

Population health profile of the Brisbane South Division of General Practice

Population Profile Series: No. 69

PHIDU

November 2005



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National Library of Australia Cataloguing in Publication entry

Population health profile of the Brisbane South Division of General Practice.

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ISBN 0 7308 9477 0.

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362.1099431

ISSN 1833-0452 Population Profile Series

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

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

The data in this report are designed to be used for needs assessment and planning purposes: while they are based on the best available data and analytic processes, data available by postcode or Statistical Local Area, as used in this report, cannot be precisely translated to Division. Division totals in the report should, therefore, be seen as estimates. Interpretation of differences between data in this profile and similar data from other sources needs to be undertaken with care as such differences may be due to the use of different methodology to produce the data.

Suggested citation:

PHIDU. (2005) *Population health profile of the Brisbane South Division of General Practice*. Population Profile Series: No. 69. Public Health Information Development Unit (PHIDU), Adelaide.

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

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

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Population health profile of the *Brisbane South Division of General Practice*

Introduction

This profile has been designed to provide a description of the population of the Brisbane South Division of General Practice, and aspects of their health. Its purpose is to provide information to support a population health approach, which aims to improve the health of the entire population and to reduce health inequalities among population groups: a more detailed discussion of a population health approach is provided in the supporting information, page 17.

Contents

The profile includes a number of tables, maps and graphs to profile population health in the Division and provides comparisons with other areas (eg. Brisbane and Australia). Specific topics covered include:

- a socio-demographic profile (pages 2-6);
- GP workforce data (page 7);
- immunisation rates (page 7);
- rates of premature death (page 8); and
- estimates of the prevalence of chronic disease and selected risk factors (pages 9-13).

Key indicators

Location:	Queensland	
Division number:	402	
Population +:	No.	%
Total	281,235	
65+	33,234	11.8%
<25	98,340	35.0%
Indigenous	4,521	1.7%
Disadvantage score¹:	1013	
GP services per head of population:		
Division‡	4.8	
Australia	4.7	
Population per FTE GP:		
Division‡	1,412	
Australia	1,403	
Premature death rate²:		
Division‡	257.4	
Australia	290.4	

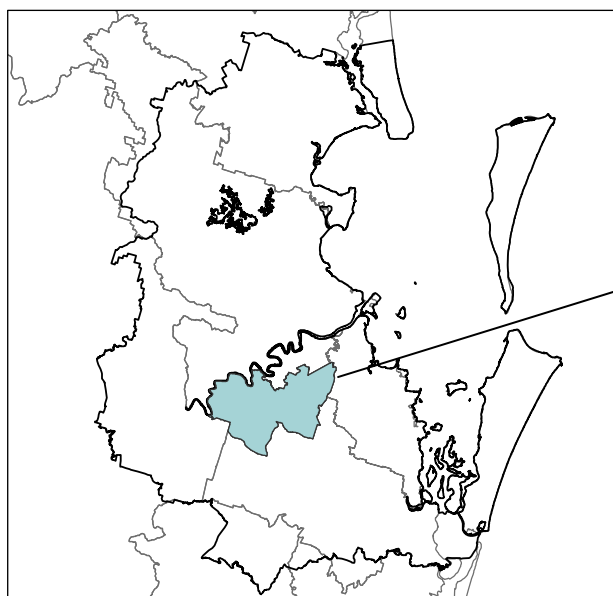
¹ Numbers above 1000 (the index score for Australia) indicate the Division is relatively advantaged

² Deaths at ages 0 to 74 years per 100,000 population

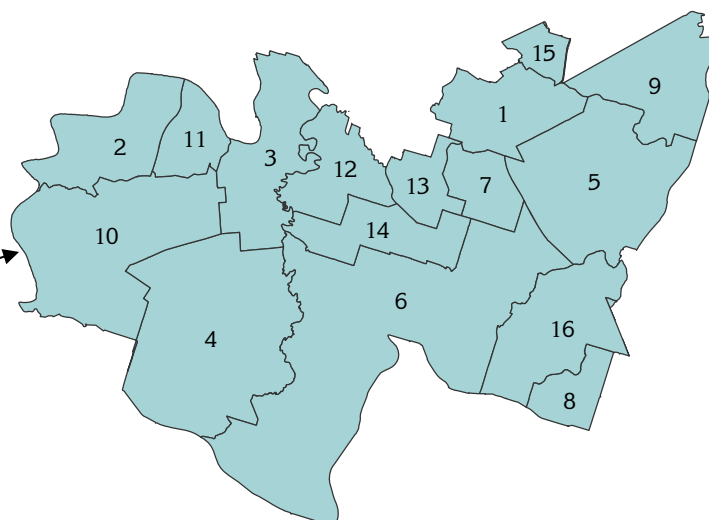
‡ See note “Data converters and mapping” re calculation of Division Total

Brisbane South Division of General Practice

Brisbane Divisions of General Practice



Brisbane South DGP by SLA/SLA group



— Brisbane Divisions of General Practice
 — Brisbane Statistical Division

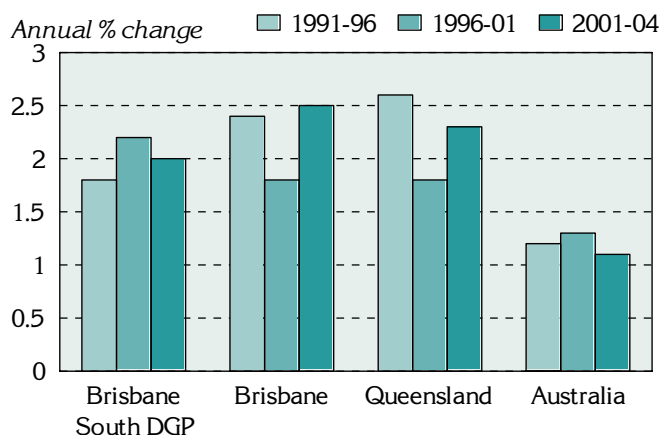
Map Legend: see page 6

Socio-demographic profile

Population

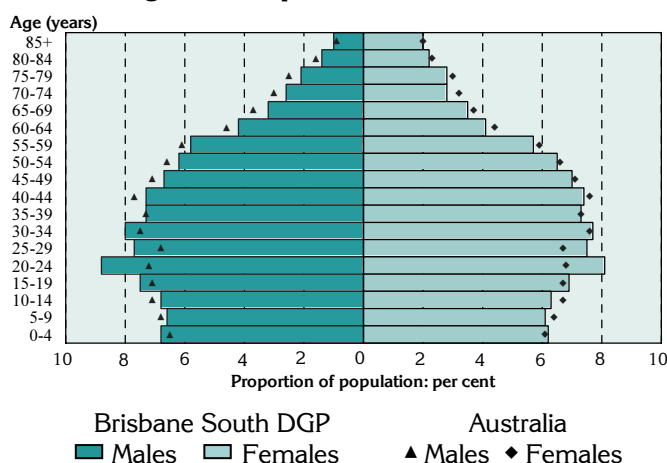
The Brisbane South Division had an Estimated Resident Population of 281,235 at 30 June 2004.

Figure 1: Annual population change, Brisbane South DGP‡, Brisbane, Queensland and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2004



Over the five years from 1991 to 1996, the Division's population increased by 1.8% on average each year, lower than in Brisbane (2.4%) and Queensland (2.6%), and higher than Australia (1.2%). From 1996 to 2001, the annual percentage increase in the Division was 2.2%, higher than in Brisbane and Queensland (both 1.8%). The growth rate of 2.0% per year from 2001 to 2004 was lower than the annual increases for Brisbane (2.5%) and Queensland (2.3%), and higher than for Australia (1.1%).

Figure 2: Population in Brisbane South DGP‡ and Australia, by age and sex, 2004



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

- at younger ages – a lower proportion of children aged 5 to 14 years;
- from 20 to 34 years – higher proportions of both males and females;
- at older ages – marginally lower proportions of males aged 40 to 84 years and females at ages 55 to 79 years.

Table 1: Population by age, Brisbane South DGP‡ and Australia, 2004

Age group (years)	Brisbane South DGP		Australia	
	Number	Per cent	Number	Per cent
0-14	54,588	19.4	3,978,751	19.8
15-24	43,753	15.6	2,762,769	13.8
25-44	84,710	30.1	5,881,048	29.3
45-64	64,952	23.1	4,864,037	24.2
65-74	17,051	6.1	1,374,792	6.8
75-84	12,080	4.3	934,505	4.7
85+	4,103	1.5	295,602	1.5
Total	281,235	100.0	20,091,504	100.0

As shown in the age-sex pyramid above, Brisbane South DGP had a slightly higher proportion of young people than Australia as a whole, with 15.6% at ages 15 to 24 years (compared to 13.8%) (Table 1). The proportions of the Division's population aged 45 to 84 years were marginally lower than those for Australia.

The Brisbane South DGP comprised 13.0% of people born in predominantly non-English speaking countries and resident in Australia for five years or more (Table 2), substantially above the 7.6% in Brisbane, and 5.8% for Queensland. Recent arrivals (those resident in Australia for less than five years) from non-English speaking countries comprised a high 3.9% of the Division's population, compared to 2.0% in Brisbane and 1.4% in Queensland.

‡ See note under 'Data converters and mapping' re calculation of Division totals on this page

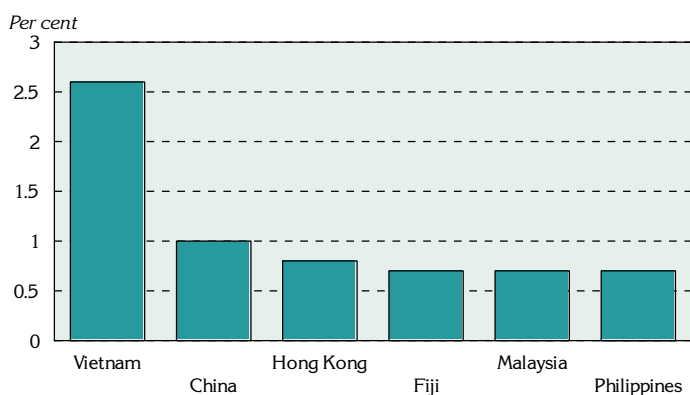
Of these residents, 3.6% had poor proficiency in English (determined when people aged five years and over born overseas in predominantly non-English speaking countries reported in the Census speaking another language and speaking English 'not well' or 'not at all'), much higher than the proportions in Brisbane (1.4%), Queensland (0.9%) and Australia (2.4%).

Table 2: Non-English speaking born, Brisbane South DGP, Brisbane, Queensland and Australia, 2001

People born in predominantly non-English speaking countries	Brisbane South DGP		Brisbane		Queensland		Australia	
	No.	%	No.	%	No.	%	No.	%
Resident in Australia for five years or more	33,447	13.0	122,983	7.6	204,783	5.8	2,019,410	10.8
Resident in Australia for less than five years	10,085	3.9	32,516	2.0	49,081	1.4	408,074	2.2
Poor proficiency in English ¹	8,563	3.6	21,426	1.4	30,109	0.9	425,399	2.4

¹ Calculated on persons aged 5 years and over who reported speaking another language and speaking English 'not well' or 'not at all'

Figure 3: Major non-English speaking birthplaces, Brisbane South DGP, 2001



Australian-born people comprised 72.1% of the Division's population, above the Australian figure of 72.6%. Of the 10.0% of people from English speaking countries, 5.1% were from the UK and Eire. The major birthplaces of the non-English speaking population include Vietnam (2.6%); China (1.0%); Hong Kong (0.8%); and Fiji, Malaysia and the Philippines (all 0.7%).

Socioeconomic status

The indicators presented in this section describe geographic variations in the distribution of the population for a number of key socioeconomic influences, which impact on the health and wellbeing of populations.

The Brisbane South DGP had similar proportions of single parent families (11.0%) compared to Brisbane as a whole (11.6%), and of Aboriginal and Torres Strait Islanders (1.7%, compared to 1.8% for Brisbane (Figure 4, Table 3).

Secondary school education participation of 16 year olds living in the Division (82.8%) was slightly higher than that for Brisbane (80.3%).

A lower proportion of the Division's households received rent assistance from Centrelink (15.7%) compared to Brisbane (18.4%), but there were more dwellings rented from the State housing authority (5.2%, compared to 4.3%). The proportion of dwellings with no access to a motor vehicle (9.1%) was slightly lower than that for Brisbane (9.8%) and for Queensland (9.3%).

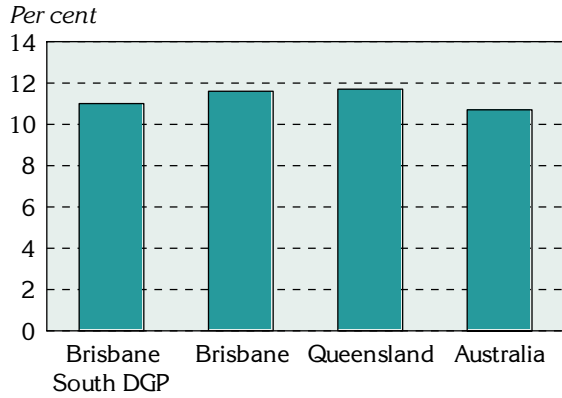
The Division had slightly higher proportions of the population who reported using, at home, a computer (47.3%) and the Internet (33.7%), compared to Brisbane (46.0% and 31.7%).

These socioeconomic indicators show the Division to comprise a population of marginally higher than average socioeconomic status: see also the note on page 5 (Summary of socioeconomic ranking).

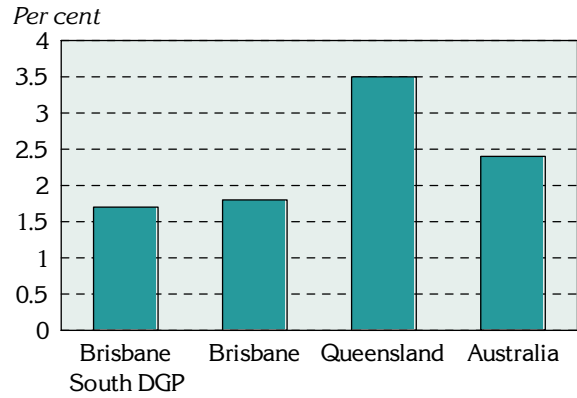
Figure 4: Socio-demographic indicators, Brisbane South DGP, Queensland and Australia, 2001

Note the different scales

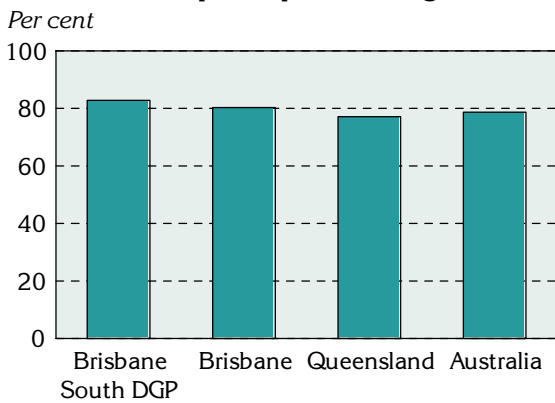
Single parent families



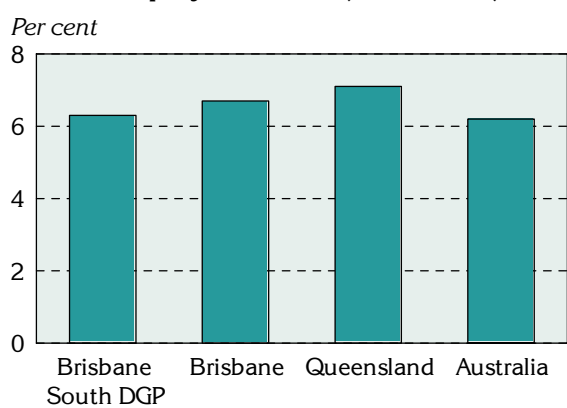
Indigenous‡



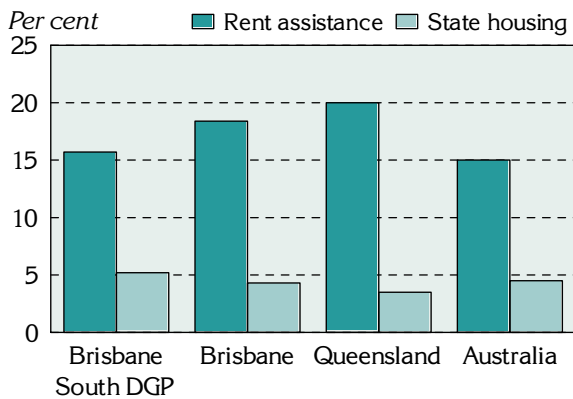
Education participation at age 16‡



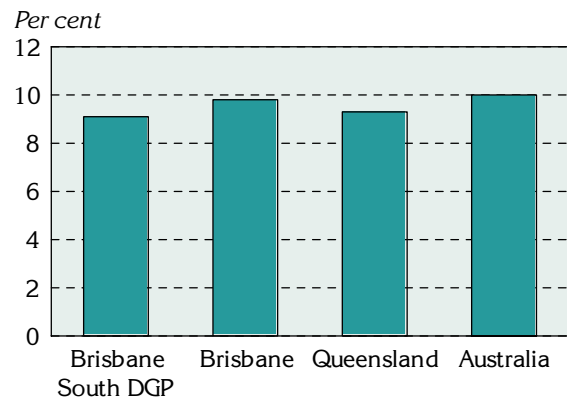
Unemployment rate (June 2003)‡



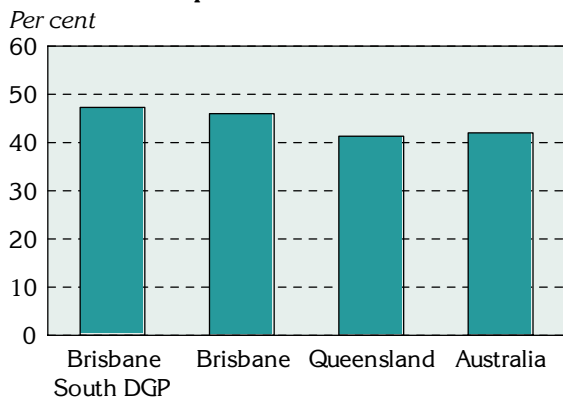
Households receiving rent assistance & dwellings rented from State housing authority



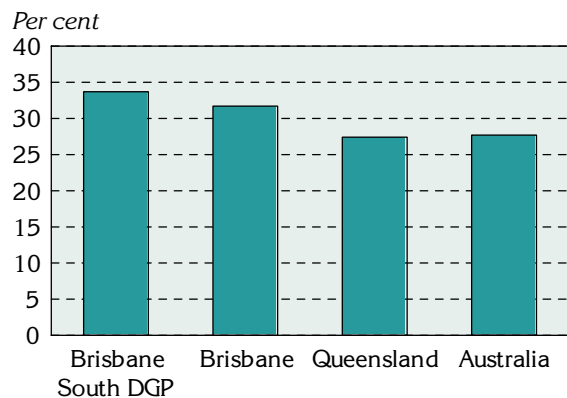
Dwellings with no motor vehicle



Computer use at home



Internet use at home



‡ See note under 'Data converters and mapping' re calculation of Division totals on this page

Table 3: Socio-demographic indicators, Brisbane South DGP, Brisbane, Queensland and Australia, 2001

Indicator	Brisbane South DGP		Brisbane		Queensland		Australia	
	No.	%	No.	%	No.	%	No.	%
Single parent families	7,602	11.0	49,762	11.6	109,687	11.7	529,969	10.7
Indigenous‡	4,521	1.7	29,641	1.8	125,908	3.5	458,261	2.4
Full-time secondary education participation at age 16‡	2,948	82.8	18,673	80.3	40,051	77.1	130,198	78.7
Households: rent assistance	14,312	15.7	107,911	18.4	253,773	20.0	1,006,599	15.0
Dwellings rented from the State housing authority	4,805	5.2	26,043	4.3	47,286	3.5	317,171	4.5
Dwellings: no motor vehicle	8,514	9.1	59,167	9.8	125,606	9.3	708,073	10.0
Computer use at home	120,929	47.3	739,819	46.0	1,481,238	41.3	7,881,983	42.0
Internet use at home	86,559	33.7	510,705	31.7	964,143	27.4	5,199,286	27.7

‡ See note under 'Data converters and mapping' re calculation of Division total

The unemployment rate of 6.3% in Brisbane South DGP was lower than those for Brisbane (6.7%), and Queensland (7.1%) (Figure 4, Table 4). The labour force participation rate (76.9%) was slightly higher than that for Brisbane (76.0%) and Queensland (75.4%), while the female labour force participation rate (71.2%) was consistent with that in Brisbane (71.4%) and higher than for Queensland (69.5%).

Table 4: Unemployment and labour force, Brisbane South DGP, Brisbane, Queensland and Australia, 2003

Labour force indicators	Brisbane South DGP		Brisbane		Queensland		Australia	
	No.	%	No.	%	No.	%	No.	%
Unemployment rate‡	9,128	6.3	59,542	6.7	136,589	7.1	623,791	6.2
Labour force participation‡	146,010	76.9	889,867	76.0	1,926,589	75.4	10,038,147	75.2
Female labour force participation (2001)	48,336	71.2	302,824	71.4	618,570	69.5	3,306,521	69.7

‡ See note under 'Data converters and mapping' re calculation of Division total

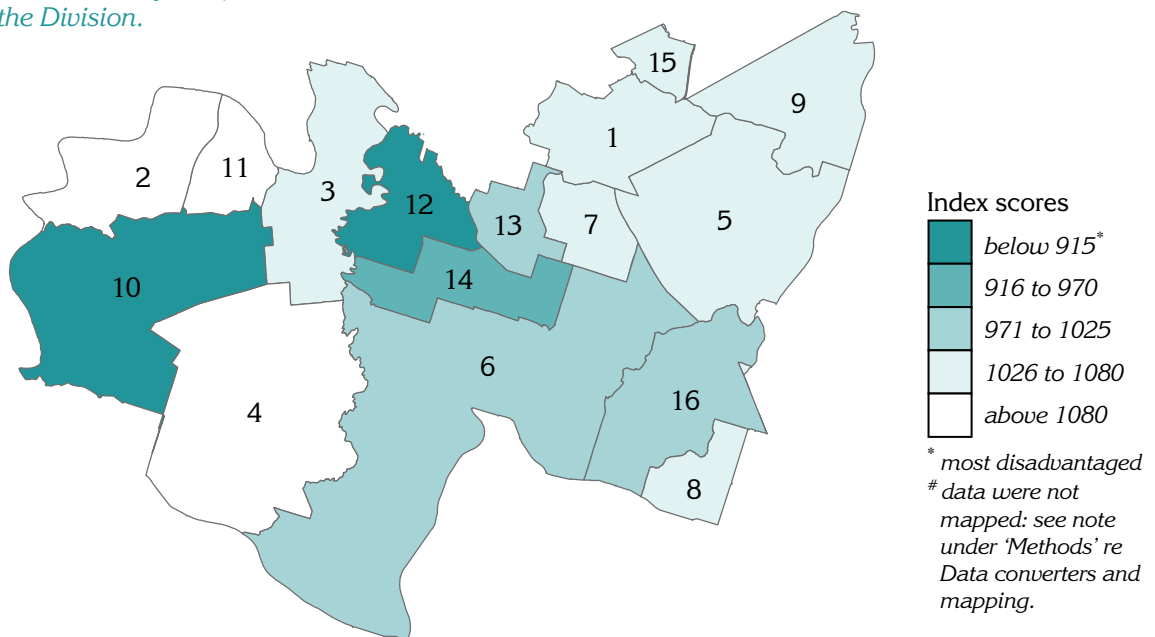
Summary of the socioeconomic ranking of the Brisbane South DGP

Following the 2001 Census, the Australian Bureau of Statistics (ABS) produced four socioeconomic indexes for areas (SEIFA) which describe various aspects of the socioeconomic profile of populations in areas. The scores from these indexes for individual Statistical Local Areas (SLAs) or groups of SLAs in Brisbane South DGP are shown in the supporting information, Table 9, page 18: SLAs are described on page 19.

The Brisbane South DGP area's SEIFA Index of Relative Socio-Economic Disadvantage (IRSD) score is 1013, marginally (1.3%) above the average scores for Australia (1000), and (0.8%) Brisbane (1008); this highlights the relatively higher socioeconomic status profile of the Division's population. Some marked variations in the IRSD within the Division are shown at the SLA/ SLA group level (Map 1).

Map 1: Index of Relative Socio-Economic Disadvantage by SLA/SLA group, Brisbane South DGP, 2001

See note under 'Methods' re Data converters and mapping concerning SLAs mapped to the Division. This is of particular relevance where part of an SLA is mapped to the Division.



Alphabetical key to SLA/SLA group, Brisbane South DGP, 2001

Archerfield/Coopers Plains	14	Kuraby	8
Camp Hill/Carindale	9	MacGregor/Pallara-Heathwood-Larapin	6
Coorparoo	15	Mt Gravatt/Rochedale	5
Darra-Sumner/Wacol	10	Nathan	7
Graceville/Oxley	3	Rocklea	12
Holland Park/Tarragindi	1	Runcorn/Eight Mile Plains	16
Inala/Richlands	4	Salisbury	13
Jindalee/River Hills	2	Seventeen Mile Rock	11

General medical practitioner (GP) supply

A total of 197.3 full-time equivalent (FTE) GPs, and 233.8 full-time workload equivalent (FWE¹) GPs worked in the Brisbane South DGP in 2003/04. Of the FWE GPs, 36.0% were female, and 22.9% were over 55 years of age (compared to 26.7% and 25.2%, respectively, for Queensland).

Apart from the day-time population, the rates of population per FTE GP varied depending on the population measure used, from a high of 1,412 people per GP (calculated on the average Estimated Resident Population (ERP) as at 30 June 2003 and 2004), to a low of 1,360 people per GP (calculated on the 1 August 2001 Census count – all people counted in the Division on Census night, including visitors from Australia and overseas). The rates of population per FWE GP were lower than the FTE rates, and varied from 1,191 (based on the ERP) to 1,148 (based on the Census count).

When calculated on the estimated day-time population, the rates of population in the Division were 5.6% below those calculated on the Usual Resident Population (usual residents of the Division counted in Australia on Census night).

Based on the ERP, the rates of population per GP in Brisbane South DGP differed little from those for Queensland and Australia, indicating a similar level of provision of GP services in the Division.

Table 5: Population per GP in Brisbane South DGP, Queensland and Australia, 2003/04

Population measure	Population	GPs		Population per GP	
		FTE	FWE	FTE	FWE
Brisbane South DGP					
Census count (adjusted)*	268,434	197.3	233.8	1,360	1,148
Usual Resident Population (URP) (adjusted)*	269,885	..	..	1,368	1,154
Estimated Resident Population (ERP)	278,569	..	..	1,412	1,191
Day-time population (estimated on URP)* ‡	254,681	..	..	1,291	1,089
Queensland (ERP)	3,841,538	2,739	3,256	1,403	1,180
Australia (ERP)	19,989,303	14,246	16,872	1,403	1,185

* The Census count, Usual Resident Population and Day-time population were adjusted to reflect population change between 2001 and 2003/04, as measured by the ERP

‡ See note under 'Data converters and mapping' re calculation of Division totals

Immunisation

Data from the Australian Childhood Immunisation Register show that 94.9% of children in the Division in 2002 were fully immunised at age one, marginally above than the Australian proportion of 94.2%.

Immunisation by provider type for children between the ages of 0 to 6 is shown in Table 6. The majority of children in the Division who were immunised were immunised by a general practitioner (94.9%), compared to 70.0% for Australia, with 3.8% immunised at a public hospital.

Table 6: Childhood immunisation at ages 0 to 6 by provider type, Brisbane South DGP and Australia, 2003/04

Provider	Brisbane South DGP	Australia
	%	%
General practitioner	94.9	70.0
Local government council	0.0	16.6
Community health centre/ worker	0.1	9.8
Public hospital	3.8	2.1
Aboriginal health service/ worker	1.2	0.9
Other*	0.0	0.6
Total: Per cent	100.0	100.0
Number	53,338	3,843,610

* Includes immunisations in/ by State Health Departments, RFDS and private hospitals

¹The FWE value is calculated for each GP location by dividing the GP's total Medicare billing (Schedule fee value of services provided during the reference period) by the mean billing of full-time doctors in that derived major speciality for the reference period. Thus, a GP earning 20% more than the mean billing of full-time doctors is shown as 1.2 FWE: this differs from full-time equivalent (FTE) counts, where the FTE value of any GP cannot exceed 1.0

Premature mortality

Deaths at ages below 75 years are used as an indicator of health status, as they largely reflect premature deaths, given the current levels of life expectancy in Australia.

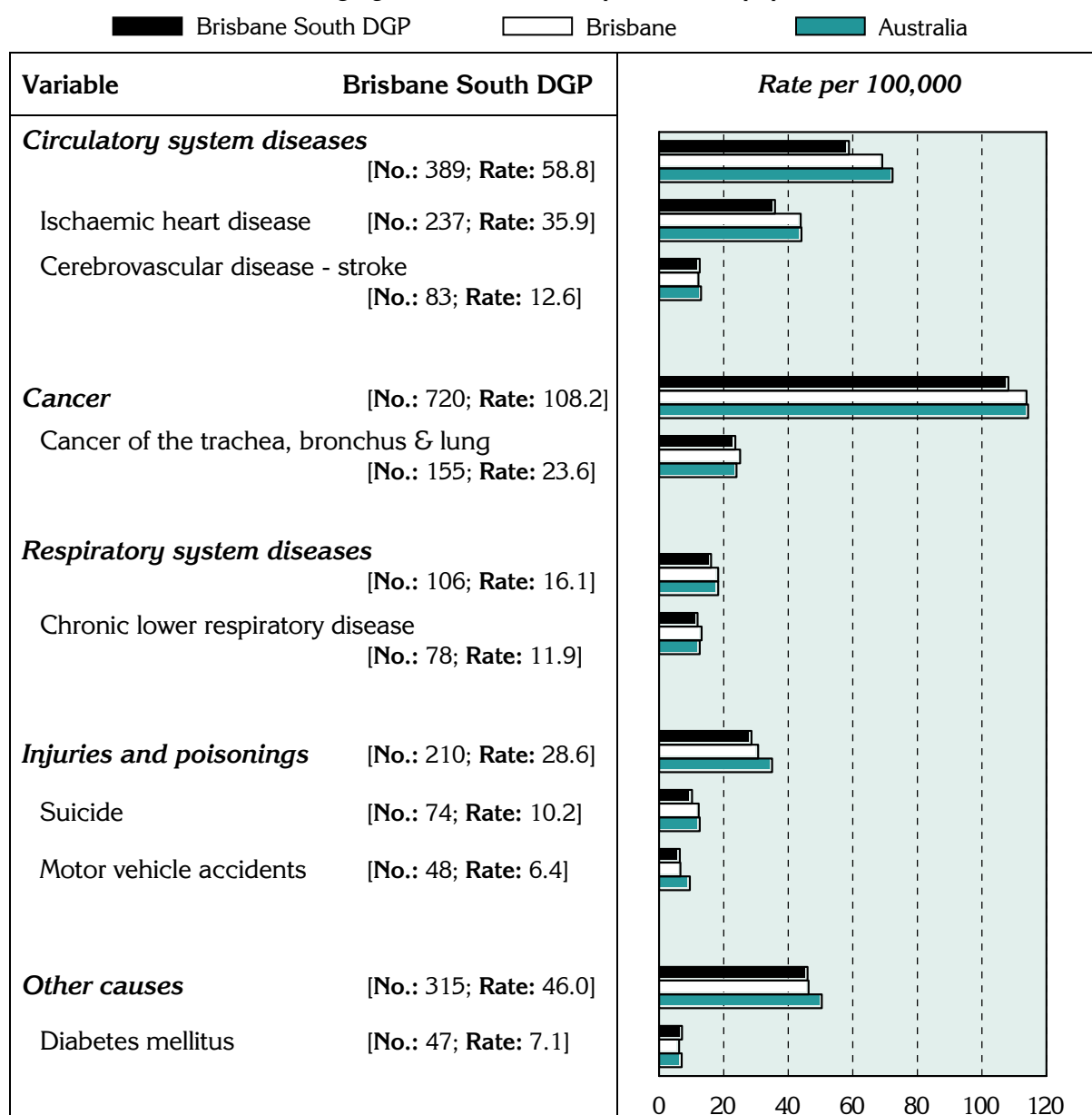
The 'all causes' death rate in the Division at ages 0 to 74 years (257.4 deaths per 100,000 population) was lower than the rates for Brisbane (277.8) and for Australia (290.4): the rates have been age standardised to allow for comparisons between areas, regardless of differences in age profiles between the Division and Australia.

The major causes of premature mortality in the Division, as for Brisbane and Australia as a whole, are cancer and diseases of the circulatory system (Figure 5). Death rates in the Division for all of the major conditions and causes were similar to, lower than, those for Brisbane and Australia.

The data on which the following chart is based are in Table 12.

Figure 5: Deaths before 75 years of age by major condition group and selected cause, Brisbane South DGP‡, Brisbane and Australia, 2000-02*

Indirectly age standardised rate per 100,000 population



* 'No.' is the total number of deaths for the 2000-02 period; 'Rate' is an annual rate, based on the 3 year average

‡ See note under 'Data converters and mapping' re calculation of Division totals

Chronic diseases and risk factors

The term “chronic disease” describes health problems that persist across time and require some degree of health care management (WHO 2002). Chronic diseases tend to have complex causes, are often long lasting and persistent in their effects, and can produce a range of complications (Thacker et al. 1995). They are responsible for a significant proportion of the burden of disease and illness in Australia and other westernised countries. Given the ageing of the population, this trend is likely to continue.

At different life stages, risk factors for chronic diseases and their determinants include genetic predisposition; poor diet and lack of exercise; alcohol misuse and tobacco smoking; poor intra-uterine conditions; stress, violence and traumatic experiences; and inadequate living environments that fail to promote healthy lifestyles (NPHP 2001). Risk factors are also more prevalent in areas of low socioeconomic status, and in communities characterised by low levels of educational attainment; high levels of unemployment; substantial levels of discrimination, interpersonal violence and exclusion; and poverty. There is a higher prevalence of risk factors among Indigenous communities, and other socioeconomically disadvantaged Australians (NPHP 2001).

Background

In this section, estimates of the prevalence of selected chronic diseases and risk factors, and two summary measures of health, are shown for the Division‡, and for SLAs within the Division: note that the estimates have been predicted from self-reported data, not on clinical records or physical measures. The chronic diseases and risk factors are those for which sufficiently reliable estimates can be made for the Division from national survey data. The process by which the estimates have been made, and details of their limitations, is described in the Notes section, pages 15-16. The data on which the following charts are based are in Table 13.

The estimates provide information of relevance to a number of the National Health Priority Areas (NHPAs – asthma; cardiovascular health; diabetes mellitus; injury prevention and control; mental health; and arthritis and musculoskeletal conditions: estimates have not been made for cancer control, the other NHPA). The risk factors for which estimates have been made are those which are accepted as being associated with these important chronic conditions. They include overweight (not obese), obesity, smoking, lack of exercise and high levels of alcohol intake.

The numbers are estimates for an area, not measured events as are death statistics: they should be used as indicators of likely levels (and not actual levels) of a condition or risk factor in an area.

Prevalence estimates: chronic disease‡

It is estimated that, with the exceptions of respiratory system diseases, and musculoskeletal system diseases (in particular, osteoporosis in females) which were higher, similar proportions of people in Brisbane South DGP reported having any of the selected chronic conditions compared to Australia as a whole (Figure 6): that is, prevalence rates per 1,000 population were similar.

Prevalence estimates: self-reported health‡

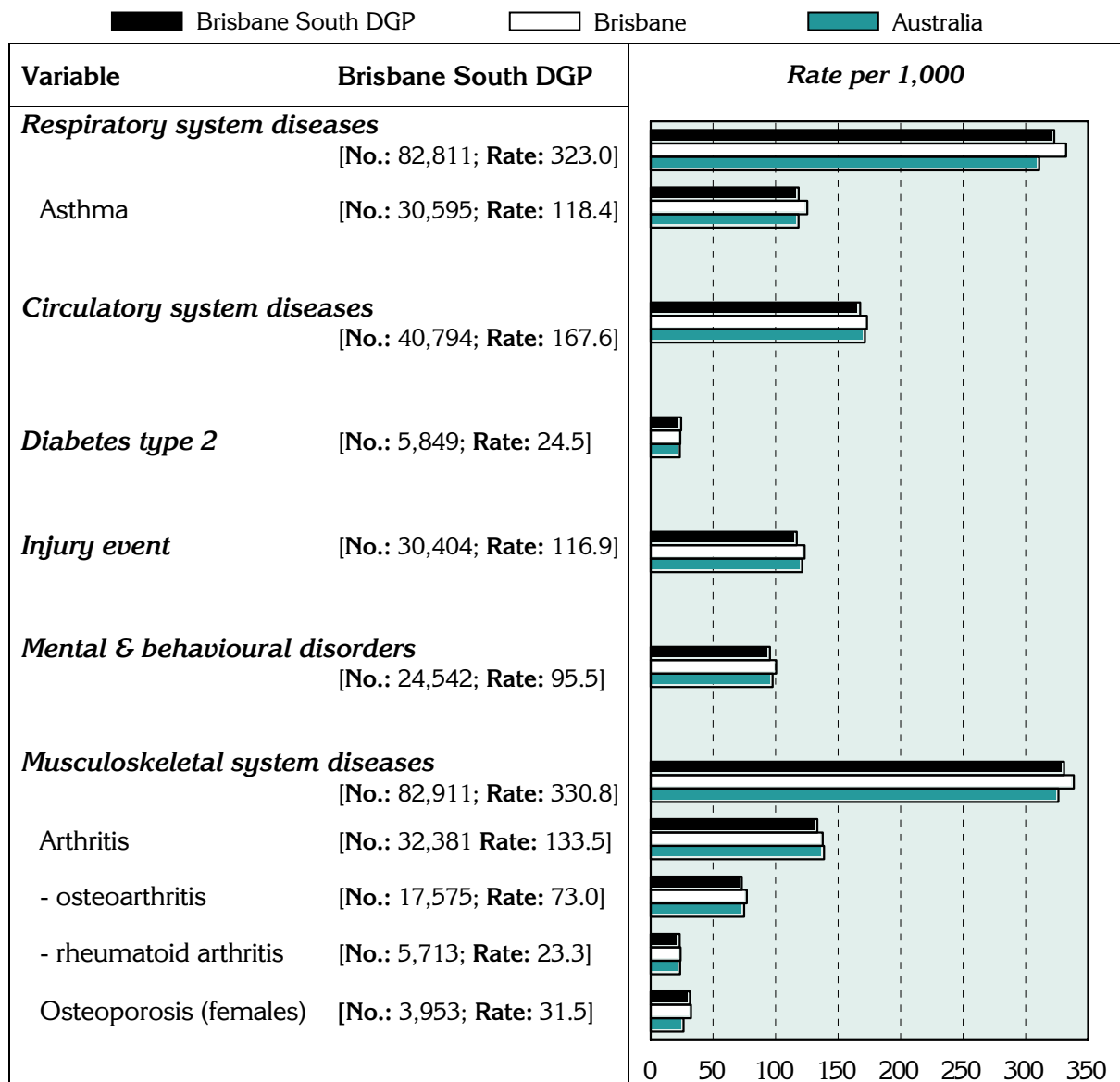
The NHS includes two measures of self-reported health. One is the Kessler Psychological Distress Scale–10 items (K–10). This is a scale of non-specific psychological distress based on 10 questions about negative emotional states in the four weeks prior to interview, asked of respondents 18 years and over (ABS 2002). The other asks respondents aged 15 years and over to rate their health on a scale from ‘excellent’, through ‘very good’, ‘good’ and ‘fair’, to ‘poor’ health.

The population of the Division aged 18 years and over is estimated to have a similar proportion with high psychological stress levels as measured by the K–10 (Figure 7) compared to Australia. The proportion of the population aged 15 years and over estimated to have reported their health as ‘fair’ or ‘poor’ is marginally lower than the national average.

‡ See note under ‘Data converters and mapping’ re calculation of Division totals

Figure 6: Estimates* of chronic disease and injury, Brisbane South DGP‡, Brisbane and Australia, 2001

Indirectly age standardised rate per 1,000 population

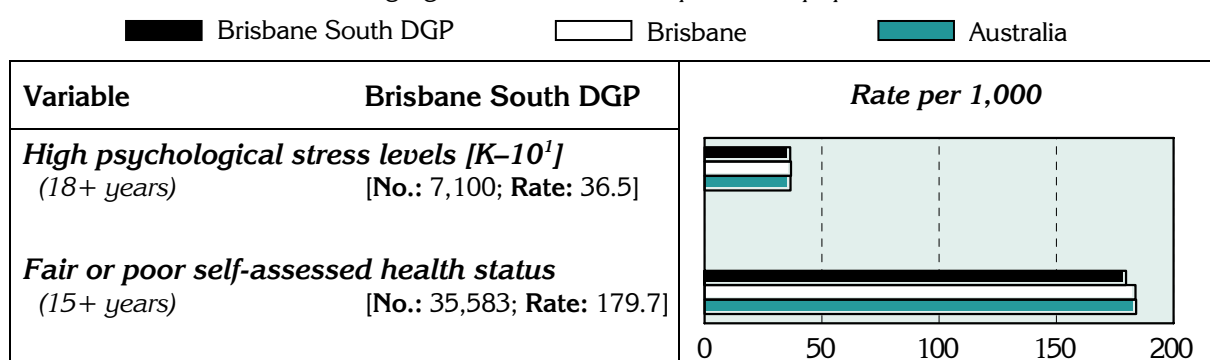


* 'No.' is a weighted estimate of the number of people in Brisbane South DGP reporting each chronic condition and is derived from synthetic predictions from the 2001 NHS

‡ See note under 'Data converters and mapping' re calculation of Division totals

Figure 7: Estimates* of measures of self-reported health, Brisbane South DGP‡, Brisbane and Australia, 2001

Indirectly age standardised rate per 1,000 population



* 'No.' is a weighted estimate of the number of people in Brisbane South DGP reporting under these measures and is derived from synthetic predictions from the 2001 NHS

¹ Kessler 10

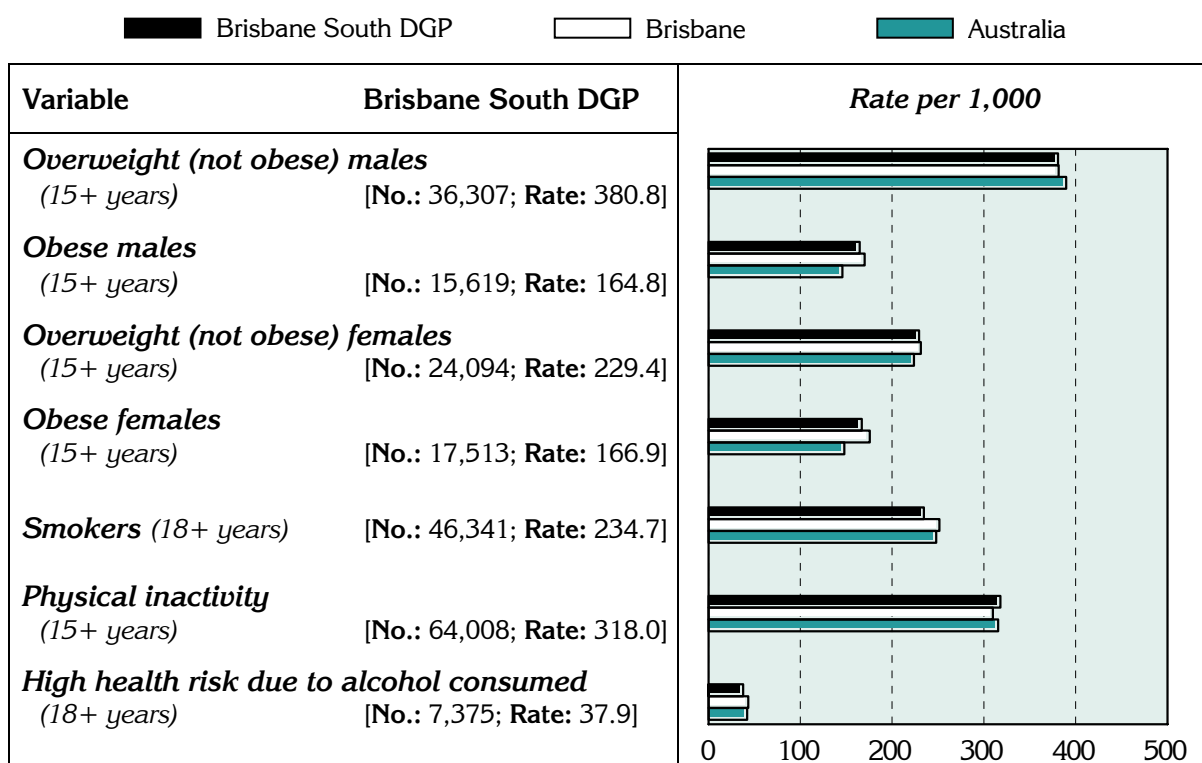
‡ See note under 'Data converters and mapping' re calculation of Division totals

Prevalence estimates: risk factors‡

The Brisbane South DGP had higher rates (when compared with the Australian population) for obesity in males, overweight and obesity in females, and lack of exercise (Figure 8).

Figure 8: Estimates* of selected risk factors, Brisbane South DGP‡, Brisbane and Australia, 2001

Indirectly age standardised rate per 1,000 population



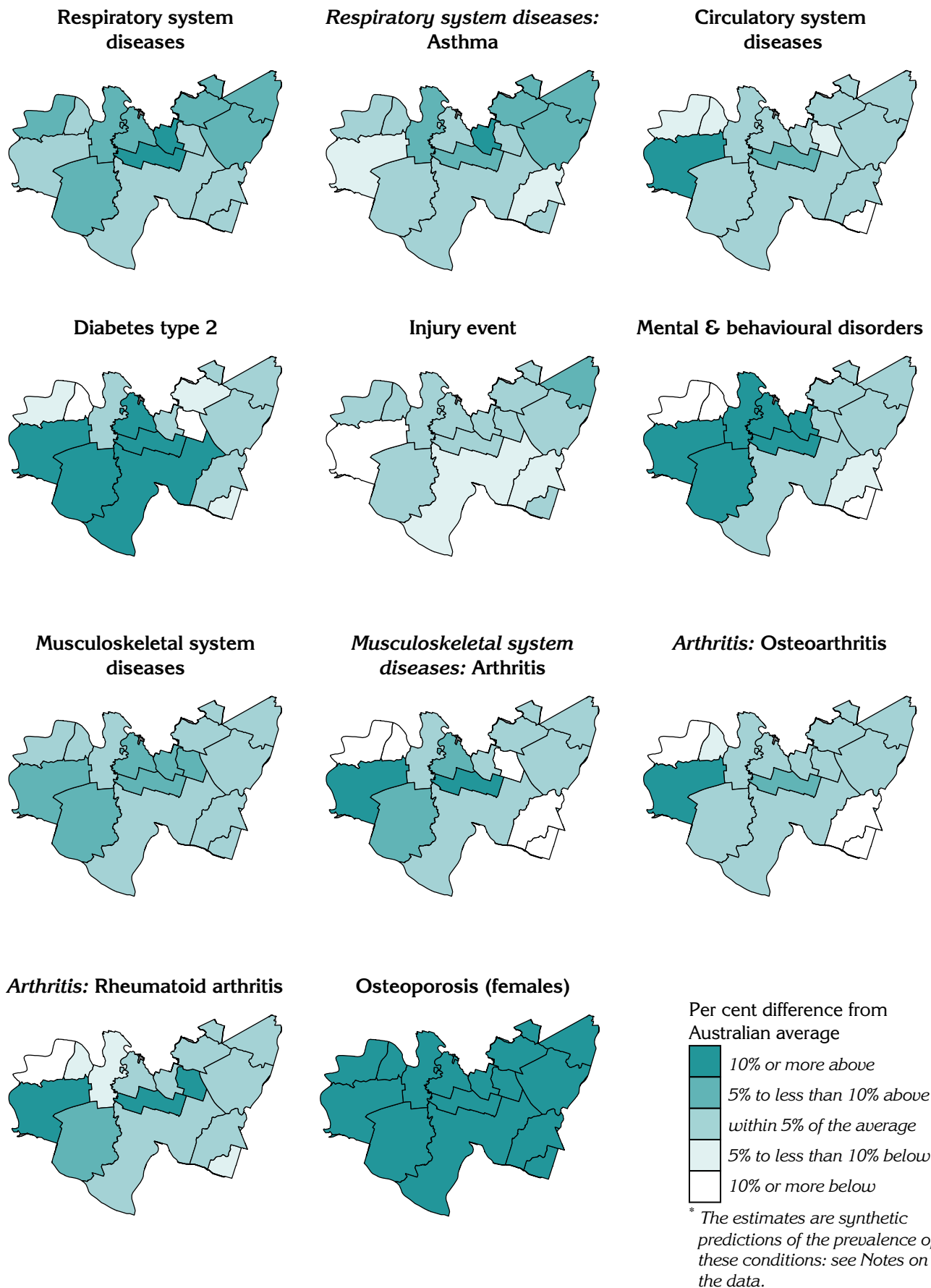
* 'No.' is a weighted estimate of the number of people in Brisbane South DGP with these risk factors and has been predicted using data from the 2001 NHS and known data for the Division

‡ See note under 'Data converters and mapping' re calculation of Division totals

The following maps provide details of the geographic distribution, at the SLA level, of the estimated prevalence of chronic disease (Map 2), self-reported health (Map 3) and risk factors associated with chronic disease (Map 4).

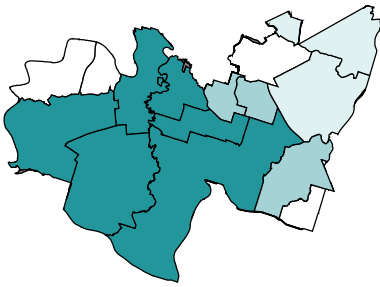
In the following maps, users should note that the estimates shown for part SLAs in the Division (see Table 11, page 19, for per cent of SLA population in the Division) represent the estimates for the whole SLA, and not just the part shown. However, SLAs with only a small proportion of their population in the Division are likely to have little influence on the total estimates for the Division, which have been based on the percentage of the SLA population in the Division.

Map 2: Estimates* of chronic disease and injury by SLA/SLA group, Brisbane South DGP, 2001

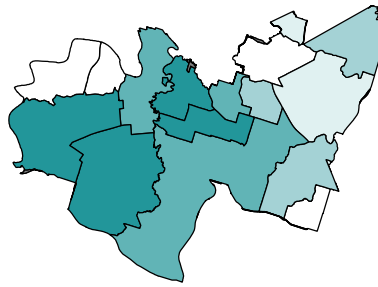


Map 3: Estimates* of measures of self-reported health by SLA/SLA group, Brisbane South DGP, 2001

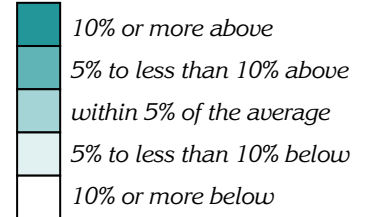
High psychological stress levels [K-10¹] (18+ years)



Fair or poor self-assessed health status (15+ years)



Per cent difference from Australian average

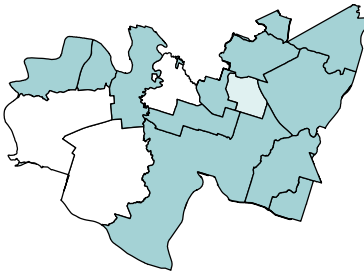


* The estimates are synthetic predictions of the prevalence of these conditions: see Notes on the data.

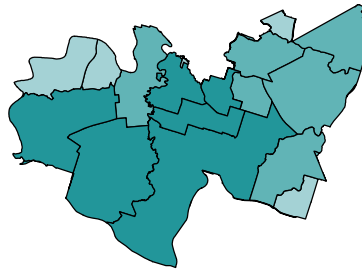
¹ Kessler 10

Map 4: Estimates* of selected risk factors by SLA/SLA group, Brisbane South DGP, 2001

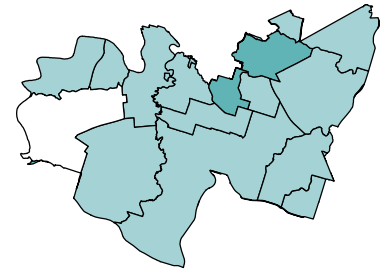
Overweight (not obese) males (15+ years)



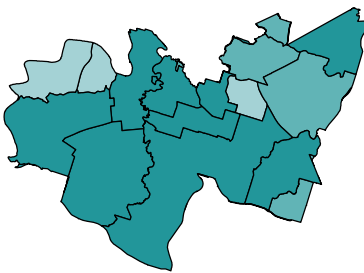
Obese males (15+ years)



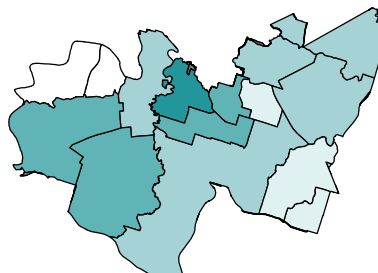
Overweight (not obese) females (15+ years)



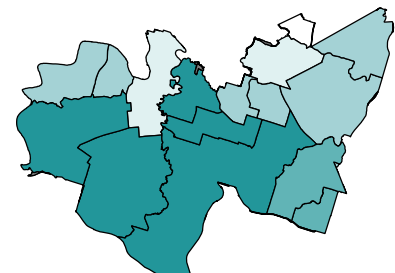
Obese females (15+ years)



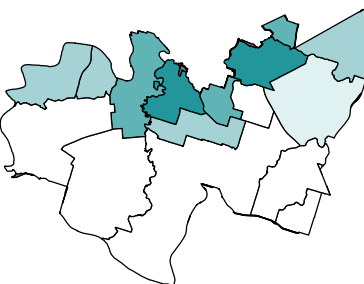
Smokers (18+ years)



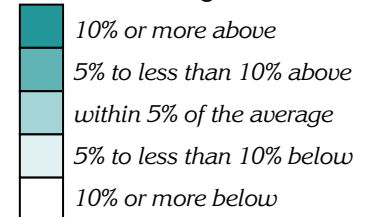
Physical inactivity (15+ years)



High health risk due to alcohol consumed (18+ years)



Per cent difference from Australian average



* The estimates are synthetic predictions of the prevalence of these conditions: see Notes on the data.

Notes on the data

Data sources and limitations

General

Unless stated otherwise, references to 'Brisbane' relate to the Brisbane Statistical Division.

Data sources

Table 7 details the data sources for the material presented in this profile.

Table 7: Data sources

Section	Source
Key indicators	
GP services per head of population	GP services data supplied by Department of Health and Ageing, 2003/04 Population data: Estimated Resident Population, ABS, mean of 30 June 2003 and 30 June 2004 populations
Socio-demographic profile	
Figures 1 and 2; Table 1	Estimated Resident Population, ABS, 30 June for the periods shown
Tables 2, 3 and 4; Figures 3 and 4	Data were extracted by postal area from the ABS Population Census 2001 ¹ , except for the following indicators: - <i>Indigenous</i> – Experimental estimates of Aboriginal and Torres Strait Islander people, ABS 2001 (unpublished) - <i>Full-time secondary education participation at age 16</i> – Census 2001 (unpublished) - <i>Households receiving rent assistance</i> – Centrelink, December Quarter 2001 (unpublished) - <i>Unemployment rate / Labour force participation</i> – extracted from <i>Small Area Labour Markets Australia</i> , June Quarter 2003, Department of Employment and Workplace Relations
Map 1; Table 9	ABS SEIFA package, Census 2001
General medical practitioner (GP) supply	
Table 5	GP data supplied by Department of Health and Ageing, 2003/04 Population estimates used in calculating the population per GP rates are the: - Census count ² , ABS Population Census 2001, scaled to 2003/04 - Usual Resident Population ³ , ABS Population Census 2001, scaled to 2003/04 - Day-time population: calculated from journey to work data, ABS Population Census (URP) 2001 (unpublished); and 2001 Census (URP), scaled to 2003/04 - Estimated Resident Population, ABS, June 2003/2004
Immunisation	
Text comment: 1 year olds	National Centre for Immunisation Research and Surveillance, 2002
Table 6	Australian Childhood Immunisation Register, Health Insurance Commission, 2003/04 (unpublished)
Premature mortality	
Figure 5; Table 12	ABS Deaths, 2000 to 2002
Chronic diseases and associated risk factors⁴	
Figures 6, 7 and 8; Maps 2, 3 and 4; Table 13	Estimated from 2001 National Health Survey (NHS), ABS (unpublished)

¹ All data extracted from Usual Residents Profile, except for data variables only released in the Basic Community Profile

² *Census count* - those counted in the Division on Census night, including tourists, business people and other visitors

³ *Usual Resident Population* - those who usually live there and who were in Australia at the time and would have provided details in the Census at the address where they were counted

⁴ See notes below

Chronic diseases and associated risk factors

The data for chronic conditions and risk factors for SLAs have been estimated from the 2001 National Health Survey (NHS), conducted by the ABS: see note below on synthetic estimates. The NHS sample includes the majority of people living in private households, but excludes the most remote areas of Australia. These areas cover 86.4% of Australia's land mass and comprise just 3% of the total population, however, 28% of Australia's Indigenous population live in these areas. Thus it has not been possible to produce these estimates for Divisions with relatively high proportions of their population in the most remote areas of Australia.

The data for chronic conditions and risk factors are self-reported data, reported to interviewers in the 2001 NHS. Table 8 includes notes relevant to this data.

Table 8: Notes on estimates of chronic diseases and associated risk factors

Indicator	Notes on the data
Estimates of chronic disease and injury (Figure 6 and Map 2)	
Long term conditions	- Respondents were asked whether they had been diagnosed with any long term health condition (a condition which has lasted or is expected to last for 6 months or more), and were also asked whether they had been told by a doctor or nurse that they had asthma, cancer, heart and circulatory conditions, and/or diabetes
Injury event	- Injuries which occurred in the four weeks prior to interview
Estimates of measures of self-reported health (Figure 7 and Map 3)	
Very high psychological distress levels (K10)	- Derived from the Kessler Psychological Distress Scale-10 items (K-10), which is a scale of non-specific psychological distress based on 10 questions about negative emotional states in the 4 weeks prior to interview. 'Very high' distress is the highest level of distress category (of a total of four categories)
Fair or poor self-assessed health status	- Respondent's general assessment of their own health, against a five point scale from excellent through to poor – 'fair' or 'poor' being the two lowest in the scale
Estimates of selected risk factors (Figure 8 and Map 4)	
Overweight (not obese)	- Based on self-reported height and weight; BMI calculated and grouped into categories (to allow reporting against both WHO and NHMRC guidelines) - overweight: 25.0 to less than 30.0
Obese	- Based on self-reported height and weight; BMI calculated and grouped into categories (to allow reporting against both WHO and NHMRC guidelines) – obese: 30.0 and greater
Smokers	- Respondent's undertaking regular (or daily) smoking at the time of interview
Physical inactivity	- Did not exercise in the two weeks prior to interview through sport, recreation or fitness (including walking) – excludes incidental exercise undertaken for other reasons, such as for work or while engaged in domestic duties
High health risk due to alcohol consumed	- Respondents estimated average daily alcohol consumption in the seven days prior to interview (based on number of days and quantity consumed). Alcohol risk levels were grouped according to NHMRC risk levels for harm in the long term, with 'high risk' defined as a daily consumption of more than 75 ml for males and 50 ml for females

Note: For a full description, refer to *ABS 2001 National Health Survey, Cat. No. 4364.0* and *ABS 2001 Health Risk Factors, Cat. No. 4812.0*

Methods

Synthetic estimates

The estimates of the prevalence of chronic disease and associated risk factors have been predicted for a majority of SLAs across Australia, using modelled survey data collected in the 2001 ABS National Health Survey (NHS) and known characteristics of the area. A synthetic prediction can be interpreted as the likely value for a 'typical' area with those characteristics: the SLA is the area level of interest for this project (where SLAs had small populations they were grouped to larger areas). This work was undertaken by the Australian Bureau of Statistics, as they hold the NHS unit record files: the small area data were compiled by PHIDU.

The approach used is to undertake an analysis of the survey data for Australia to identify associations in the NHS data between the variables that we wish to predict at the area level (eg. prevalence of chronic conditions and risk factors) and the data we have at the area level (eg. socioeconomic status, use of health services). The relationship between these variables for which we have area level data (the predictors) and the reporting of chronic conditions in the NHS is also a part of the model that is developed by the ABS. For example, such associations might be between the number of people reporting specified chronic conditions in the NHS and:

- the number of hospital admissions (in total, to public and to private hospitals, by age, sex and diagnosis),
- socioeconomic status (as indicated by Census data, or for recipients of government pensions and benefits), and
- the number of visits to a general medical practitioner.

The results of the modelling exercise are then applied to the SLA counts of the predictors. The prediction is, effectively, the likely value for a typical area with those characteristics. The raw numbers were then age-standardised, to control for the effects of differences in the age profiles of areas.

The numbers are estimates for an area, not measured events as are death statistics: they should be used as indicators of likely levels of a condition or risk factor in an area.

Premature deaths

Details of deaths by SLA were purchased from the ABS. The raw numbers were then age-standardised, by the indirect method, to control for the effects of differences in the age profiles of areas.

Data converters and mapping

[Conversion to Division of data available by postcode](#)

The allocation of postcodes to Divisions was undertaken using information from the Department of Health and Ageing's web site, which shows the proportion of a postcode in a Division (Table 10).

[Conversion to Division of data available by SLA](#)

(marked in this profile as ‡ See note under 'Data converters and mapping' re calculation of Division total)

Where the data presented in these profiles were only available by SLA they have been converted to Division of General Practice areas using a concordance based on data at the 2001 Census. A copy of the concordance is included in the Population data: A Guide for Divisions of General Practice: it is also available from the Divisions' data area on PHIDU web site.

In brief, the concordance splits the data (eg number of deaths) for each SLA across one or more Divisions. The proportion of an SLA's data that is allocated to each Division was calculated from (a) CD level Census 2001 data that splits SLAs across approximations to postcodes (referred to as postal areas) and (b) data on the DoHA website that splits postcodes across Divisions. This concordance can be adjusted to meet any new configuration of Division boundaries based on the 2001 Collection Districts, or combinations thereof.

The estimated population of each SLA in this Division is shown in Table 11.

[Mapping](#)

In some Divisions the maps may include a very small part of an SLA which has not been allocated any population, or either has a population of less than 100 or has less than 1% of the SLA's total population: these areas are mapped with a pattern.

Supporting information

This and other information is also available at www.publichealth.gov.au

A definition of population health

Population health, in the context of general practice, has been defined¹ as:

“The prevention of illness, injury and disability, reduction in the burden of illness and rehabilitation of those with a chronic disease. This recognises the social, cultural and political determinants of health. This is achieved through the organised and systematic responses to improve, protect and restore the health of populations and individuals. This includes both opportunistic and planned interventions in the general practice setting.”

The key determinants of health are social support networks, employment and working conditions, social environments, physical environments, geographical isolation, personal health practices, healthy child development, ageing and disability, biology and genetic endowment, health services, gender and culture.

In the Aboriginal and Torres Strait Islander context this means that a population health approach to health services will assist in ensuring “that Aboriginal and Torres Strait Islander people enjoy a healthy life equal to that of the general population, that is enshrined by a strong living culture, dignity and justice”.² This recognises the importance of achieving improvements to Aboriginal and Torres Strait Islander health and respects the particular health issues facing Indigenous people.

¹ “The role of general practice in population health – A Joint Consensus Statement of the General Practice Partnership Advisory Council and the National Public Health Partnership Group” (Joint Advisory Group on General Practice and Population Health 2001)

² As defined in the Strategic Framework for Aboriginal and Torres Strait Islander Health

SEIFA scores

Following the 2001 Census, the Australian Bureau of Statistics (ABS) produced four socioeconomic indexes for areas (SEIFA). The indexes describe various aspects of the socioeconomic make-up of populations in areas, using data collected in the 2001 Census.

The Index of Relative Socio-Economic Disadvantage (labelled ‘Disadvantage’ in Table 9) includes all variables that either reflect or measure disadvantage. The Index of Advantage/Disadvantage is used to rank areas in terms of both advantage and disadvantage: any information on advantaged persons in an area will offset information on disadvantaged persons in the area. The Index of Economic Resources and the Index of Education and Occupation were targeted towards specific aspects of advantage/disadvantage.

For further information on the composition and calculation of these indexes see the ABS Information Paper ABS Cat No. 2039.0 available on the ABS web site www.abs.gov.au. The scores for these indexes for each Statistical Local Area (SLA) or part SLA in Brisbane South DGP are shown in Table 9.

In using this table, users should note that the index score shown for SLAs with less than 100 per cent in the Division represents the score for the whole SLA, and not just the part shown. However, SLAs with small proportions may have little influence on the average index score for the Division which has been based on the postcodes in the Division.

Table 9: SEIFA scores by SLA/SLA group, Brisbane South DGP, 2001

SLA/ SLA group name (% per cent of SLA/ SLA group in the Division)	Index score				
	Disadvantage	Advantage	Economic Resources	Education & Occupation	
Holland Park/Tarragindi [#]	(100.0)	1057	1070	1032	1087
Jindalee/River Hills [#]	(100.0)	1087	1114	1103	1100
Graceville/Oxley [#]	(100.0)	1063	1084	1052	1097
Inala/Richlands [#]	(100.0)	898	934	955	925
Mt Gravatt/Rochedale [#]	(97.1)	1032	1039	1019	1047
MacGregor/Pallara-Heathwood-Larapinta [#]	(100.0)	988	1013	998	1020
Nathan	(100.0)	1030	1044	1028	1035
Kuraby	(100.0)	1048	1057	1071	1041
Camp Hill/Carindale [#]	(50.0)	1060	1076	1068	1072
Darra-Sumner/Wacol [#]	(7.6)	804	863	900	864
Seventeen Mile Rock	(100.0)	1086	1108	1101	1095
Rocklea	(100.0)	910	903	938	884
Salisbury	(100.0)	1004	983	959	1000
Archerfield/Coopers Plains [#]	(100.0)	968	979	959	990
Coorparoo	(50.0)	1067	1097	1052	1122
Runcorn/Eight Mile Plains [#]	(100.0)	1017	1044	1026	1045

* 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

SLA group: see Table 11 for codes for the individual SLAs in this group

Statistical geography of the Brisbane South DGP

The postcodes in the Brisbane South DGP are shown below (Table 10).

Table 10: Postcodes in the Brisbane South DGP, 2004

Postcode	Per cent of postcode population in the Division*	Postcode	Per cent of postcode population in the Division*	Postcode	Per cent of postcode population in the Division*
4072	100	4106	100	4113	100
4073	100	4107	100	4121	100
4074	100	4108	100	4122	100
4075	100	4109	100	4151	50
4076	100	4110	100	4152	50
4077	100	4111	100		
4078	100	4112	100		

* Proportions are approximate

Source: Department of Health and Ageing web site (accessed online version as at February 2005):

<http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm>

Statistical Local Areas (SLAs) are defined by the Australian Bureau of Statistics to produce areas for the presentation and analysis of data. In Brisbane, SLAs are based on suburbs: as many of these have very small populations, they have in some cases been grouped to form areas of larger population: the groupings are those used in HealthWIZ. The individual suburbs and groups of suburbs that comprise the Division are listed in Table 11. The SLA group name does not in all cases include the names of all suburbs (SLAs) in the group: all relevant SLA codes are shown in the table.

Table 11: SLAs/SLA groups in the Brisbane South DGP by 2001 boundaries

SLA code ¹	SLA/ SLA group name	Per cent of SLA/ SLA group's population in the Division*	Estimate of the SLA/ SLA group's 2004 population in the Division
31001, 31356, 31456, 31492, 31547, 31552, 31615	MacGregor/ Pallara-Heathwood-Larapinta	100.0	22,429
31023, 31154	Archerfield/Coopers Plains	100.0	24,304
31097, 31108, 31113, 31116	Camp Hill/Carindale	50.0	20,214
31157	Coorparoo	50.0	43,204
31162, 31241, 31451, 31522	Graceville/Oxley	100.0	41,958
31167, 31596	Darra-Sumner/Wacol	77.6	42,862
31176, 31184, 31203, 31288, 31484	Inala/Richlands	100.0	1,485
31198, 31503	Runcorn/Eight Mile Plains	100.0	6,577
31282, 31285, 31563	Holland Park/Tarragindi	100.0	19,510
31296, 31301, 31375, 31408, 31487, 31612	Jindalee/River Hills	100.0	6,930
31331	Kuraby	100.0	8,290
31372, 31402, 31405, 31495, 31588, 31626	Mt Gravatt/Rochedale	97.1	1,445
31416	Nathan	100.0	5,388
31498	Rocklea	100.0	4,672
31511	Salisbury	100.0	7,117
31517	Seventeen Mile Rock	100.0	24,821

* 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

¹ For further details refer to Australian Standard Geographical Classification, 2001, ABS Cat No. 1216.0, 2001

Supporting data

The data used in Figure 5 to illustrate the rates of premature mortality in the Division are shown below in Table 12.

Table 12: Deaths before 75 years of age by major condition group and selected cause, Brisbane South DGP‡, Brisbane and Australia, 2000-02*

Indirectly age standardised rate per 100,000 population

Variable	Brisbane South DGP‡		Brisbane		Australia	
	No.	Rate	No.	Rate	No.	Rate
Circulatory system diseases	389	58.8	2,781	69.1	38,357	72.3
Ischaemic heart disease	237	35.9	1,764	43.9	23,364	44.1
Cerebrovascular disease – stroke	83	12.6	488	12.2	6,920	13.0
Cancer	720	108.2	4,629	113.8	60,603	114.3
Cancer of the trachea, bronchus & lung	155	23.6	1,008	25.1	12,715	24.0
Respiratory system diseases	106	16.1	728	18.3	9,726	18.3
Chronic lower respiratory disease	78	11.9	523	13.2	6,657	12.6
Injuries and poisonings	210	28.6	1,387	30.7	18,573	35.0
Suicide	74	10.2	556	12.3	6,706	12.6
Motor vehicle accidents	48	6.4	302	6.6	5,014	9.5
Other causes	315	46.0	1,946	46.3	26,735	50.4
Diabetes mellitus	47	7.1	252	6.2	3,734	7.0

* 'No.' is the total number of deaths for the 2000-02 period; 'Rate' is an annual rate, based on the 3 year average

‡ See note under 'Data converters and mapping' re calculation of Division totals

The data used to illustrate the prevalence estimates of chronic disease (Figure 6), measures of self-reported health (Figure 7), and selected risk factors (Figure 8), are shown in Table 13 below.

Table 13: Estimates of chronic disease and associated risk factors, Brisbane South DGP‡, Brisbane and Australia, 2001

Indirectly age standardised rate per 1,000 population

Variable	Brisbane South DGP‡	Brisbane	Australia
Chronic disease and injury (Figure 6)			
Respiratory system diseases	323.0	332.4	310.8
Asthma	118.4	125.4	118.3
Circulatory system diseases	167.6	173.1	171.5
Diabetes type 2	24.5	23.7	23.4
Injury event	116.9	123.2	121.2
Mental & behavioural disorders	95.5	100.5	97.6
Musculoskeletal system diseases	330.8	338.6	326.2
Arthritis	133.5	137.7	138.8
- Osteoarthritis	73.0	77.0	74.9
- Rheumatoid arthritis	23.3	24.0	23.6
Osteoporosis (females)	31.5	32.4	26.4
Measures of self-reported health (Figure 7)			
Very high psychological distress levels (18+ years)	36.5	36.8	36.6
Fair or poor self-assessed health status (15+ years)	179.7	183.7	184.0
Risk factors (Figure 8)			
Overweight (not obese) males (15+ years)	380.8	381.5	389.7
Obese males (15+ years)	164.8	170.2	145.9
Overweight (not obese) females (15+ years)	229.4	231.4	223.9
Obese females (15+ years)	166.9	175.7	148.0
Smokers (18+ years)	234.7	251.6	248.0
Physical inactivity (15+ years)	318.0	309.9	315.5
High health risk due to alcohol consumed (18+ years)	37.9	43.3	42.1

‡ See note under 'Data converters and mapping' re calculation of Division totals

References

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Thacker S, Stroup D & Rothenberg R (1995). Public health surveillance for chronic conditions: a scientific basis for decisions. *Statistics in Medicine* 14: 629-641.

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Acknowledgements

Funding for these profiles was provided by the Population Health Division of the Department of Health and Ageing (DoHA). Assistance, by way of comment on the profiles and assistance in obtaining some datasets, has also been received from the Primary Care Division of the DoHA, the ABS and the ACIR.

Further developments and updates

Subject to agreement and funding, a number of developments could be undertaken:

- Details of hospitalisations potentially avoidable through ambulatory care interventions are currently being prepared and will be forwarded to Divisions (and posted on the PHIDU web site) when they are available. Other enhancements will be considered as appropriate datasets become available.

The profiles could be updated as the data are updated. For example:

- Population estimates, avoidable hospitalisations, immunisation, and GP activity and workforce data – annually;
- Chronic disease estimates – three-yearly;
- Census data – five-yearly.

Any developments would be informed by consultation, including with Divisions.

PHIDU contact details

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

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