# Population health profile of the

# Murrumbidgee

# Division of General Practice: supplement

Population Profile Series: No. 30a

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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 Murrumbidgee Division of General Practice: supplement

This profile is a supplement to the *Population health profile of the Murrumbidgee Division of General Practice*, dated November 2005, available from <a href="www.publichealth.gov.au">www.publichealth.gov.au</a>. This supplement includes an update of the population of the Murrumbidgee 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:

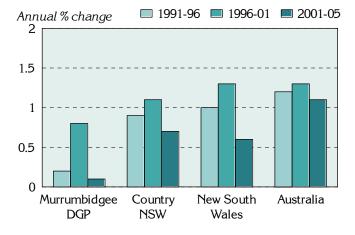
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions
- 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 Murrumbidgee Division had an Estimated Resident Population of 63,601 at 30 June 2005.

Figure 1: Annual population change, Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005



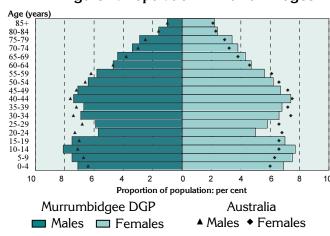
Over the five years from 1991 to 1996, the Division's population increased by 0.2% on average each year, well below the level in country New South Wales (0.9%), New South Wales (1.0%) and Australia (1.2%). From 1996 to 2001, the annual percentage increase was higher (0.8%), but still below that in country New South Wales (1.1%), New South Wales (1.3%), and Australia (1.3%). The Division's population increased by just 0.1% from 2001 to 2004, compared to annual increases of 0.7% for country New South Wales, 0.6% for New South Wales, and 1.1% for Australia.

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

Age group (years)	Murrumbidgee DGP		Austral	ia
	No.	%	No.	%
0-14	14,262	22.4	3,978,221	19.6
15-24	8,026	12.6	2,819,834	13.9
25-44	17,003	26.7	5,878,107	28.9
45-64	15,004	23.6	4,984,446	24.5
65-74	5,030	7.9	1,398,831	6.9
75-84	3,260	5.1	954,143	4.7
85+	1,017	1.6	315,027	1.5
Total	63,601	100.0	20,328,609	100.0

As shown in the accompanying table and the age-sex pyramid below, the Murrumbidgee DGP had a higher proportion of its population at ages 0 to 14 years (22.4%) compared to Australia as a whole (19.6%) but fewer people aged 15 to 24 years (12.6%) and 25 to 44 years (26.7%), compared to Australia (13.9% and 28.9%, respectively). Conversely, the 65 to 74 year age groups had higher proportions compared to Australia as a whole.

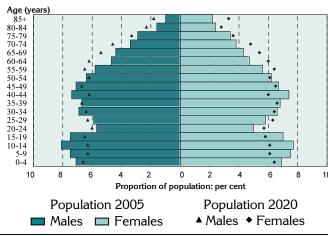
Figure 2: Population in Murrumbidgee DGP and Australia, by age and sex, 2005



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

- at younger ages notably more children aged 0 to 19 years;
- from 20 to 59 years notably fewer males and females (perhaps moving away to continue education, or to seek employment opportunities); and
- at older ages relatively fewer males and females aged 65 to 79 years.

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



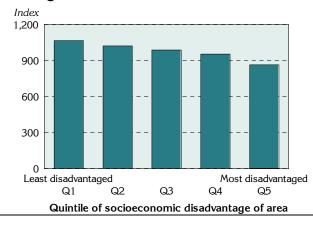
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages generally much lower proportions of males and females aged 0 to 19 years;
- from 30 to 54 years lower proportions of both males and females; and
- from 55 years onwards relatively more males and females (most pronounced at ages 60 to 74 years and for the 85+ age group).

# Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the Murrumbidgee Division of General Practice*, dated November 2005, available from <a href="https://www.publichealth.gov.au">www.publichealth.gov.au</a>, for other socio-demographic indicators.

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



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

The Murrumbidgee DGP has an index score of 977, below the score for Australia of 1000: this score varies widely across the Division, from a low of 864 in the most disadvantaged areas to 1065 in the least disadvantaged areas.

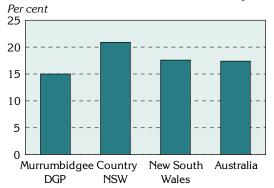
Note: each 'quintile' comprises approximately 20% of the population of the Division.

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. The proportion of jobless families in the Murrumbidgee DGP (15.0%) was markedly lower than in country New South Wales as a whole (20.9%), (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 markedly higher proportion of the population with private health insurance (54.2%), compared to country New South Wales (44.9%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 2001

### Jobless families with children under 15 years old



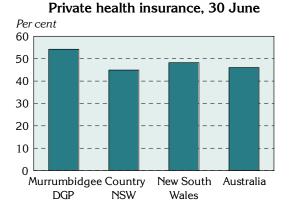
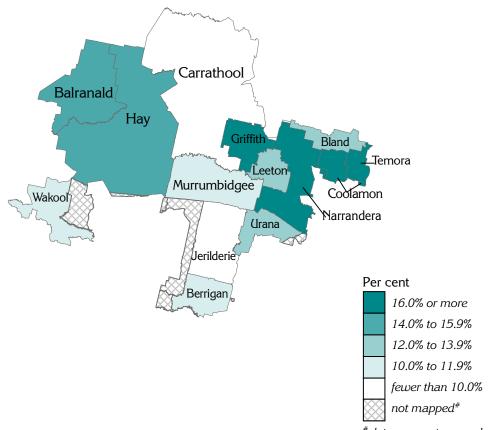


Table 2: Socio-demographic indicators, Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 2001

Indicator	Murrumbidgee DGP		Country	Country NSW		New South Wales		Australia	
	No.	%	No.	%	No.	%	No.	%	
Jobless families with children under 15 years old	1,053	15.0	54,883	20.9	121,409	17.6	357,563	17.4	
Private health insurance (30 June)	33,040	54.2	1,061,580	44.9	3,062,382	48.2	8,671,106	46.0	

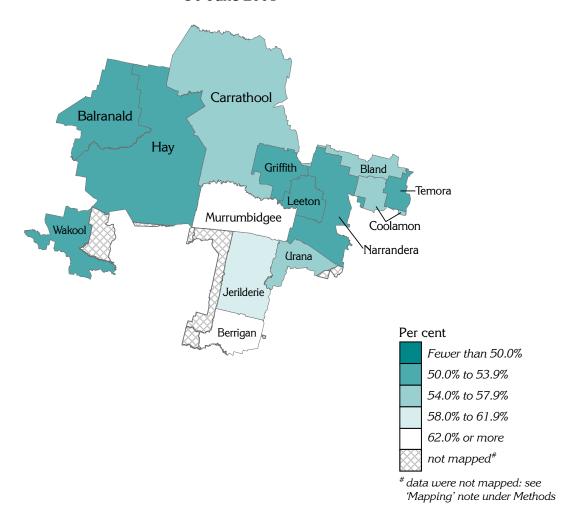
Details of the distribution of jobless families and of the population covered by private health insurance are shown by Statistical Local Area (SLA) in Maps 1 and 2, respectively.

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



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

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



# GP services to residents of the Murrumbidgee 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.

The majority (92.7%) of all unreferred attendances to residents of Murrumbidgee DGP were provided in the Division (i.e. by a GP with a provider number in the Division): this represented 211,814 GP unreferred attendances (Table 3). A further 2.3% of unreferred attendances to residents were provided by GPs with a provider number in the Riverina DGP. Smaller numbers of unreferred attendances were also provided by GPs in neighbouring Victorian Divisions.

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

Division		Unreferred a	ttendances
Number	Name	No.	% <sup>3</sup>
232	Murrumbidgee DGP	211,814	92.7
228	Riverina DGP	5,161	2.3
229	NSW Central Coast DGP	1,880	0.8
327	Goulburn Valley DGP	1,255	0.5
331	Murray Plains DGP	746	0.3
329	Border DGP	719	0.3
Other		6,976	3.1
Total		228,551	100.0

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

The majority (87.2%) of unreferred attendances provided by GPs with a provider number in Murrumbidgee DGP were also to people living in the Division (i.e. their Medicare address was in the Division) (Table 4). A further 3.1% of unreferred attendances by GPs in the Division were to people living in Riverina DGP,

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

Division		Unreferred at	ttendances
Number	Name	No.	% <sup>3</sup>
232	Murrumbidgee DGP	211,814	87.2
228	Riverina DGP	7,483	3.1
327	Goulburn Valley DGP	3,465	1.4
331	Murray Plains DGP	2,333	1.0
332	Mallee DGP	1,907	0.8
206	Western Sydney DGP (now WentWest & part Hawkesbury-Hills)	1,004	0.4
222	ACT DGP	887	0.4
Other		14,094	5.7
Total		242,987	100.0

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

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

<sup>&</sup>lt;sup>3</sup> Proportion of all unreferred attendances of patients with an address in Division 232 by Division in which attendance occurred

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

<sup>&</sup>lt;sup>3</sup> Proportion of all unreferred attendances to GPs with a provider number in Division 232 by Division of patient address

# Additional prevalence estimates: chronic diseases and risk factors combined

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

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

It is estimated that there were relatively more people in Murrumbidgee DGP who had asthma and were smokers, compared to Australia as a whole, but with a lower rate to that in country New South Wales (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 Murrumbidgee DGP who had type 2 diabetes and were overweight or obese, compared to country New South Wales and Australia.

Figure 6: Estimates of selected chronic diseases and risk factors, Murrumbidgee DGP, country New South Wales and Australia, 2001

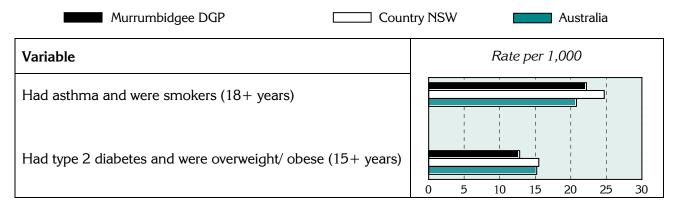


Table 5: Estimates of selected chronic diseases and risk factors, Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 2001

Variable	Murrumbidgee DGP		Country	Country NSW		New South Wales		Australia	
_	No. <sup>1</sup>	Rate <sup>2</sup>	No. <sup>1</sup>	Rate <sup>2</sup>	No.1	Rate <sup>2</sup>	No. <sup>1</sup>	Rate <sup>1</sup>	
Had asthma and smoked <sup>3</sup>	1,265	22.2	54,344	24.7	126,542	19.7	397,734	20.8	
Had type 2 diabetes & were overweight/ obese <sup>4</sup>	800	12.8	40,784	15.5	100,235	15.7	283,176	15.2	

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

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

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

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

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

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

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

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

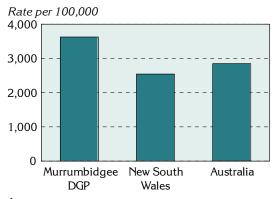
In 2001 to 2002, the 2,384 admissions for ambulatory care sensitive (ACS) conditions accounted for 11.3% of all admissions in the Murrumbidgee DGP (Table 6, Figure 7), markedly above the levels for both New South Wales (8.6%) and Australia (8.7%).

Table 6: Avoidable<sup>1</sup> and unavoidable hospitalisations, Murrumbidgee DGP, New South Wales, and Australia, 2001/02

Category	Murrumbidgee DGP			New	South Wale	es	Australia			
	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	No.	Rate <sup>2</sup>	%	
Avoidable <sup>1</sup>	2,384	3,625.1	11.3	170,066	2,543.8	8.6	552,786	2,847.5	8.7	
Unavoidable	18,638	29,246.5	88.7	1,810,901	27,255.3	91.4	5,818,199	29,970.7	91.3	
Total	21,022	32,896.4	100.0	1,980,967	29,798.8	100.0	6,370,985	32,818.2	100.0	

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

Figure 7: Avoidable hospitalisations<sup>1</sup>, Murrumbidgee DGP, New South Wales and Australia, 2001/02



The rate of avoidable hospitalisations in Murrumbidgee DGP is markedly higher, a rate of 3,625.1 admissions per 100,000 population, compared to New South Wales (a rate of 2,543.8) and Australia (2,847.5).

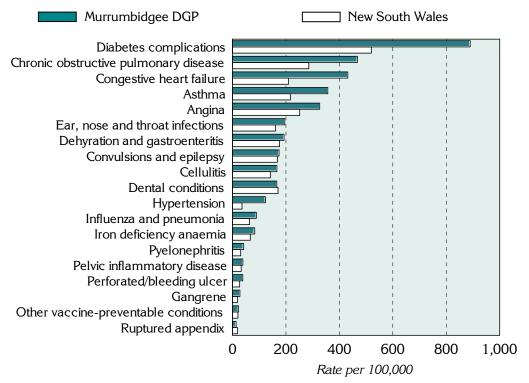
Diabetes complications, chronic obstructive pulmonary disease, congestive heat failure, asthma and angina had the highest rates of avoidable hospitalisations in the Murrumbidgee DGP (Figure 8, Table 7).

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. Ear nose and throat infections; and dehydration and gastroenteritis have the highest rates of avoidable hospitalisations for the acute conditions.

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

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

Figure 8: Avoidable hospitalisations<sup>1</sup> by condition, Murrumbidgee DGP and New South Wales, 2001/02



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

Table 7: Avoidable hospitalisations<sup>1</sup> by condition, Murrumbidgee DGP, New South Wales and Australia, 2001/02

Sub-category/ condition	Murrumbi	dgee DGP	New So	uth Wales	Austr	alia
	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>	No.	Rate <sup>2</sup>
Vaccine-preventable	74	112.0	5,630	84.5	16,573	85.4
Influenza and pneumonia	59	89.3	4,280	64.1	13,021	67.1
Other vaccine preventable	15	22.7	1,350	20.4	3,552	18.3
Chronic <sup>3</sup>	1,769	2,679.0	106,803	1,587.0	352,545	1,816
Diabetes complications	587	889.5	34,975	519.5	141,345	728.1
Iron deficiency anaemia	53	83.2	4,494	67.0	16,451	84.7
Hypertension	79	123.5	2,398	35.7	6,354	32.7
Congestive heart failure	281	431.7	14,270	209.7	42,447	218.6
Angina	215	326.7	16,987	251.8	49,963	257.4
Chronic obstructive pulmonary disease	312	467.7	19,359	285.6	54,853	282.6
Asthma	242	356.7	14,289	216.8	41,009	211.3
Acute	689	1,056.8	62,543	946.0	200,913	1,035
Dehydration and gastroenteritis	120	192.9	11,725	176.4	37,766	194.5
Convulsions and epilepsy	115	174.5	11,093	168.1	31,137	160.4
Ear, nose and throat infections	136	195.9	10,615	161.1	32,075	165.2
Dental conditions	111	166.0	11,196	170.3	43,667	224.9
Perforated/bleeding ulcer	25	38.7	1,830	27.1	5,795	29.9
Ruptured appendix	9	13.7	1,212	18.5	3,866	19.9
Pyelonephritis	26	42.0	2,038	31.0	7,386	38.0
Pelvic inflammatory disease	22	39.1	2,134	32.7	6,547	33.7
Cellulitis	107	166.2	9,451	142.0	28,204	145.3
Gangrene	18	27.8	1,249	18.6	4,470	23.0
Total avoidable hospitalisations <sup>4</sup>	2,384	3,625.1	170,066	2,543.8	552,786	2,847.5

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

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

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

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

# Avoidable mortality

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

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

Almost three quarters (70.3%) of all deaths in Murrumbidgee DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, lower than the proportion for country New South Wales (71.6%) (Table 8). Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 27.0% of all deaths at ages 0 to 74 years in Murrumbidgee DGP, compared to 28.3% in country New South Wales.

Table 8: Avoidable and unavoidable mortality (0 to 74 years) by area, Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 1997 to 2001

Mortality category	Murrumbidgee DGP		Country	/ NSW	New S Wal		Austr	Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	
Avoidable	697	224.5	29,442	234.3	66,151	213.6	189,845	211.8	
% of total	70.3	••	71.6		71.4	••	71.5	••	
(Amenable)	(268)	(85.6)	(11,638)	(91.2)	(26,374)	(85.0)	(76,249)	(85.1)	
(% of total)	(27.0)	()	(28.3)	()	(28.5)	()	(28.7)	()	
Unavoidable	295	94.3	11,700	92.1	26,468	85.3	75,582	84.3	
% of total	29.7		28.4		28.6	••	28.5	••	
Total mortality	992	318.8	41,142	326.4	92,619	299.0	265,427	296.1	
%	100.0		100.0		100.0		100.0		

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

Rates of avoidable mortality were higher for males than for females in each of the comparator areas. Murrumbidgee DGP's rate of avoidable mortality for males was 311.5 deaths per 100,000 males, more than twice the rate of 134.4 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 97.8, compared to 72.8 for females, a rate ratio of 1.34 (Figure 9, Table 9).

Figure 9: Avoidable and amenable mortality by sex (0 to 74 years), Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 1997 to 2001

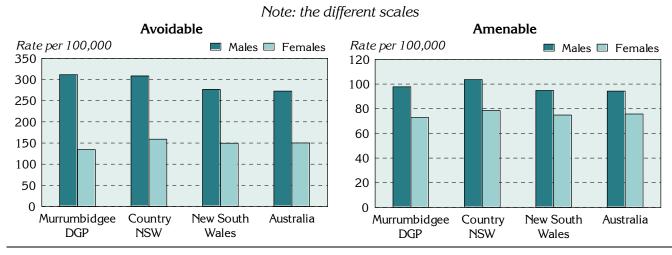


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 1997 to 2001

Mortality category and sex	Murrumbidgee DGP		Country	Country NSW		New South Wales		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	
Avoidable									
Males	501	311.5	19,569	308.5	43,074	276.8	123,026	272.6	
Females	197	134.4	9,873	159.1	23,077	149.6	66,819	150.1	
Total	697	224.5	29,442	234.3	66,151	213.6	189,845	211.8	
Rate ratio-M:F <sup>2</sup>		2.32**	••	1.94**	••	1.85**		1.82**	
Amenable									
Males	161	97.8	6,743	103.6	14,811	94.8	42,568	94.3	
Females	107	72.8	4,895	78.6	11,562	74.9	33,681	75.7	
Total	268	85.6	11,638	91.2	26,374	85.0	76,249	85.1	
Rate ratio-M:F <sup>2</sup>		1.34*	••	1.32**	••	1.27**	••	1.25**	

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

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

The numbers of YLL for Murrumbidgee DGP, country New South Wales, New South Wales 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 70.1% of total YLL (0 to 74 years) for Murrumbidgee DGP, lower than the 71.8% for country New South Wales. Similarly, the proportion of YLL from amenable mortality for Murrumbidgee DGP (26.8%) was lower than that for country New South Wales (27.6%).

Table 10: Years of life lost from avoidable mortality (0 to 74 years), Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 1997 to 2001

Mortality category	Murrumbidgee DGP		Country	Country NSW		New South Wales		Australia	
	No.	% of	No.	% of	No.	% of	No.	% of	
		total		total		total		total	
Avoidable	11,950	70.1	502,860	71.8	1,147,183	71.8	3,327,375	71.9	
(Amenable)	(4,568)	(26.8)	(192,960)	(27.6)	(444,143)	(27.8)	(1,298,430)	(28.0)	
Unavoidable	5,089	29.9	197,182	28.2	451,496	28.2	1,303,289	28.1	
Total	17,039	100.0	700,042	100.0	1,598,679	100.0	4,630,664	100.0	

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

<sup>&</sup>lt;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 1,360.8 deaths per 100,000 population in Murrumbidgee 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 371.9 in Murrumbidgee Division.

Table 11: Avoidable and amenable mortality by age, Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 1997 to 2001

Mortality category and age (years)		Murrumbidgee DGP		y NSW	New S Wa		Austi	ralia
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>
Avoidable								
0-14	18	24.1	738	29.0	1,836	27.5	5,669	28.8
15-24	21	52.6	938	62.6	2,241	50.9	7,045	52.8
25-44	70	78.4	3,317	99.6	8,119	82.9	24,356	83.9
45-64	263	371.9	9,755	343.5	22,358	311.1	64,282	304.9
65-74	326	1,360.8	14,694	1464.0	31,597	1,375.8	88,493	1,358.1
Total	697	224.5	29,442	234.3	66,151	213.6	189,845	211.8
Amenable								
0-24	17	13.8	645	15.5	1,658	14.8	5,083	15.4
25-44	16	17.6	784	23.0	1,878	19.2	5,946	20.5
45-64	109	155.4	4,060	142.9	9,444	131.4	27,464	130.3
65-74	126	530.3	6,148	613.7	13,394	582.9	37,756	579.4
Total	268	85.6	11,638	91.2	26,374	85.0	76,249	85.1

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

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

The highest rates of avoidable mortality for the selected major condition groups in the Murrumbidgee DGP were for cardiovascular diseases, with a rate of 73.5 deaths per 100,000 population, and cancer, 71.2 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 chronic obstructive pulmonary disease, with rates of 52.8 per 100,000 population and 28.7 per 100,000, respectively.

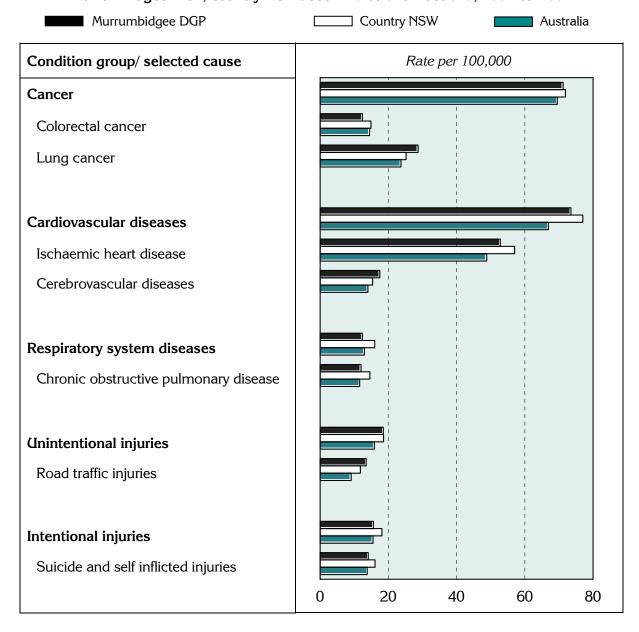
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Murrumbidgee DGP, country New South Wales, New South Wales and Australia, 1997 to 2001

Condition group/ selected cause	Murrum DG	•	Country	NSW		New South Wales		Australia	
	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	No.	Rate <sup>1</sup>	
Cancer	223	71.2	9,239	71.9	21,158	68.1	62,338	69.5	
Colorectal cancer	39	12.4	1,936	14.9	4,318	13.9	13,008	14.5	
Lung cancer	92	28.7	3,314	25.2	7,297	23.4	21,208	23.7	
Cardiovascular diseases	235	73.5	10,101	77.0	21,925	70.3	59,945	66.9	
Ischaemic heart disease	169	52.8	7,474	57.0	15,935	51.1	43,712	48.8	
Cerebrovascular diseases	55	17.5	2,015	15.4	4,656	14.9	12,558	14.0	
Respiratory system diseases	40	12.4	2,136	16.0	4,313	13.8	11,612	13.0	
Chronic obstructive pulmonary disease	39	12.0	1,966	14.6	3,882	12.4	10,395	11.6	
Unintentional injuries	53	18.5	2,027	18.6	4,540	15.0	14,224	15.9	
Road traffic injuries	39	13.5	1,279	11.8	2,528	8.4	8,138	9.1	
Intentional injuries	44	15.6	1,939	18.1	4,497	14.9	13,891	15.5	
Suicide and self inflicted injuries	40	14.1	1,730	16.1	3,941	13.0	12,393	13.8	

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

With the exception of colorectal cancer, rates in the Division were above, or consistent with, those for Australia for the condition groups and selected causes, but generally below the rates in country New South Wales (Figure 10).

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



### Notes on the data

### Data sources and limitations

#### General

References to 'country New South Wales' relate to New South Wales excluding the Sydney Statistical Division

#### **Data sources**

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

Table 13: Data sources

Section	Source			
Population				
Figures 1 and 2; Table 1	Estimated Resident Population, ABS, 30 June for the periods shown			
Figure 3	Estimated Resident Population, ABS, 30 June 2005; Population Projections, ABS, 30 June 2020 (unpublished) <sup>1</sup>			
Additional socio-demographic indicators				
Figure 4	ABS SEIFA package, Census 2001			
Table 2; Figure 5; Map 1	Jobless families, ABS, 2001 (unpublished)			
Table 2; Figure 5; Map 2	Private health insurance, from Hansard			
GP services – patient flow/ GP catchment				
Tables 3 and 4	Medicare Australia, 2003/04			
Additional prevalence estimates: chronic diseases and risk factors combined				
Figure 6; Table 5	Estimated from 2001 National Health Survey (NHS), ABS (unpublished)			
Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions				
Tables 6 and 7; Figures 7 and 8	ational Hospital Morbidity Database at Australian Institute of Health & Welfare, 001/02; data produced in HealthWIZ by Prometheus Information (not available public release dataset)			
Avoidable mortality				
Tables 8, 9, 10, 11 and 12; Figures 9 and 10	ABS Deaths 1997-2001; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)			

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

### Methods

For background information on the additional prevalence estimates presented in this profile, please refer to the 'Notes on the data' section of the *Population health profile*, November 2005 (<a href="https://www.publichealth.gov.au">www.publichealth.gov.au</a>).

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

### **Mapping**

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

### Statistical geography of the Murrumbidgee DGP

For information on the postcodes in the Division, please refer the Department of Health and Ageing website <a href="http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm">http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-pcd-programs-divisions-divspc.htm</a>; also included in table format in the 'Notes on the data' section of the *Population health profile*, November 2005 (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, SLAs are equivalent to Local Government Areas. The SLAs, and the proportion of their population estimated to be in Murrumbidgee Division (based on their 2001 Census Population), are shown in Table 14.

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

	• •		
SLA	SLA name	Per cent of the SLA's	Estimate of the SLA's
code		population in the	2005 population in
		Division*	the Division
10300	Balranald	4.2	114
10650	Berrigan	78.3	6,494
10800	Bland	8.4	549
11600	Carrathool	70.3	2,303
12000	Coolamon	19.0	785
13450	Griffith	100.0	25,140
13850	Hay	100.0	3,534
13900	Holbrook	0.4	#
14250	Jerilderie	100.0	1,871
14300	Junee	1.1	#
14750	Leeton	100.0	12,026
15550	Murrumbidgee	100.0	2,620
15800	Narrandera	95.6	6,293
17350	Temora	9.3	592
17450	Tumbarumba	0.6	#
17700	Urana	9.3	130
17751	Wagga Wagga - Part A	0.1	#
17754	Wagga Wagga - Part B	2.4	111
17800	Wakool	18.3	886

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