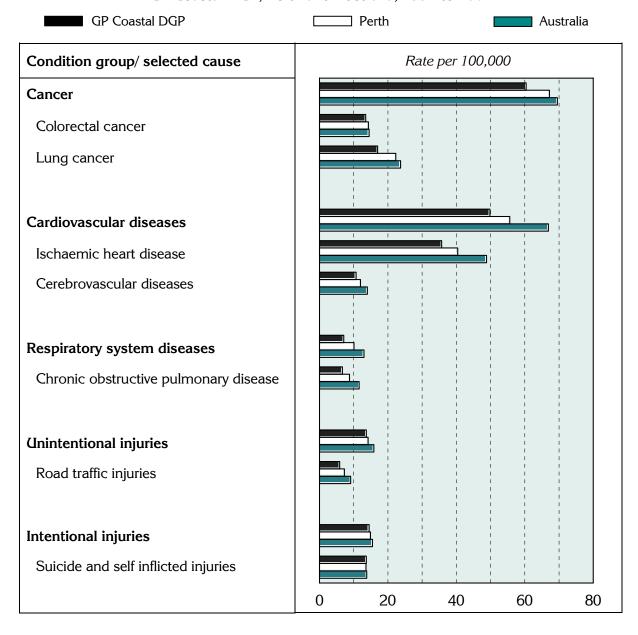
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, GP Coastal DGP, Perth, Western Australia and Australia, 1997 to 2001

Condition group/	GP Coas	tal DGP	Per	th	Western A	Australia	Austr	alia
selected cause	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Cancer	355	60.4	4,043	67.2	5,531	67.8	62,338	69.5
Colorectal cancer	79	13.5	854	14.3	1,189	14.6	13,008	14.5
Lung cancer	100	17.0	1,327	22.3	1,842	22.8	21,208	23.7
Cardiovascular diseases	291	49.8	3,294	55.6	4,750	58.9	59,945	66.9
Ischaemic heart disease	209	35.7	2,394	40.4	3,469	42.9	43,712	48.8
Cerebrovascular diseases	63	10.7	711	12.0	1,000	12.5	12,558	14.0
Respiratory system diseases	41	7.1	593	10.1	871	11.0	11,612	13.0
Chronic obstructive pulmonary disease	39	6.7	510	8.8	748	9.5	10,395	11.6
Unintentional injuries	81	13.7	923	14.2	1,549	17.5	14,224	15.9
Road traffic injuries	35	5.9	479	7.3	918	10.3	8,138	9.1
Intentional injuries	86	14.5	968	14.9	1,412	15.9	13,891	15.5
Suicide and self inflicted injuries	81	13.7	884	13.6	1,270	14.3	12,393	13.8

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

Rates in the Division were below those for Perth and Australia for all condition groups and selected causes, although the Division's rates for colorectal cancer and the unintentional injury categories were only marginally lower (Figure 10).

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



### Notes on the data

### Data sources and limitations

#### General

References to 'Perth' relate to the Perth Statistical Division.

#### **Data sources**

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

Table 13: Data sources

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

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

### Methods

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

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

#### **Mapping**

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

### Statistical geography of the GP Coastal DGP

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

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 Stirling has two SLAs – Central (4% of which is estimated to be in this Division) and Coastal (29%). These SLAs and all or parts of the other SLAs listed in Table 14 comprise the Division.

Table 14: SLAs and population in GP Coastal DGP, 2005 on 2001 boundaries

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
51310	Cambridge	100.0	24,686
51750	Claremont	100.0	9,166
52170	Cottesloe	100.0	7,589
55740	Mosman Park	100.0	8,637
56580	Nedlands	100.0	21,934
56930	Peppermint Grove	100.0	1,667
57082	Perth - Remainder	33.1	3,457
57914	Stirling - Central	3.5	3,545
57915	Stirling - Coastal	38.4	24,735
57980	Subiaco	100.0	16,489
58570	Vincent	28.3	7,577

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

### Acknowledgements

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

### Further developments and updates

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

### PHIDU contact details

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

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