

# Population health profile of the Central Queensland Rural 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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# Population health profile of the Central Queensland Rural Division of General Practice: supplement

This profile is a supplement to the *Population health profile of the Central Queensland Rural Division of General Practice*, dated November 2005, available from [www.publichealth.gov.au](http://www.publichealth.gov.au). This supplement includes an update of the population of the Central Queensland Rural Division of General Practice, as well as additional indicators and aspects of the Division's socioeconomic status, use of GP services and health. The contents are:

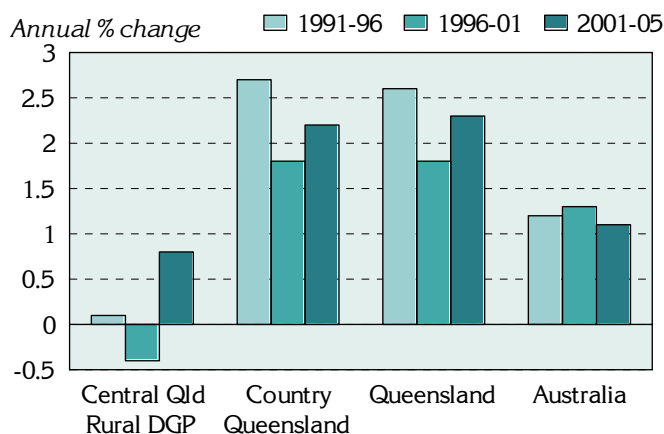
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions
- Avoidable mortality

For further information on the way Division totals in this report have been estimated, please refer to the 'Notes on the data' section of the *Population health profile*, November 2005 ([www.publichealth.gov.au](http://www.publichealth.gov.au)).

## Population

The Central Queensland Rural Division had an Estimated Resident Population of 70,995 at 30 June 2005.

**Figure 1: Annual population change, Central Queensland Rural DGP, country Queensland, Queensland and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005**



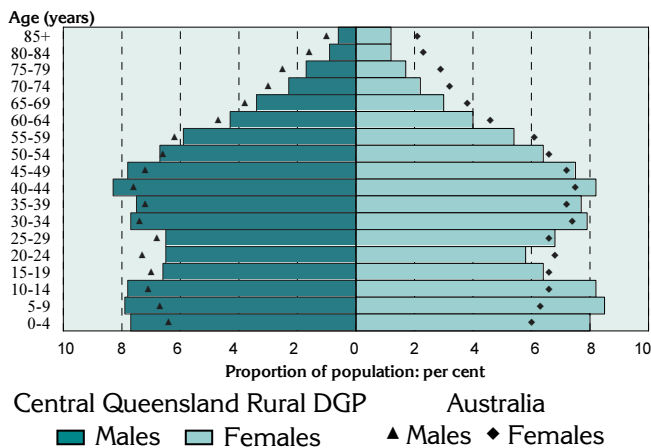
Over the five years from 1991 to 1996, the Division's population increased by just 0.1% on average each year, compared to substantial increases in country Queensland (2.7%) and Queensland (2.6%). From 1996 to 2001, the Division's population decreased (0.4% per year), compared to annual increases in country Queensland and Queensland (1.8%). The growth rate of 0.8% per year from 2001 to 2005 was still less than half than the annual increases for country Queensland (2.1%) and Queensland (2.3%).

**Table 1: Population by age, Central Queensland Rural DGP and Australia, 2005**

Age group (years)	Central Queensland Rural DGP		Australia	
	No.	%	No.	%
0-14	17,025	24.0	3,978,221	19.6
15-24	8,973	12.6	2,819,834	13.9
25-44	21,496	30.3	5,878,107	28.9
45-64	17,067	24.0	4,984,446	24.5
65-74	3,888	5.5	1,398,831	6.9
75-84	1,917	2.7	954,143	4.7
85+	628	0.9	315,027	1.5
<b>Total</b>	<b>70,995</b>	<b>100.0</b>	<b>20,328,609</b>	<b>100.0</b>

As shown in the accompanying table and the age-sex pyramid below, Central Queensland Rural DGP had relatively more 0 to 14 year olds (24.0%) compared to Australia as a whole (19.6%), but fewer young people aged 15 to 24 years (12.6%, compared to 13.9%). The 25 to 44 year age group had a slightly higher proportion than Australia (30.3% compared to 28.9%) (Table 1). Conversely, the 45 years and over age groups were relatively smaller.

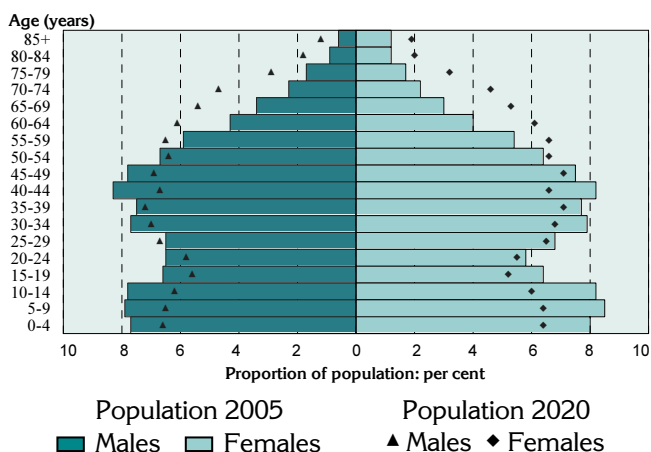
**Figure 2: Population in Central Queensland Rural DGP and Australia, by age and sex, 2005**



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

- at younger ages – relatively more children aged 0 to 14 years and relatively fewer young people 15 to 29 years (to 24 years for females);
- relatively fewer males from 30 to 49 years and females from 25 to 49 years; and
- relatively more males and females from aged 55 years and older.

**Figure 3: Population projections for Central Queensland Rural DGP, by age and sex, 2005 and 2020**



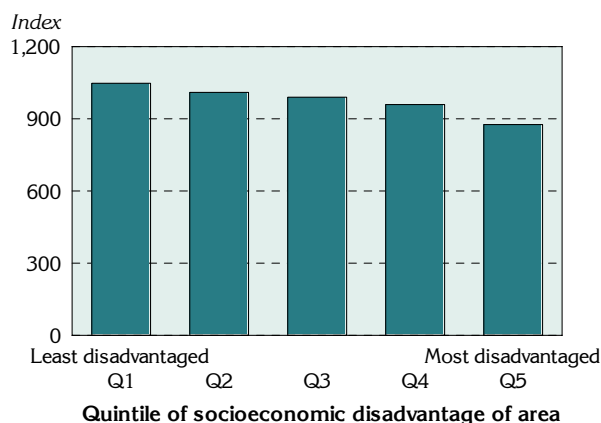
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- relatively fewer males aged 0 to 54 years (except for ages 25 to 29 years) and females to 49 years; and
- from 55 years – relatively more males and females (most pronounced at ages 60 to 74 years).

## Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Central Queensland Rural, Division of General Practice*, dated November 2005, available from [www.publichealth.gov.au](http://www.publichealth.gov.au), for other socio-demographic indicators.

**Figure 4: Index of Relative Socio-Economic Disadvantage, Central Queensland Rural DGP, 2001**



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

The Central Queensland Rural DGP has an index score of 992, just below the score for Australia of 1000: this score varies across the Division, from a low of 876 in the most disadvantaged areas to 1048 in the least disadvantaged areas.

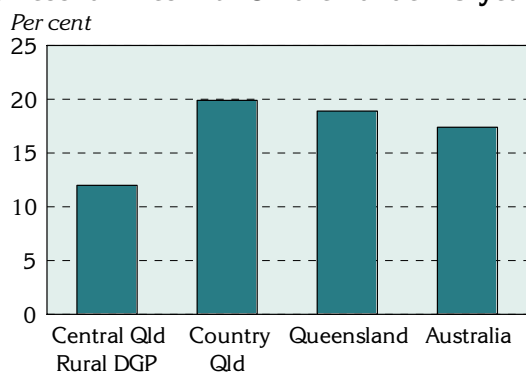
Note: each ‘quintile’ comprises approximately 20% of the population of the Division.

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 Central Queensland Rural DGP (12.0%), than for country Queensland as a whole (19.9%) (Figure 5, Table 2).

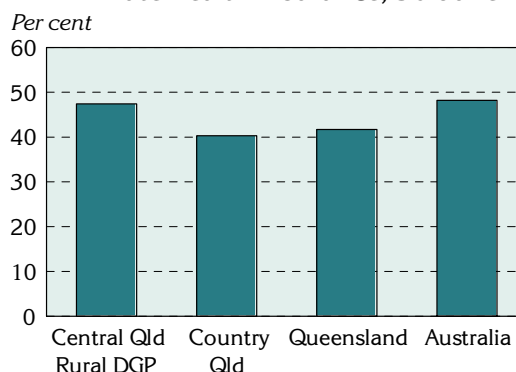
With the introduction of the 30% rebate for private health insurance premiums, there was a once-off registration process, providing information of the postcode and residence of those who had such insurance (these data are not available at this area level for later dates). In 2001, the Division had a higher proportion of the population with private health insurance (47.4%), compared to country Queensland (40.3%) (Figure 5, Table 2).

**Figure 5: Socio-demographic indicators, Central Queensland Rural DGP, country Queensland, Queensland and Australia, 2001**

**Jobless families with children under 15 years old**



**Private health insurance, 30 June**

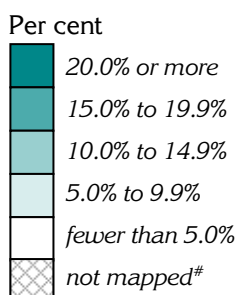


**Table 2: Socio-demographic indicators, Central Queensland Rural DGP, country Queensland, Queensland and Australia, 2001**

Indicator	Central Queensland Rural DGP		Country Queensland		Queensland		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	983	12.0	42,801	19.9	74,942	18.9	357,563	17.4
Private health insurance (30 June)	32,828	47.4	812,860	40.3	1,511,613	41.7	8,671,106	46.0

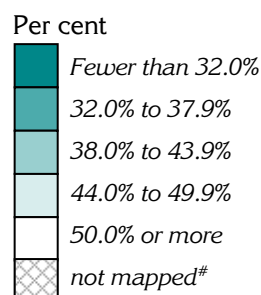
Details of the distribution of jobless families (Map 1) and of the population covered by private health insurance (Map 2) are shown by Statistical Local Area (SLA) in Maps 1 and 2, respectively.

**Map 1: Jobless families with children under 15 years of age by SLA, Central Queensland Rural DGP, 2001**



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

**Map 2: People covered by private health insurance by SLA, Central Queensland Rural DGP, 30 June 2001**



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

## GP services to residents of the Central Queensland Rural 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.

Almost three quarters (72.0%) of GP unreferred attendances to residents of Central Queensland Rural DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 201,799 GP unreferred attendances (Table 3). A further 19.5% of unreferred attendances were provided by GPs with a provider number in Capricornia DGP.

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

Division		Unreferred attendances	
Number	Name	No.	% <sup>3</sup>
410	Central Queensland Rural DGP	201,799	72.0
419	Capricornia DGP	54,714	19.5
411	Mackay DGP	4,960	1.8
405	GPpartners DGP	2,527	0.9
420	Wide Bay DGP	2,372	0.8
Other	..	13,736	4.9
<b>Total</b>	..	<b>280,108</b>	<b>100.0</b>

<sup>1</sup> Based on address in Medicare records

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

<sup>3</sup> Proportion of all unreferred attendances of patients with an address in Division 410 by Division in which attendance occurred

The majority (87.8%) of unreferred attendances provided by GPs with a provider number in Central Queensland Rural DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 4.5% of unreferred attendances by GPs in the Division were to residents of Capricornia DGP.

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

Division		Unreferred attendances	
Number	Name	No.	% <sup>3</sup>
410	Central Queensland Rural DGP	201,799	87.8
419	Capricornia DGP	9,175	4.0
416	North and West Queensland DGP	3,097	1.3
411	Mackay DGP	2,647	1.2
420	Wide Bay DGP	2,251	1.0
Other	..	10,998	4.8
<b>Total</b>	..	<b>229,967</b>	<b>100.0</b>

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

<sup>2</sup> Based on address in Medicare records

<sup>3</sup> Proportion of all unreferred attendances to GPs with a provider number in Division 410 by Division of patient address

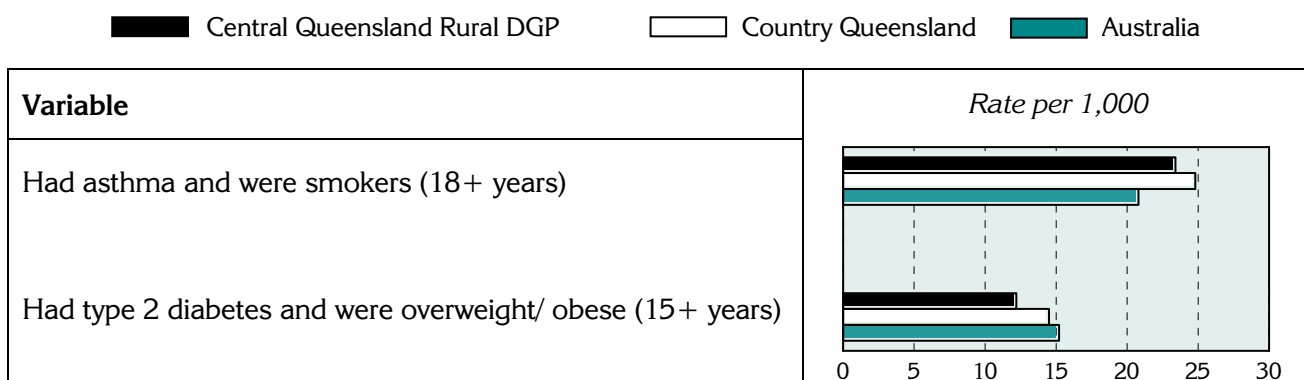
## Additional prevalence estimates: chronic diseases and risk factors combined

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

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

It is estimated that there were more people in Central Queensland Rural DGP who had asthma and were smokers, compared to Australia as a whole, although fewer than in country Queensland (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were higher than the national rates. However, there were fewer people in Central Queensland Rural DGP who had type 2 diabetes and were overweight/ obese, compared to country Queensland and Australia.

**Figure 6: Estimates of selected chronic diseases and risk factors, Central Queensland Rural DGP, country Queensland and Australia, 2001**



**Table 5: Estimates of selected chronic diseases and risk factors, Central Queensland Rural DGP, country Queensland, Queensland and Australia, 2001**

Variable	Central Queensland Rural DGP		Country Queensland		Queensland		Australia	
	No. <sup>1</sup>	Rate <sup>2</sup>	No. <sup>1</sup>	Rate <sup>2</sup>	No. <sup>1</sup>	Rate <sup>2</sup>	No. <sup>1</sup>	Rate <sup>1</sup>
Had asthma & smoked <sup>3</sup>	1,549	23.4	37,177	21.6	83,759	23.2	397,734	20.8
Had type 2 diabetes & were overweight/obese <sup>4</sup>	728	12.2	23,133	15.7	52,952	15.0	283,176	15.2

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

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

<sup>3</sup> Population aged 18 years and over

<sup>4</sup> Population aged 15 years and over

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

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

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

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

In 2001 to 2002, the 2,445 admissions from ambulatory care sensitive (ACS) conditions accounted for 9.3% of all admissions in the Central Queensland Rural DGP (Table 6, Figure 7), above the levels in Queensland (8.5%) and Australia (8.7%).

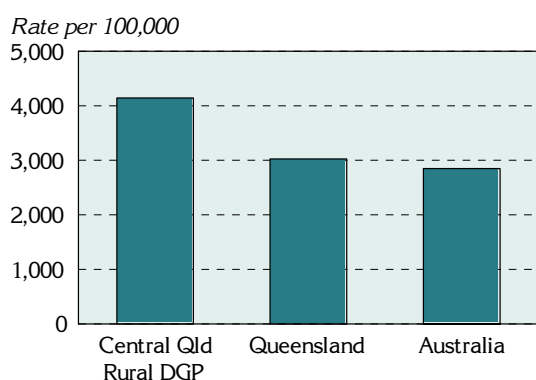
**Table 6: Avoidable<sup>1</sup> and unavoidable hospitalisations, Central Queensland Rural DGP, Queensland, and Australia, 2001/02**

Category	Central Queensland Rural DGP			Queensland			Australia		
	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%
Avoidable <sup>1</sup>	2,445	4,142.4	9.3	106,884	3,025.0	8.5	552,786	2,847.5	8.7
Unavoidable	23,904	38,984.0	90.7	1,153,519	32,410.1	91.5	5,818,199	29,970.7	91.3
<b>Total</b>	<b>26,349</b>	<b>43,111.3</b>	<b>100.0</b>	<b>1,260,403</b>	<b>35,435.5</b>	<b>100.0</b>	<b>6,370,985</b>	<b>32,818.2</b>	<b>100.0</b>

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

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

**Figure 7: Avoidable hospitalisations<sup>1</sup>, Central Queensland Rural DGP, Queensland and Australia, 2001/02**



The rate of avoidable hospitalisations in Central Queensland Rural DGP is markedly higher, a rate of 4,142.4 admissions per 100,000 population, compared to Queensland (a rate of 3,025.0) and Australia (2,847.5).

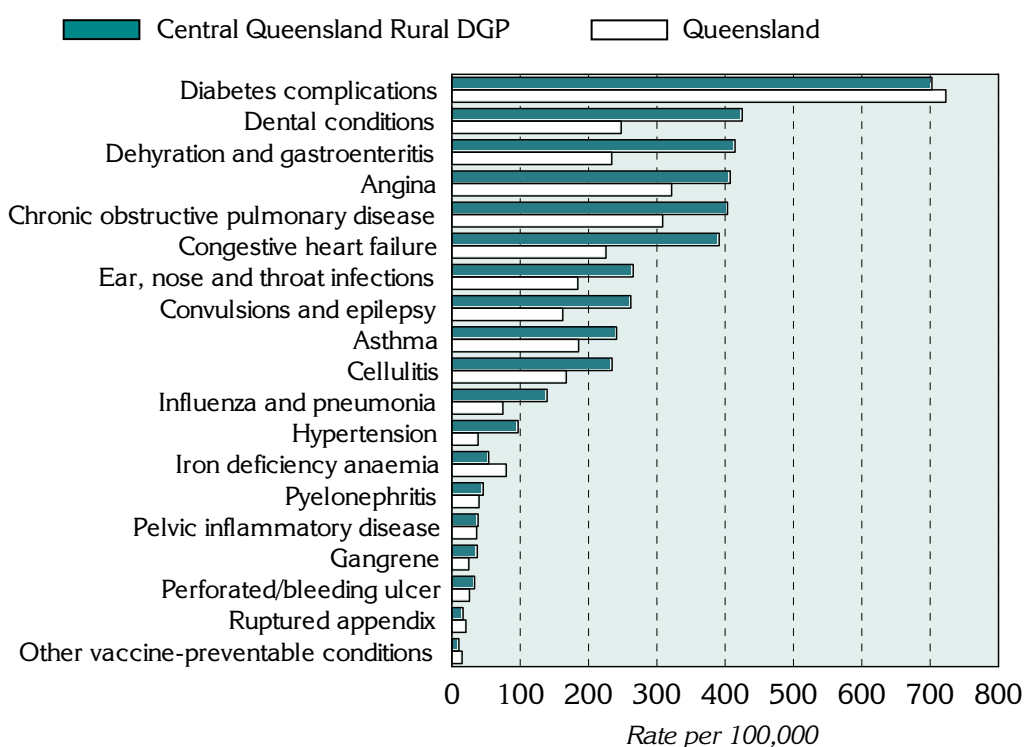
<sup>1</sup> Admissions resulting from ACS conditions

Diabetes complications, dental conditions, dehydration and gastroenteritis, angina, chronic obstructive pulmonary disease and congestive heart failure were the conditions with the highest rates of avoidable hospitalisations in the Central Queensland Rural 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. Almost two-thirds of avoidable hospitalisations are attributable to chronic health conditions. The predominance of hospitalisations for chronic conditions in this period can be primarily attributed to the large number of admissions for diabetes complications. Dental conditions; and dehydration and gastroenteritis have the highest rates of avoidable hospitalisations for the acute conditions.



**Figure 8: Avoidable hospitalisations<sup>1</sup> by condition, Central Queensland Rural DGP and Queensland, 2001/02**



<sup>1</sup> Admissions resulting from ACS conditions: excludes nutritional deficiencies as less than ten admissions

**Table 7: Avoidable hospitalisations<sup>1</sup> by condition, Central Queensland Rural DGP, Queensland and Australia, 2001/02**

Sub-category/ condition	Central Queensland Rural DGP		Queensland		Australia	
	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>
<b>Vaccine-preventable</b>	<b>92</b>	<b>149.5</b>	<b>3,188</b>	<b>89.6</b>	<b>16,573</b>	<b>85.4</b>
Influenza and pneumonia	85	139.3	2,646	74.6	13,021	67.1
Other vaccine preventable	7	10.2	542	15.0	3,552	18.3
<b>Chronic<sup>3</sup></b>	<b>1,203</b>	<b>2,296.4</b>	<b>65,455</b>	<b>1,882.0</b>	<b>352,545</b>	<b>1,816</b>
Diabetes complications	375	702.6	25,175	722.9	141,345	728.1
Iron deficiency anaemia	28	53.8	2,772	79.7	16,451	84.7
Hypertension	50	97.0	1,324	38.3	6,354	32.7
Congestive heart failure	169	391.2	7,617	225.5	42,447	218.6
Angina	209	407.4	11,134	321.5	49,963	257.4
Chronic obstructive pulmonary disease	194	403.4	10,619	308.5	54,853	282.6
Asthma	178	241.0	6,814	185.6	41,009	211.3
<b>Acute</b>	<b>1,202</b>	<b>1,771.7</b>	<b>41,300</b>	<b>1,143.3</b>	<b>200,913</b>	<b>1,035</b>
Dehydration and gastroenteritis	244	414.3	8,278	234.1	37,766	194.5
Convulsions and epilepsy	188	261.9	5,902	162.3	31,137	160.4
Ear, nose and throat infections	207	265.4	6,829	184.4	32,075	165.2
Dental conditions	317	424.9	9,101	247.8	43,667	224.9
Perforated/bleeding ulcer	17	33.2	892	25.8	5,795	29.9
Ruptured appendix	11	16.2	754	20.7	3,866	19.9
Pyelonephritis	29	45.8	1,437	39.8	7,386	38.0
Pelvic inflammatory disease	25	38.3	1,315	36.2	6,547	33.7
Cellulitis	144	234.6	5,930	167.4	28,204	145.3
Gangrene	20	37.1	862	24.8	4,470	23.0
<b>Total avoidable hospitalisations<sup>4</sup></b>	<b>2,445</b>	<b>4,142.4</b>	<b>106,884</b>	<b>3,025.0</b>	<b>552,786</b>	<b>2,847.5</b>

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

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

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

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

## Avoidable mortality

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

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

Three quarters (75.4%) of all deaths in Central Queensland Rural DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, higher than the proportion for country Queensland (72.8%) (Table 8). Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 31.2% of all deaths at ages 0 to 74 years in Central Queensland Rural DGP, compared to 29.3% in country Queensland.

**Table 8: Avoidable and unavoidable mortality (0 to 74 years) by area, Central Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001**

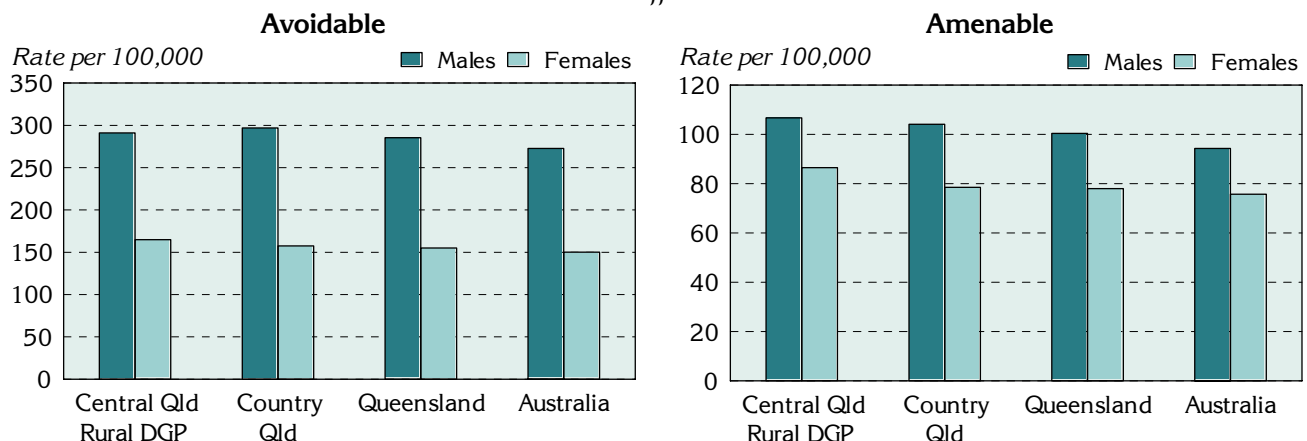
Mortality category	Central Queensland Rural DGP		Country Queensland		Queensland		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable	617	228.1	20,859	227.8	35,515	220.6	189,845	211.8
% of total	75.4	..	72.8	..	72.8	..	71.5	..
(Amenable)	(255)	(96.6)	(8,383)	(91.5)	(14,323)	(89.3)	(76,249)	(85.1)
(% of total)	(31.2)	(..)	(29.3)	(..)	(29.3)	(..)	(28.7)	(..)
Unavoidable	201	75.3	7,793	85.0	13,291	82.7	75,582	84.3
% of total	24.6	..	27.2	..	27.2	..	28.5	..
<b>Total mortality</b>	<b>818</b>	<b>303.6</b>	<b>28,652</b>	<b>312.8</b>	<b>48,806</b>	<b>303.4</b>	<b>265,427</b>	<b>296.1</b>
%	100.0	..	100.0	..	100.0	..	100.0	..

<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. Central Queensland Rural DGP's rate of avoidable mortality for males was 291.1 deaths per 100,000 males, notably higher than the rate of 164.9 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 106.7, compared to 86.5 for females, a rate ratio of 1.23 (Figure 9, Table 9).

**Figure 9: Avoidable and amenable mortality by sex (0 to 74 years), Central Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001**

*Note: the different scales*



**Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, Central Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001**

Mortality category and sex	Central Queensland Rural DGP		Country Queensland		Queensland		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
<b>Avoidable</b>								
Males	425	291.1	9,362	269.5	23,316	285.3	123,026	272.6
Females	192	164.9	5,294	152.0	12,199	155.1	66,819	150.1
<b>Total</b>	<b>617</b>	<b>228.1</b>	<b>14,656</b>	<b>211.2</b>	<b>35,515</b>	<b>220.6</b>	<b>189,845</b>	<b>211.8</b>
<b>Rate ratio-M:F<sup>2</sup></b>	..	<b>1.77**</b>	..	<b>1.77**</b>	..	<b>1.84**</b>	..	<b>1.82**</b>
<b>Amenable</b>								
Males	153	106.7	3,249	95.2	8,181	100.4	42,568	94.3
Females	102	86.5	2,691	77.4	6,142	78.0	33,681	75.7
<b>Total</b>	<b>255</b>	<b>96.6</b>	<b>5,940</b>	<b>86.4</b>	<b>14,323</b>	<b>89.3</b>	<b>76,249</b>	<b>85.1</b>
<b>Rate ratio-M:F<sup>2</sup></b>	..	<b>1.23</b>	..	<b>1.23**</b>	..	<b>1.29**</b>	..	<b>1.25**</b>

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

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

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

The numbers of YLL for Central Queensland Rural DGP, country Queensland, Queensland 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 75.2% of total YLL (0 to 74 years) for Central Queensland Rural DGP, above the level of 72.9% for country Queensland: the proportion of YLL from amenable mortality for Central Queensland Rural DGP (30.2%) was also higher than for country Queensland (28.5%).

**Table 10: Years of life lost from avoidable mortality (0 to 74 years), Central Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001**

Mortality category	Central Queensland Rural DGP		Country Queensland		Queensland		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	11,616	75.2	369,609	72.9	629,779	72.9	3,327,375	71.9
(Amenable)	(4,643)	(30.0)	(144,553)	(28.5)	(247,893)	(28.7)	(1,298,430)	(28.0)
Unavoidable	3,842	24.9	137,686	27.1	234,699	27.1	1,303,289	28.1
<b>Total</b>	<b>15,457</b>	<b>100.0</b>	<b>507,294</b>	<b>100.0</b>	<b>864,478</b>	<b>100.0</b>	<b>4,630,664</b>	<b>100.0</b>

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

In each of the areas in Table 11, the majority of avoidable mortality at ages 0 to 74 years occurred in the 65 to 74 year age group (Table 11), with 1,455.1 deaths per 100,000 population in Central Queensland Rural 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 316.0 in Central Queensland Rural DGP.

**Table 11: Avoidable and amenable mortality by age, Central Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001**

Mortality category and age (years)	Central Queensland Rural DGP		country Queensland		Queensland		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
<b>Avoidable</b>								
0-14	32	36.1	500	30.1	1,208	32.2	5,669	28.8
15-24	37	81.6	562	44.8	1,386	54.3	7,045	52.8
25-44	98	85.5	1,916	77.8	4,527	84.9	24,356	83.9
45-64	227	316.0	5,107	301.7	12,543	322.5	64,282	304.9
65-74	222	1,455.1	6,571	1410.9	15,851	1404.6	88,493	1,358.1
<b>Total</b>	<b>617</b>	<b>228.1</b>	<b>14,656</b>	<b>211.2</b>	<b>35,515</b>	<b>220.6</b>	<b>189,845</b>	<b>211.8</b>
<b>Amenable</b>								
0-24	26	18.1	451	15.9	1,059	16.8	5,083	15.4
25-44	29	25.4	491	20.1	1,165	21.8	5,946	20.5
45-64	100	141.6	2,236	132.2	5,352	137.9	27,464	130.3
65-74	100	665.6	2,762	591.5	6,748	599.1	37,756	579.4
<b>Total</b>	<b>255</b>	<b>96.6</b>	<b>5,940</b>	<b>86.4</b>	<b>14,323</b>	<b>89.3</b>	<b>76,249</b>	<b>85.1</b>

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

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

The highest rates of avoidable mortality for the selected major condition groups in the Central Queensland Rural DGP were for cancer, with a rate of 76.2 deaths per 100,000 population, and cardiovascular diseases, 69.1 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 55.0 per 100,000 population and 22.8 per 100,000, respectively.

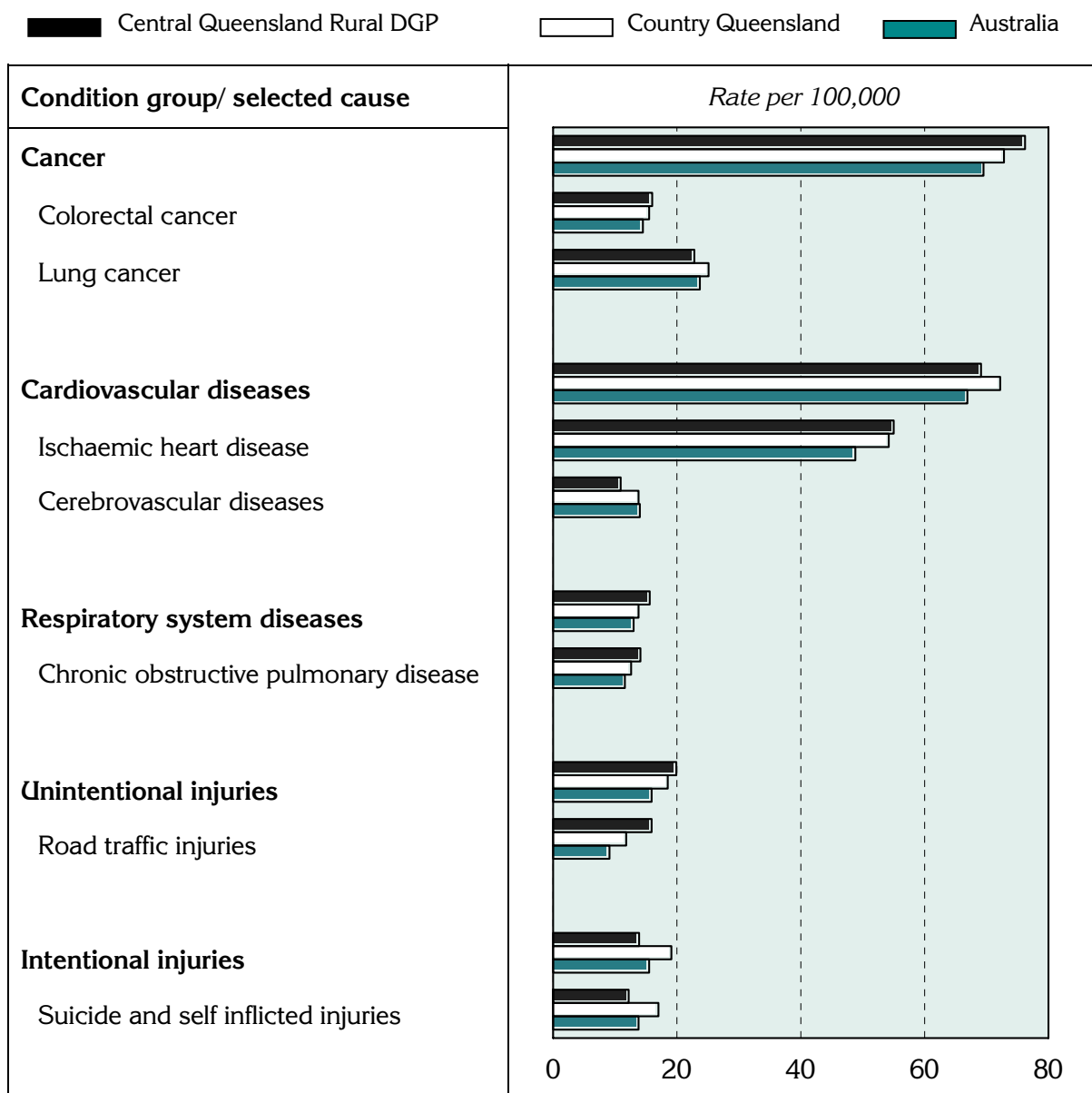
**Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Central Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001**

Condition group/ selected cause	Central Queensland Rural DGP		Country Queensland		Queensland		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
<b>Cancer</b>	<b>196</b>	<b>76.2</b>	<b>6,690</b>	<b>72.8</b>	<b>11,618</b>	<b>72.6</b>	<b>62,338</b>	<b>69.5</b>
Colorectal cancer	41	16.0	1,425	15.5	2,392	15.0	13,008	14.5
Lung cancer	58	22.8	2,329	25.1	4,062	25.4	21,208	23.7
<b>Cardiovascular diseases</b>	<b>173</b>	<b>69.1</b>	<b>6,646</b>	<b>72.2</b>	<b>11,294</b>	<b>71.0</b>	<b>59,945</b>	<b>66.9</b>
Ischaemic heart disease	140	55.0	5,005	54.2	8,434	52.9	43,712	48.8
Cerebrovascular diseases	26	10.9	1,263	13.8	2,210	14.0	12,558	14.0
<b>Respiratory system diseases</b>	<b>37</b>	<b>15.6</b>	<b>1,262</b>	<b>13.8</b>	<b>2,168</b>	<b>13.7</b>	<b>11,612</b>	<b>13.0</b>
Chronic obstructive pulmonary disease	32	14.1	1,159	12.6	1,970	12.5	10,395	11.6
<b>Unintentional injuries</b>	<b>65</b>	<b>19.9</b>	<b>1,662</b>	<b>18.5</b>	<b>2,630</b>	<b>15.8</b>	<b>14,224</b>	<b>15.9</b>
Road traffic injuries	52	15.9	1,054	11.8	1,565	9.4	8,138	9.1
<b>Intentional injuries</b>	<b>46</b>	<b>13.9</b>	<b>1,712</b>	<b>19.1</b>	<b>3,017</b>	<b>18.2</b>	<b>13,891</b>	<b>15.5</b>
Suicide and self inflicted injuries	40	12.2	1,521	17.0	2,719	16.4	12,393	13.8

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

Rates in the Division for the condition groups and selected causes were above those for country Queensland and Australia, with the exception of lung cancer, cardiovascular diseases (total, below country Queensland only), cerebrovascular diseases and intentional injuries (Figure 10).

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



# Notes on the data

## Data sources and limitations

### General

References to 'country Queensland' relate to Queensland excluding the Brisbane Statistical Division.

### Data sources

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

**Table 13: Data sources**

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

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

## Methods

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

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

## Mapping

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

## Statistical geography of the Central Queensland Rural DGP

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

Statistical Local Areas (SLAs) are defined by the Australian Bureau of Statistics to produce areas for the presentation and analysis of data. In this Division, most SLAs are the same as the Local Government Areas (LGAs). However, a very small part of the LGA of Fitzroy, which is comprised of two SLAs, Part A and Part B, is in this Division (7% of Part B). This SLA and all or parts of the other SLAs listed in Table 14 comprise the Division.

**Table 14: SLAs and population in Central Queensland Rural 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
30350	Banana	93.8	13,456
30450	Barcoo	10.7	#
30500	Bauhinia	89.5	2,002
30600	Belyando	79.7	8,489
31700	Broadsound	71.7	4,844
32850	Duaringa	89.9	6,976
33000	Emerald	96.1	13,111
<b>33151</b>	<b><i>Fitzroy – Part A</i></b>	<b>70.0</b>	<b>3,506</b>
33154	Fitzroy - Part B	64.7	3,471
34100	Jericho	32.8	362
34550	Livingstone	22.4	6,442
35150	Monto	100.0	2,490
35350	Mount Morgan	96.2	2,860
35850	Peak Downs	85.4	2,824
<b>36350</b>	<b><i>Rockhampton</i></b>	<b>0.2</b>	<b>114</b>

\* 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. In addition, in a small number of cases, part(s) of an SLA can be allocated to another Division, sometimes several hundred kilometres away. Although adjustments have not been made to the concordance to correct these errors, the affected SLAs are highlighted in the table (shown in bold italic typeface)

# Not shown as the total population is less than 100

## Acknowledgements

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

## Further developments and updates

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

## PHIDU contact details

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