

Population health profile of the Fremantle Regional Division of General Practice: supplement

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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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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

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

Population health profile

of the Fremantle Regional Division of General Practice: supplement

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

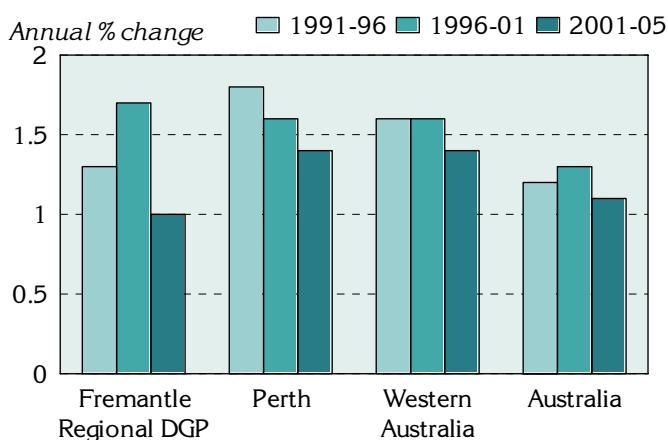
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive 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 Fremantle Regional Division had an Estimated Resident Population of 243,981 at 30 June 2005.

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



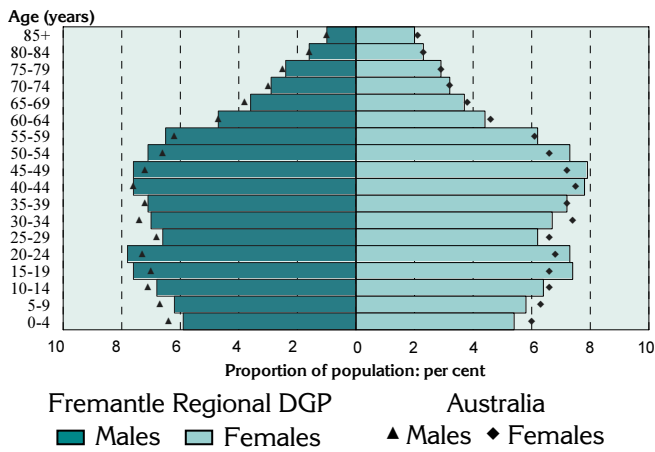
Over the five years from 1991 to 1996, the Division's population increased by 1.3% on average each year, lower than the increases for Perth (1.8%) and Western Australia (1.6%). From 1996 to 2001, the annual percentage increase in the Division was 1.7%, marginally higher than the growth in Perth and Western Australia (both 1.6%). The Division's growth rate of 1.0% from 2001 to 2005 was lower than the annual increases for Perth and Western Australia (both 1.4%).

Table 1: Population by age, Fremantle Regional DGP and Australia, 2005

Age group (years)	Fremantle Regional DGP		Australia	
	No.	%	No.	%
0-14	44,397	18.2	3,978,221	19.6
15-24	36,772	15.1	2,819,834	13.9
25-44	68,464	28.1	5,878,107	28.9
45-64	62,985	25.8	4,984,446	24.5
65-74	16,431	6.7	1,398,831	6.9
75-84	11,216	4.6	954,143	4.7
85+	3,715	1.5	315,027	1.5
Total	243,981	100.0	20,328,609	100.0

As shown in the accompanying table and the age-sex pyramid (Figure 2), the Fremantle Regional DGP had slightly fewer children than Australia as a whole, with 18.2% at ages 0 to 14 years, but more young people aged 15 to 24 years (15.1%) (compared to 19.6% and 13.9% for Australia) (Table 1). The proportion of the Division's population aged 45 to 64 years (25.8%) was slightly higher than for Australia (24.5%).

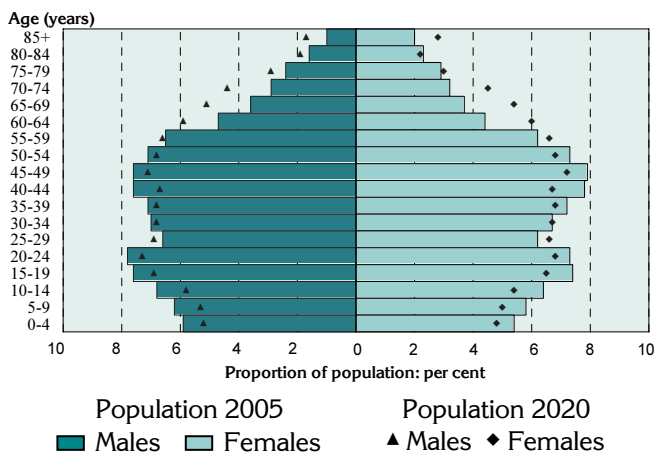
Figure 2: Population in Fremantle Regional DGP and Australia, by age and sex, 2005



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

- at younger ages – relatively fewer children aged 0 to 14 years;
- from 15 to 24 years – relatively more young people;
- from 25 to 39 years – relatively fewer males, and females (to 34 years); and
- from 40 years of age – relatively more males aged 45 to 59 years and females aged 40 to 59 years.

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



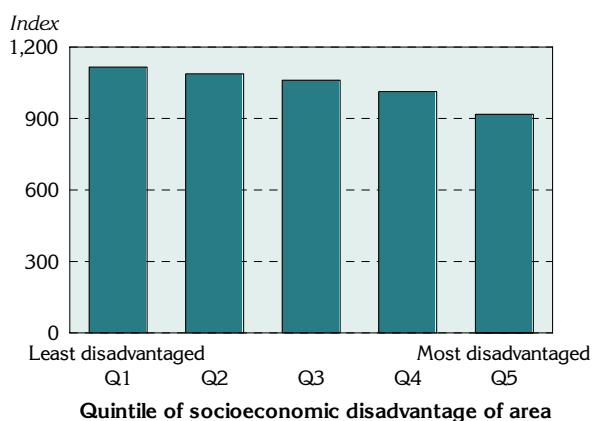
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- 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; and
- from 55 years onwards – relatively more males and females, with the exception of 80 to 84 year old females.

Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Fremantle Regional 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, Fremantle Regional DGP, 2001



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

The Fremantle Regional DGP has an index score of 1037, above the score for Australia of 1000: this score varies across the Division, from 917 in the most disadvantaged areas to 1115 in the least disadvantaged areas.

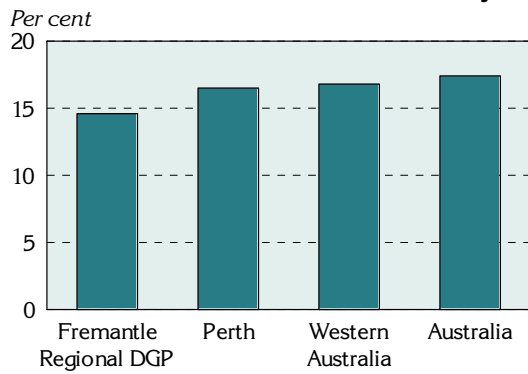
Note: each 'quintile' comprises approximately 20% of the population of the Division.

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 notably fewer jobless families in the Fremantle Regional DGP (14.6%), 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 (49.6%), compared to Perth (42.7%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, Fremantle Regional DGP, Perth, Western Australia and Australia, 2001

Jobless families with children under 15 years old



Private health insurance, 30 June

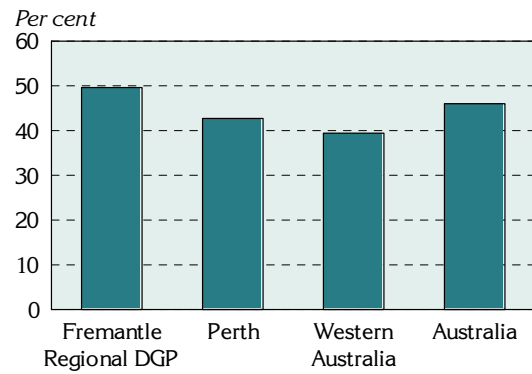
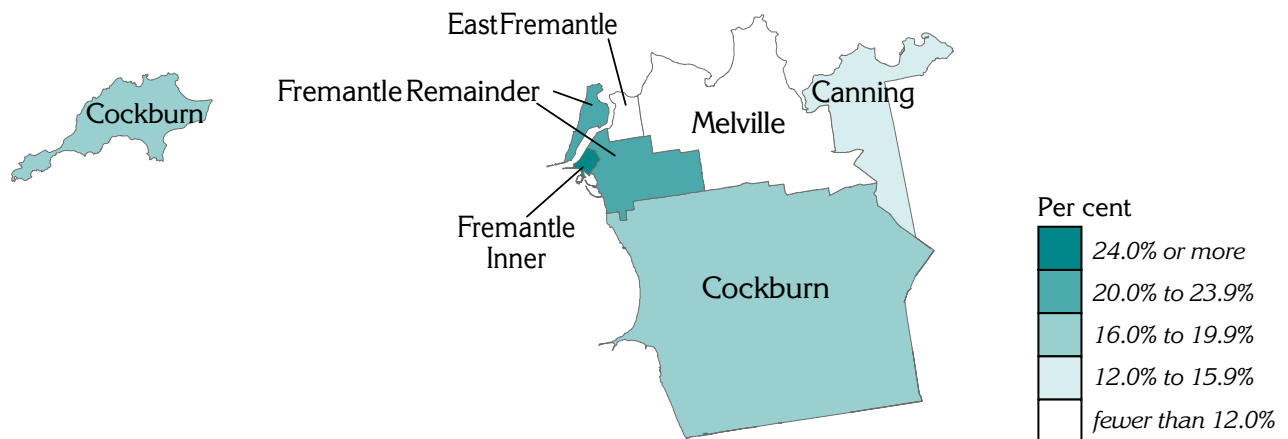


Table 2: Socio-demographic indicators, Fremantle Regional DGP, Perth, Western Australia and Australia, 2001

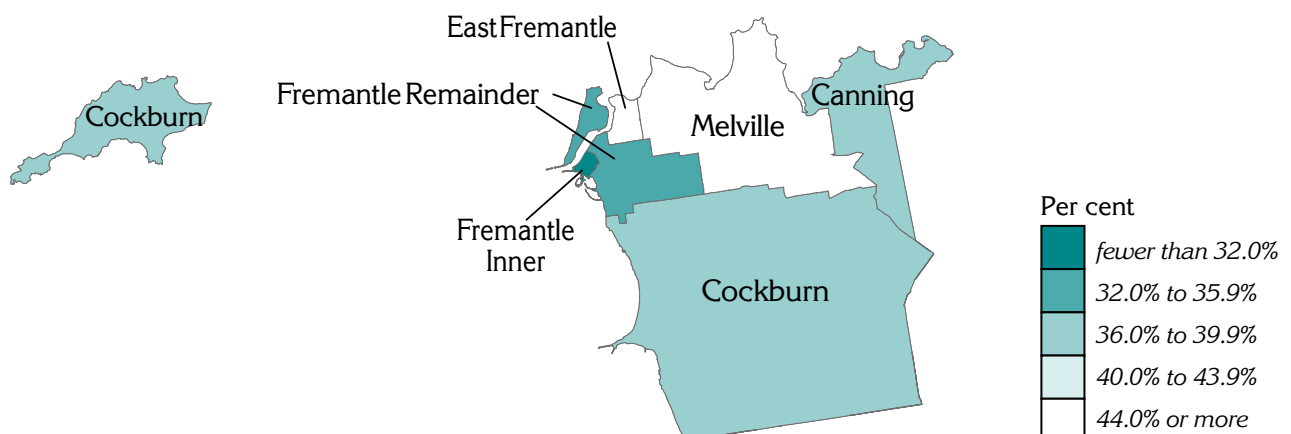
Indicator	Fremantle Regional DGP		Perth		Western Australia		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	3,569	14.6	24,254	16.5	34,396	16.8	357,563	17.4
Private health insurance (30 June)	109,559	49.6	559,922	42.7	708,743	39.4	8,671,106	46.0

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.

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



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



GP services to residents of the Fremantle Regional 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.

Four fifths (80.0%) of all unreferred attendances to residents of Fremantle Regional DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 848,018 GP unreferred attendances (Table 3). A further 9.1% of unreferred attendances to residents were provided by GPs with a provider number in Canning DGP, with 4.5% provided by GPs in GP Coastal DGP.

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

Division		Unreferred attendances	
Number	Name	No.	% ³
605	Fremantle Regional DGP	848,018	80.0
604	Canning DGP	96,652	9.1
602	GP Coastal DGP	48,224	4.5
601	Perth and Hills DGP	29,493	2.8
603	Osborne DGP	10,328	1.0
606	Rockingham Kwinana	7,268	0.7
Other	..	19,959	1.9
Total	..	1,059,942	100.0

¹ Based on address in Medicare records

² Division of GP based on provider number

³ Proportion of all unreferred attendances of patients with an address in Division 605 by Division in which attendance occurred

Close to four fifths (79.0%) of unreferred attendances provided by GPs with a provider number in Fremantle Regional DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 11.0% of unreferred attendances by GPs in the Division were to residents of Canning DGP, and 3.0% to people living in GP Coastal DGP.

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

Division		Unreferred attendances	
Number	Name	No.	% ³
605	Fremantle Regional DGP	848,018	79.0
604	Canning DGP	118,297	11.0
606	Rockingham Kwinana DGP	32,066	3.0
601	Perth and Hills DGP	15,301	1.4
602	GP Coastal DGP	15,069	1.4
603	Osborne DGP	10,547	1.0
Other	..	33,991	3.2
Total	..	1,073,289	100.0

¹ Division of GP based on provider number

² Based on address in Medicare records

³ Proportion of all unreferred attendances to GPs with a provider number in Division 605 by Division of patient address

Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier *Population health profile of the Fremantle Regional 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 Fremantle Regional 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. The rate of people in Fremantle Regional DGP who had type 2 diabetes and were overweight/ obese was consistent with the rates in Perth and Australia.

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

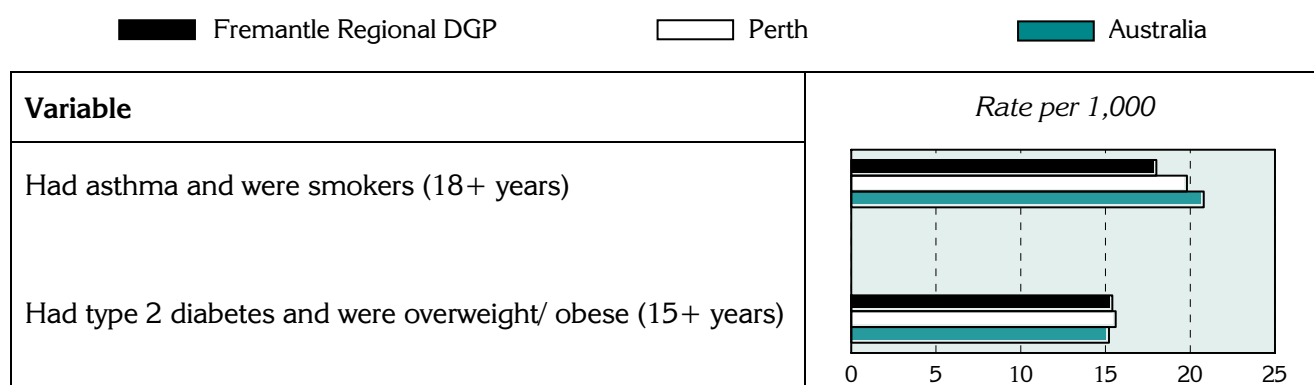


Table 5: Estimates of selected chronic diseases and risk factors, Fremantle Regional DGP, Perth, Western Australia and Australia, 2001

Variable	Fremantle Regional DGP		Perth		Western Australia		Australia	
	No. ¹	Rate ²	No. ¹	Rate ²	No. ¹	Rate ²	No. ¹	Rate ¹
Had asthma & smoked ³	4,121	18.0	27,686	19.8	38,731	21.1	397,734	20.8
Had type 2 diabetes & were overweight/ obese ⁴	3,308	15.4	19,421	15.6	25,290	15.0	283,176	15.2

¹ No. is a weighted estimate of the number of people in Fremantle Regional 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 5,115 admissions from ambulatory care sensitive (ACS) conditions accounted for 7.0% of all admissions in the Fremantle Regional DGP (Table 6, Figure 7), markedly below the levels in Western Australia (8.8) and Australia (8.7%).

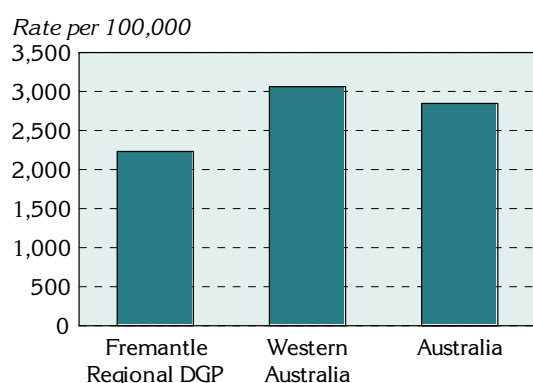
Table 6: Avoidable¹ and unavoidable hospitalisations, Fremantle Regional DGP, Western Australia, and Australia, 2001/02

Category	Fremantle Regional DGP			Western Australia			Australia		
	No.	Rate ²	%	No.	Rate ²	%	No.	Rate ²	%
Avoidable ¹	5,115	2,232.8	7.0	55,102	3,062.4	8.8	552,786	2,847.5	8.7
Unavoidable	67,649	29,090.6	93.0	568,402	31,010.0	91.2	5,818,199	29,970.7	91.3
Total	72,765	31,330.6	100.0	623,504	34,070.5	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, Fremantle Regional DGP, Western Australia and Australia, 2001/02



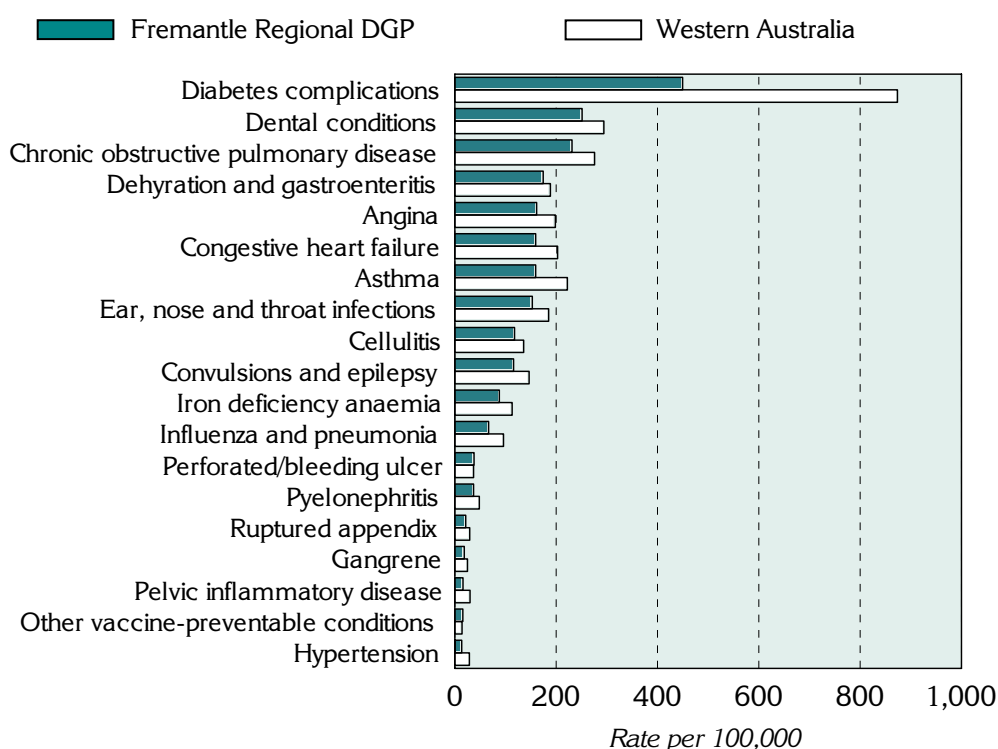
The rate of avoidable hospitalisations in Fremantle Regional DGP is markedly lower, a rate of 2,232.8 admissions per 100,000 population, compared to both Western Australia (a rate of 3,062.4) and Australia (2,847.5).

¹ Admissions resulting from ACS conditions

Diabetes complications, dental conditions, and chronic obstructive pulmonary disease, were the three conditions with the highest rates of avoidable hospitalisations in the Fremantle Regional 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 hospitalisations¹ by condition, Fremantle Regional DGP and Western Australia, 2001/02



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

Table 7: Avoidable hospitalisations¹ by condition, Fremantle Regional DGP, Western Australia and Australia, 2001/02

Sub-category/ condition	Fremantle Regional DGP		Western Australia		Australia	
	No.	Rate ²	No.	Rate ²	No.	Rate ²
Vaccine-preventable	190	83.1	2,018	110.7	16,573	85.4
Influenza and pneumonia	153	67.0	1,743	96.2	13,021	67.1
Other vaccine preventable	37	16.1	275	14.5	3,552	18.3
Chronic³	2,888	1,263.9	33,628	1,915.6	352,545	1,816
Diabetes complications	1,033	449.6	15,323	873.6	141,345	728.1
Iron deficiency anaemia	206	88.1	2,009	113.4	16,451	84.7
Hypertension	32	13.9	510	29.0	6,354	32.7
Congestive heart failure	360	159.6	3,400	202.9	42,447	218.6
Angina	371	161.7	3,452	198.5	49,963	257.4
Chronic obstructive pulmonary disease	524	231.4	4,707	275.9	54,853	282.6
Asthma	362	159.6	4,227	222.3	41,009	211.3
Acute	2,171	945.5	21,021	1,121.4	200,913	1,035
Dehydration and gastroenteritis	408	174.6	3,443	188.7	37,766	194.5
Convulsions and epilepsy	266	116.2	2,779	146.7	31,137	160.4
Ear, nose and throat infections	342	153.0	3,550	185.3	32,075	165.2
Dental conditions	573	251.3	5,623	294.3	43,667	224.9
Perforated/bleeding ulcer	87	38.1	645	37.1	5,795	29.9
Ruptured appendix	52	21.8	566	29.4	3,866	19.9
Pyelonephritis	88	37.2	914	48.7	7,386	38.0
Pelvic inflammatory disease	39	16.3	577	30.2	6,547	33.7
Cellulitis	273	118.1	2,484	135.9	28,204	145.3
Gangrene	43	18.9	440	25.1	4,470	23.0
Total avoidable hospitalisations⁴	5,115	2,232.8	55,102	3,062.4	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 (71.0%) of all deaths in Fremantle Regional DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, consistent with the proportion for Perth (70.6%) (Table 8). Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 29.1% of all deaths at ages 0 to 74 years in Fremantle Regional DGP, compared to 28.1% in Perth.

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

Mortality category	Fremantle Regional DGP		Perth		Western Australia		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable	1,883	178.2	11,480	189.1	16,602	201.0	189,845	211.8
% of total	71.0	..	70.6	..	71.2	..	71.5	..
(Amenable)	(772)	(73.3)	(4,574)	(75.9)	(6,517)	(79.6)	(76,249)	(85.1)
(% of total)	(29.1)	(..)	(28.1)	(..)	(28.0)	(..)	(28.7)	(..)
Unavoidable	768	72.9	4,783	79.3	6,708	81.6	75,582	84.3
% of total	29.0	..	29.4	..	28.8	..	28.5	..
Total mortality	2,652	251.1	16,263	268.4	23,310	282.6	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. Fremantle Regional DGP's rate of avoidable mortality for males was 229.0 deaths per 100,000 males, higher than the rate of 126.7 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 82.4, compared to 64.0, for females, a rate ratio of 1.29 (Figure 9, Table 9).

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

Note: the different scales

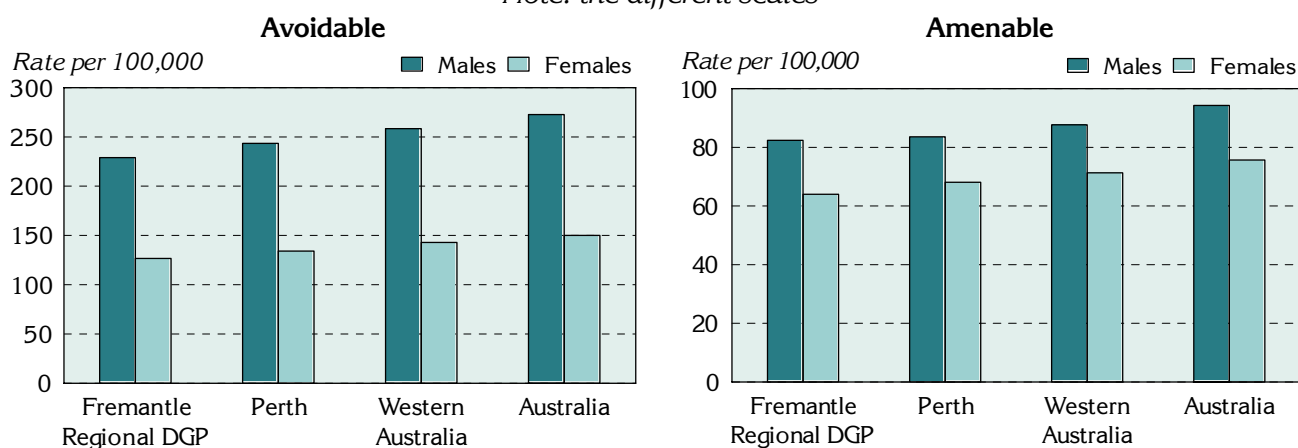


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, Fremantle Regional DGP, Perth, Western Australia and Australia, 1997 to 2001

Mortality category and sex	Fremantle Regional DGP		Perth		Western Australia		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable								
Males	1,209	229.0	7,424	243.4	10,850	258.3	123,026	272.6
Females	674	126.7	4,056	134.1	5,752	142.9	66,819	150.1
Total	1,883	178.2	11,480	189.1	16,602	201.0	189,845	211.8
Rate ratio-M:F²	..	1.81**	..	1.82**	..	1.81**	..	1.82**
Amenable								
Males	432	82.4	2,516	83.6	3,646	87.7	42,568	94.3
Females	340	64.0	2,058	68.1	2,871	71.3	33,681	75.7
Total	772	73.3	4,574	75.9	6,517	79.6	76,249	85.1
Rate ratio-M:F²	..	1.29**	..	1.23**	..	1.23**	..	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 Fremantle Regional 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 71.5% of total YLL (0 to 74 years) for Fremantle Regional DGP, consistent with the 71.0% for Perth. The proportion of YLL from amenable mortality of 28.2% for Fremantle Regional DGP was marginally higher than the 27.2% for Perth.

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

Mortality category	Fremantle Regional DGP		Perth		Western Australia		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	32,725	71.5	204,435	71.0	300,008	71.7	3,327,375	71.9
(Amenable)	(12,925)	(28.2)	(78,352)	(27.2)	(113,010)	(27.0)	(1,298,430)	(28.0)
Unavoidable	13,062	28.5	83,597	29.0	118,618	28.3	1,303,289	28.1
Total	45,787	100.0	288,033	100.0	418,625	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 1,237.6 deaths per 100,000 population in the Fremantle Regional 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 234.7 in the Fremantle Regional Division.

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

Mortality category and age (years)	Fremantle Regional DGP		Perth		Western Australia		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable								
0-14	44	20.5	352	25.9	548	27.9	5,669	28.8
15-24	73	42.3	517	49.7	826	60.7	7,045	52.8
25-44	239	69.9	1,596	75.9	2,479	85.3	24,356	83.9
45-64	605	234.7	3,828	257.4	5,546	275.2	64,282	304.9
65-74	922	1,237.6	5,187	1254.8	7,203	1282.7	88,493	1,358.1
Total	1,883	178.2	11,480	189.1	16,602	201.0	189,845	211.8
Amenable								
0-24	44	11.9	301	13.0	454	13.8	5,083	15.4
25-44	51	14.7	371	17.6	594	20.5	5,946	20.5
45-64	271	104.9	1,675	112.7	2,381	118.5	27,464	130.3
65-74	406	544.7	2,228	538.5	3,088	550.9	37,756	579.4
Total	772	73.3	4,574	75.9	6,517	79.6	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 Fremantle Regional DGP were for cancer, with a rate of 67.3 deaths per 100,000 population, and cardiovascular diseases, 51.4 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 36.5 per 100,000 population and 22.3 per 100,000, respectively.

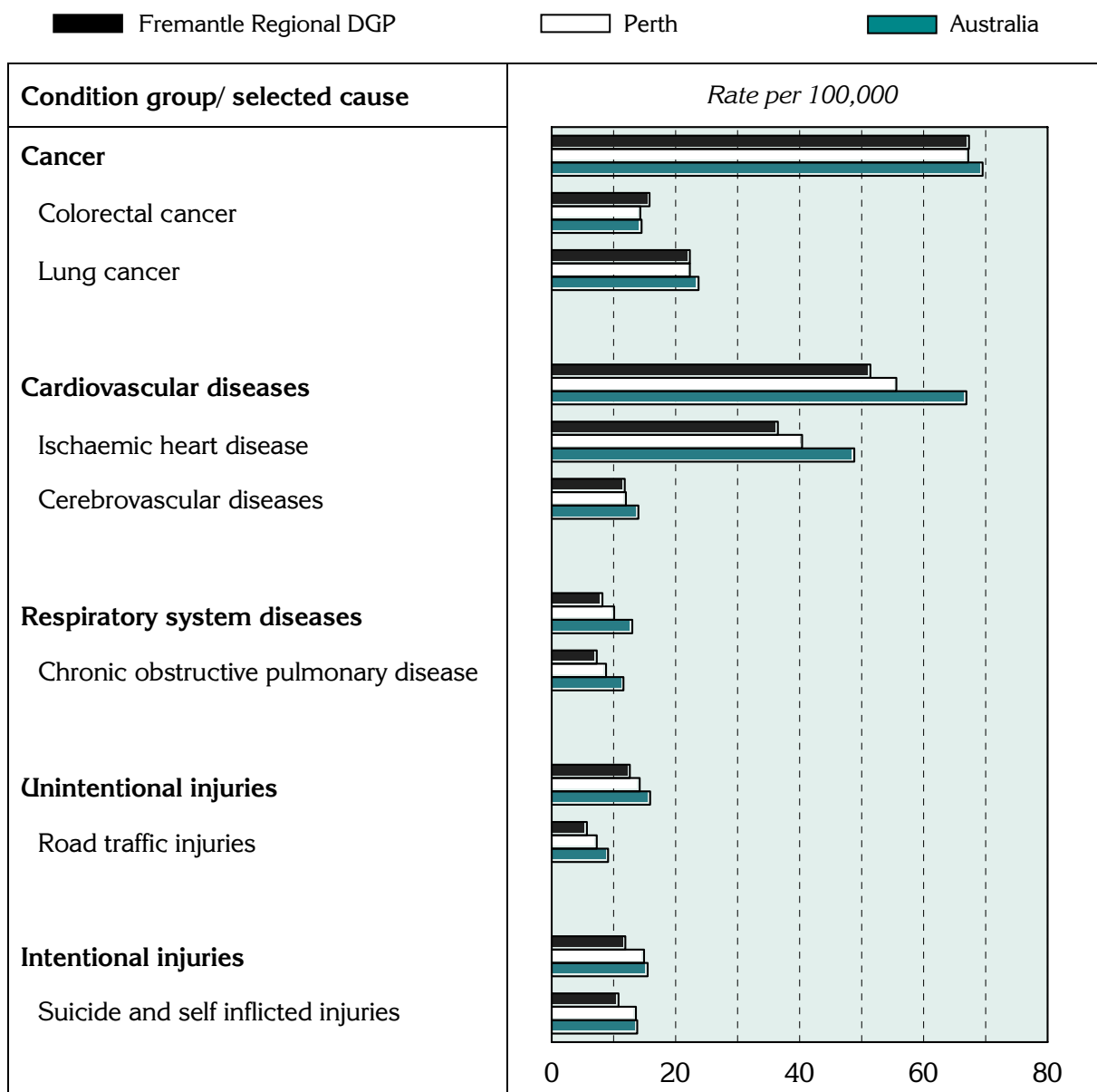
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Fremantle Regional DGP, Perth, Western Australia and Australia, 1997 to 2001

Condition group/ selected cause	Fremantle Regional DGP		Perth		Western Australia		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Cancer	714	67.3	4,043	67.2	5,531	67.8	62,338	69.5
Colorectal cancer	167	15.8	854	14.3	1,189	14.6	13,008	14.5
Lung cancer	234	22.3	1,327	22.3	1,842	22.8	21,208	23.7
Cardiovascular diseases	539	51.4	3,294	55.6	4,750	58.9	59,945	66.9
Ischaemic heart disease	383	36.5	2,394	40.4	3,469	42.9	43,712	48.8
Cerebrovascular diseases	123	11.8	711	12.0	1,000	12.5	12,558	14.0
Respiratory system diseases	86	8.2	593	10.1	871	11.0	11,612	13.0
Chronic obstructive pulmonary disease	76	7.3	510	8.8	748	9.5	10,395	11.6
Unintentional injuries	137	12.6	923	14.2	1,549	17.5	14,224	15.9
Road traffic injuries	62	5.7	479	7.3	918	10.3	8,138	9.1
Intentional injuries	129	11.9	968	14.9	1,412	15.9	13,891	15.5
Suicide and self inflicted injuries	117	10.8	884	13.6	1,270	14.3	12,393	13.8

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

Rates in the Division for the condition groups and selected causes were generally consistent with, or below, those for Australia and Perth (Figure 10).

Figure 10: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Fremantle Regional 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) 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 (i.e. jobless families, people with health insurance): these areas are mapped with a pattern.

Statistical geography of the Fremantle Regional 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, Fremantle Local Government Area (LGA) has been split into two SLAs – Inner and Remainder. Both of these SLAs, and all or parts of the SLAs listed in Table 14 comprise the Division.

Table 14: SLAs and population in Fremantle Regional 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
51330	Canning	39.5	31,576
51820	Cockburn	100.0	76,780
53150	East Fremantle	100.0	6,819
53431	Fremantle - Inner	100.0	779
53432	Fremantle - Remainder	100.0	25,480
53780	Gosnells	3.6	3,284
55320	Melville	99.9	97,142
92009	Territory of Christmas Island	100.0	1,523
93009	Territory of Cocos (Keeling) Islands	100.0	598

* 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

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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