

Population health profile of the Nepean

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

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Population health profile of the Nepean Division of General Practice: supplement

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

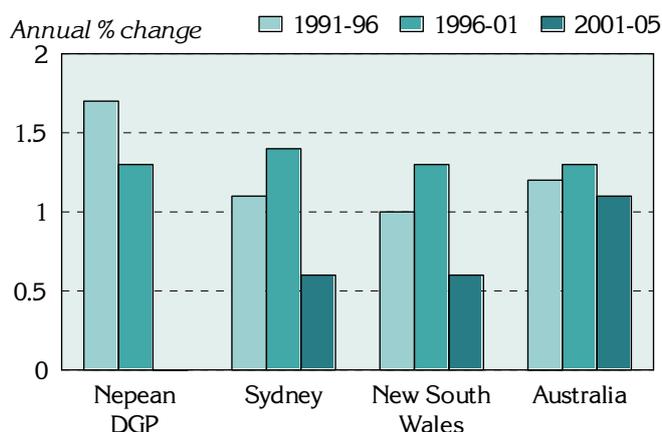
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive 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 Nepean Division had an Estimated Resident Population of 180,287 at 30 June 2005.

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



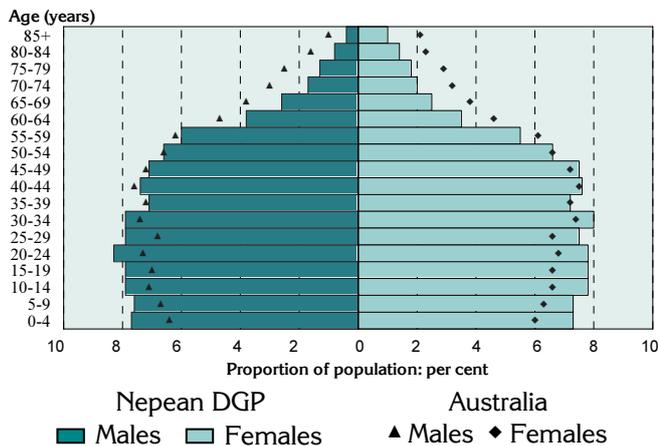
Over the five years from 1991 to 1996, the Division's population increased by 1.7% on average each year, markedly higher than in Sydney (1.1%) and New South Wales (1.0%). From 1996 to 2001, the annual percentage increase in the Division was 1.3%, similar to that in Sydney (1.4%) and New South Wales (1.3%). There was no growth from 2001 to 2005, compared to increases in Sydney and New South Wales (both 0.6%).

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

Age group (years)	Nepean DGP		Australia	
	No.	%	No.	%
0-14	41,091	22.8	3,978,221	19.6
15-24	28,717	15.9	2,819,834	13.9
25-44	54,496	30.2	5,878,107	28.9
45-64	42,085	23.3	4,984,446	24.5
65-74	7,878	4.4	1,398,831	6.9
75-84	4,762	2.6	954,143	4.7
85+	1,257	0.7	315,027	1.5
Total	180,287	100.0	20,328,609	100.0

As shown in the accompanying table and the age-sex pyramid below (Figure 2), Nepean DGP had higher proportions of the age groups from 0 to 44 years, and lower proportions above those ages, when compared to Australia.

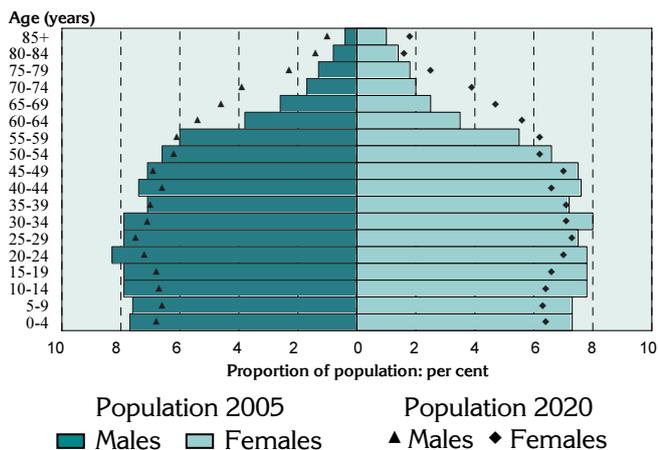
Figure 2: Population in Nepean DGP and Australia, by age and sex, 2005



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

- at younger ages – higher proportions of children aged 0 to 14 years and young people aged 15 to 24 years;
- from 25 to 34 years – higher proportions of both males and females; and
- at older ages – lower proportions of both males and females at ages 55 years and over.

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



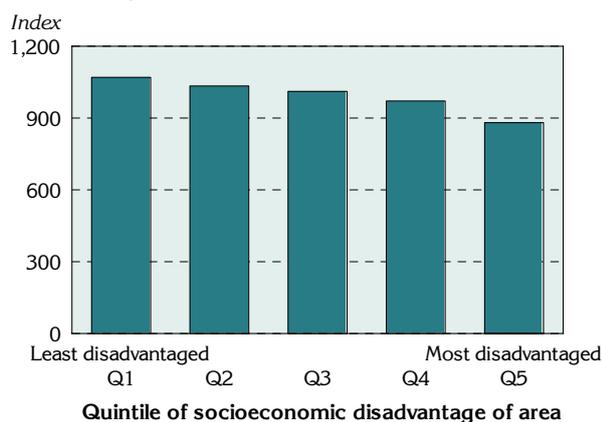
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- from ages 0 to 44 – much lower proportions of males and females (only marginally lower at ages 25 to 29 years and 35 to 39 years); and
- from age 55 years and above – higher proportions of 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 Nepean Division of General Practice*, dated November 2005, available from www.publichealth.gov.au, for other socio-demographic indicators.

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



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

The Nepean DGP has an index score of 993, marginally lower than the score for Australia of 1000: this score varies across the Division, from a score of 881 in the most disadvantaged areas to 1070 in the least disadvantaged areas.

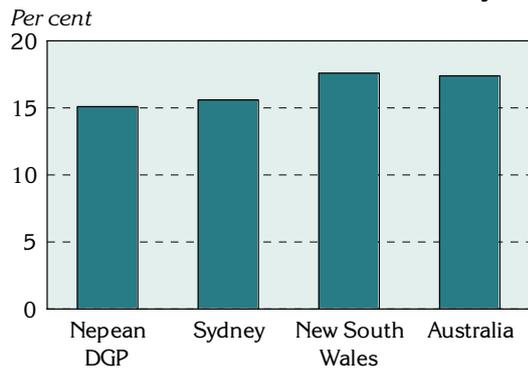
Note: each 'quintile' comprises approximately 20% of the population of the Division.

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 rate of jobless families in the Nepean DGP (15.1%), was consistent with the level in Sydney as a whole (15.6%) (Figure 5, Table 2).

With the introduction of the 30% rebate for private health insurance premiums, there was a once-off registration process, providing information of the postcode and residence of those who had such insurance (these data are not available at this area level for later dates). In 2001, the Division had a notably lower proportion of the population with private health insurance (42.4%), compared to Sydney (50.2%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, Nepean DGP, Sydney, New South Wales and Australia, 2001

Jobless families with children under 15 years old



Private health insurance, 30 June

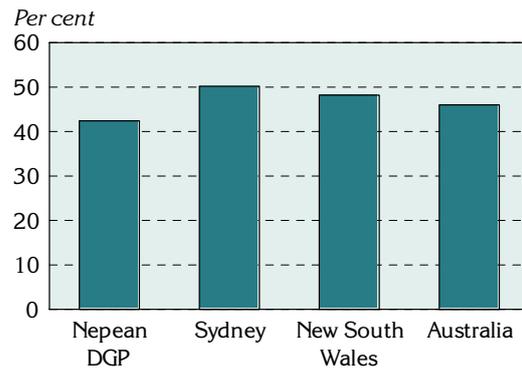
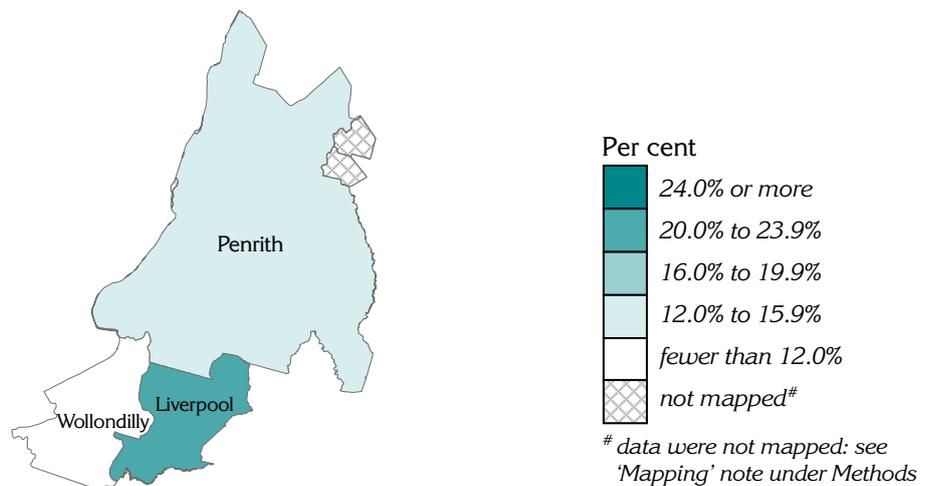


Table 2: Socio-demographic indicators, Nepean DGP, Sydney, New South Wales and Australia, 2001

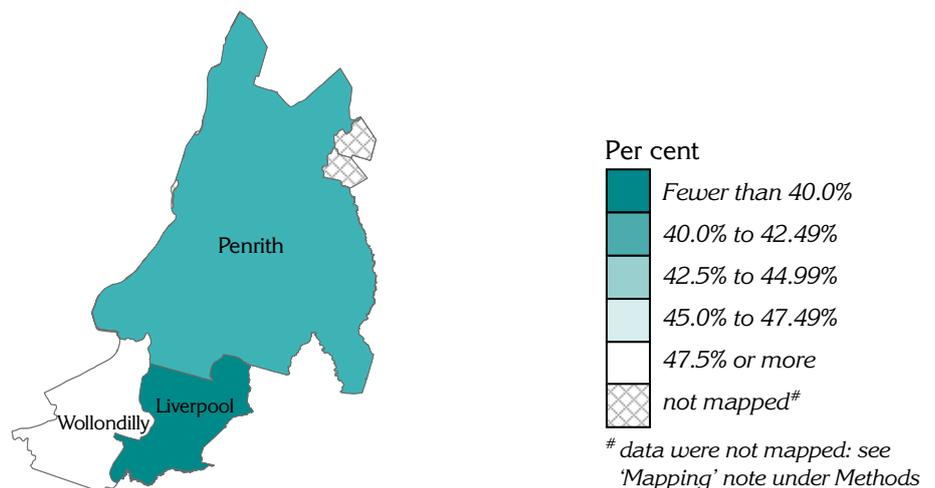
Indicator	Nepean DGP		Sydney		New South Wales		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	3,395	15.1	66,526	15.6	121,409	17.6	357,563	17.4
Private health insurance (30 June)	73,806	42.4	2,000,802	50.2	3,062,382	48.2	8,671,106	46.0

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, Nepean DGP, 2001



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



GP services to residents of the Nepean DGP

The following tables include information, purchased from Medicare Australia, of the movement of patients and GPs between Divisions. Note that the data only include unreferred attendances recorded under Medicare: unreferred attendances not included are those for which the cost is met by the Department of Veterans' Affairs or a compensation scheme; or are provided by salaried medical officers in hospitals, community health services or Aboriginal Medical Services, and which are not billed to Medicare. At any attendance, one or more services may have been provided.

Four fifths (83.4%) of all unreferred attendances to residents of Nepean DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 888,974 GP unreferred attendances (Table 3). A further 8.4% of unreferred attendances to residents were provided by GPs with a provider number in Western Sydney DGP.

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

Division		Unreferred attendances	
Number	Name	No.	% ³
237	Nepean DGP	888,974	83.4
206	Western Sydney DGP (now WentWest & part Hawkesbury-Hills)	89,106	8.4
211	Fairfield DGP	11,517	1.1
238	Blue Mountains DGP	10,599	1.0
240	Hawkesbury DGP (now part of Hawkesbury-Hills)	9,026	0.8
215	Macarthur DGP	8,167	0.8
Other	..	48,165	4.5
Total	..	1,065,554	100.0

¹ Based on address in Medicare records

² Division of GP based on provider number

³ Proportion of all unreferred attendances of patients with an address in Division 237 by Division in which attendance occurred

More than four fifths (80.7%) of unreferred attendances provided by GPs with a provider number in Nepean DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 6.6% of unreferred attendances by GPs in the Division were to people living in Western Sydney DGP. Residents of the Blue Mountains DGP (4.7%) also received unreferred attendances from GPs in the Nepean Division.

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

Division		Unreferred attendances	
Number	Name	No.	% ³
237	Nepean DGP	888,974	80.7
206	Western Sydney DGP (now WentWest & part Hawkesbury-Hills)	73,150	6.6
238	Blue Mountains DGP	51,805	4.7
240	Hawkesbury DGP (now part of Hawkesbury-Hills)	21,585	2.0
210	Liverpool DGP	7,677	0.7
Other	..	58,555	5.3
Total	..	1,101,746	100.0

¹ Division of GP based on provider number

² Based on address in Medicare records

³ Proportion of all unreferred attendances to GPs with a provider number in Division 237 by Division of patient address

Additional prevalence estimates: chronic diseases and risk factors combined

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

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

It is estimated that there were relatively more people in Nepean DGP who had asthma and were smokers, compared to Australia and (in particular) country New South Wales (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were higher. There were also relatively more people in Nepean DGP who had type 2 diabetes and were overweight or obese, compared to Australia and country New South Wales.

Figure 6: Estimates of selected chronic diseases and risk factors, Nepean DGP, Sydney and Australia, 2001



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

Variable	Nepean DGP		Sydney		New South Wales		Australia	
	No. ¹	Rate ²	No. ¹	Rate ²	No. ¹	Rate ²	No. ¹	Rate ¹
Had asthma and smoked ³	4,275	23.0	72,198	17.0	126,542	19.7	397,734	20.8
Had type 2 diabetes & were overweight/ obese ⁴	2,249	17.6	59,451	15.9	100,235	15.7	283,176	15.2

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

² Rate is the indirectly age-standardised rate per 1,000 population

³ Population aged 18 years and over

⁴ Population aged 15 years and over

Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions

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

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

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

In 2001 to 2002, the 4,272 admissions from ambulatory care sensitive (ACS) conditions accounted for 9.3% of all admissions in the Nepean DGP (Table 6, Figure 7), above the levels in both New South Wales (8.6%) and Australia (8.7%).

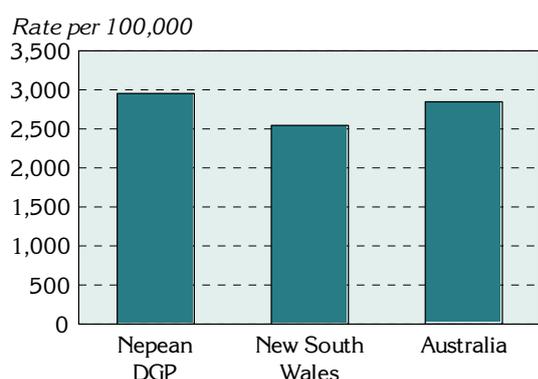
Table 6: Avoidable¹ and unavoidable hospitalisations, Nepean DGP, New South Wales, and Australia, 2001/02

Category	Nepean DGP			New South Wales			Australia		
	No.	Rate ²	%	No.	Rate ²	%	No.	Rate ²	%
Avoidable ¹	4,272	2,953.2	9.3	170,066	2,543.8	8.6	552,786	2,847.5	8.7
Unavoidable	41,867	27,079.8	90.7	1,810,901	27,255.3	91.4	5,818,199	29,970.7	91.3
Total	46,139	30,010.5	100.0	1,980,967	29,798.8	100.0	6,370,985	32,818.2	100.0

¹ Admissions resulting from ACS conditions

² Rate is the indirectly age-standardised rate per 100,000 population

Figure 7: Avoidable hospitalisations¹, Nepean DGP, New South Wales and Australia, 2001/02



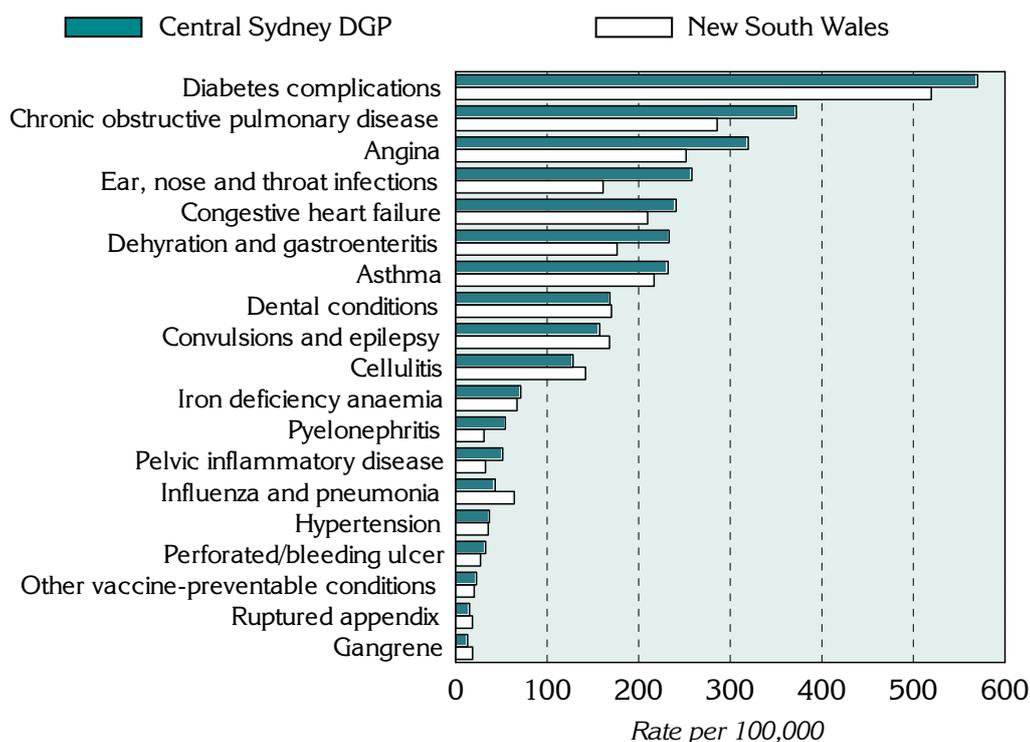
The rate of avoidable hospitalisations in Nepean DGP is notably higher, a rate of 2,953.2 admissions per 100,000 population, compared to both New South Wales (a rate of 2,543.8), and Australia (2,847.5).

¹ Admissions resulting from ACS conditions

Diabetes complications; chronic obstructive pulmonary disease; angina; and ear, nose and throat infections were the four conditions with the highest rates of avoidable hospitalisations in the Nepean 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.

Figure 8: Avoidable hospitalisations¹ by condition, Nepean DGP and New South Wales, 2001/02



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

Table 7: Avoidable hospitalisations¹ by condition, Nepean DGP, New South Wales and Australia, 2001/02

Sub-category/ condition	Nepean DGP		New South Wales		Australia	
	No.	Rate ²	No.	Rate ²	No.	Rate ²
Vaccine-preventable	104	65.9	5,630	84.5	16,573	85.4
Influenza and pneumonia	64	43.1	4,280	64.1	13,021	67.1
Other vaccine preventable	40	22.8	1,350	20.4	3,552	18.3
Chronic³	2,314	1,842.8	106,803	1,587.0	352,545	1,816
Diabetes complications	708	570.2	34,975	519.5	141,345	728.1
Iron deficiency anaemia	94	71.1	4,494	67.0	16,451	84.7
Hypertension	47	36.9	2,398	35.7	6,354	32.7
Congestive heart failure	236	240.9	14,270	209.7	42,447	218.6
Angina	377	319.5	16,987	251.8	49,963	257.4
Chronic obstructive pulmonary disease	409	372.1	19,359	285.6	54,853	282.6
Asthma	443	232.1	14,289	216.8	41,009	211.3
Acute	1,950	1,112.2	62,543	946.0	200,913	1,035
Dehydration and gastroenteritis	354	233.2	11,725	176.4	37,766	194.5
Convulsions and epilepsy	288	157.4	11,093	168.1	31,137	160.4
Ear, nose and throat infections	520	258.1	10,615	161.1	32,075	165.2
Dental conditions	321	168.4	11,196	170.3	43,667	224.9
Perforated/bleeding ulcer	39	32.8	1,830	27.1	5,795	29.9
Ruptured appendix	28	15.2	1,212	18.5	3,866	19.9
Pyelonephritis	94	54.3	2,038	31.0	7,386	38.0
Pelvic inflammatory disease	96	51.5	2,134	32.7	6,547	33.7
Cellulitis	194	128.2	9,451	142.0	28,204	145.3
Gangrene	16	13.1	1,249	18.6	4,470	23.0
Total avoidable hospitalisations⁴	4,272	2,953.2	170,066	2,543.8	552,786	2,847.5

¹ Admissions resulting from ACS conditions

² Rate is the indirectly age-standardised rate per 100,000 population

³ Excludes nutritional deficiencies as less than ten admissions

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

Avoidable mortality

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

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

Almost three quarters (72.4%) of all deaths in Nepean DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, just above the proportion for Sydney (71.3%) (Table 8). However, the rate in the Division is notably (15%) higher than that in Sydney, a differential of 1.15.

Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 28.1% of all deaths at ages 0 to 74 years in Nepean DGP, compared to 28.6% in Sydney.

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

Mortality category	Nepean DGP		Sydney		New South Wales		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable	1,450	229.3	36,709	199.5	66,151	213.6	189,845	211.8
% of total	72.4	..	71.3	..	71.4	..	71.5	..
(Amenable)	(562)	(90.9)	(14,736)	(80.6)	(26,374)	(85.0)	(76,249)	(85.1)
(% of total)	(28.1)	(..)	(28.6)	(..)	(28.5)	(..)	(28.7)	(..)
Unavoidable	551	88.3	14,768	80.6	26,468	85.3	75,582	84.3
% of total	27.5	..	28.7	..	28.6	..	28.5	..
Total mortality	2,002	317.7	51,477	280.1	92,619	299.0	265,427	296.1
%	100.0	..	100.0	..	100.0	..	100.0	..

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

Rates of avoidable mortality were higher for males than for females in each of the comparator areas. Nepean DGP's rate of avoidable mortality for males was 225.2 deaths per 100,000 males, notably higher than the rate of 143.9 for females. The rate of amenable mortality for males in the Division was marginally higher, 72.3, compared to 71.1 for females, a rate ratio of 1.20 (Figure 9, Table 9).

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

Note: the different scales

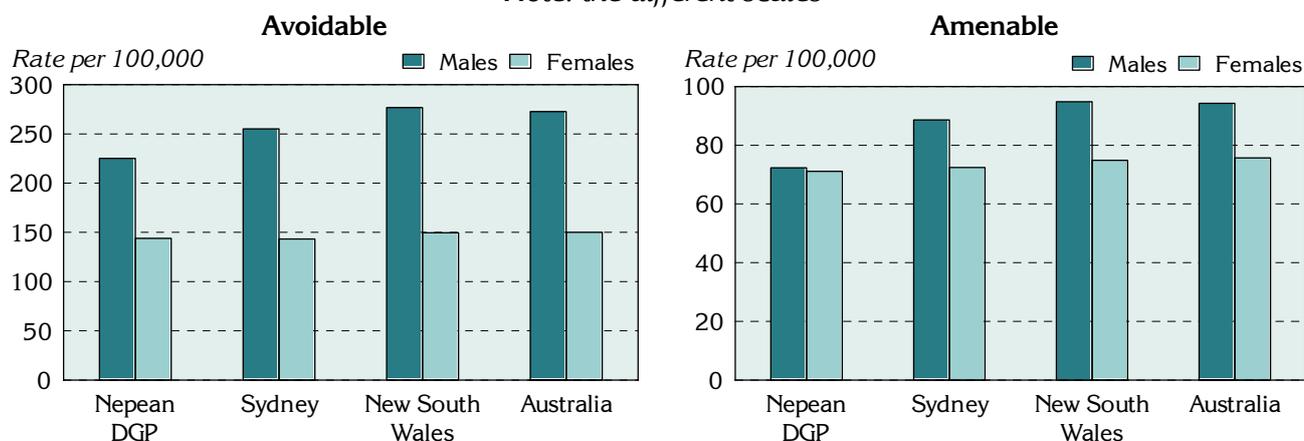


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, Nepean DGP, Sydney, New South Wales and Australia, 1997 to 2001

Mortality category and sex	Nepean DGP		Sydney		New South Wales		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable								
Males	925	290.5	23,505	255.1	43,074	276.8	123,026	272.6
Females	526	167.3	13,204	143.2	23,077	149.6	66,819	150.1
Total	1,450	229.3	36,709	199.5	66,151	213.6	189,845	211.8
Rate ratio-M:F²	..	1.74**	..	1.78**	..	1.85**	..	1.82**
Amenable								
Males	302	99.1	8,068	88.6	14,811	94.8	42,568	94.3
Females	260	82.6	6,667	72.4	11,562	74.9	33,681	75.7
Total	562	90.9	14,736	80.6	26,374	85.0	76,249	85.1
Rate ratio-M:F²	..	1.20	..	1.22**	..	1.27**	..	1.25**

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

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

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

The numbers of YLL for Nepean DGP, Sydney, 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 72.6% of total YLL (0 to 74 years) for Nepean DGP, higher than the 71.7% for Sydney. At the same time, the proportion of YLL from amenable mortality for Nepean DGP (27.4%) was lower than that for Sydney (28.0%).

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

Mortality category	Nepean DGP		Sydney		New South Wales		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	26,813	72.6	644,323	71.7	1,147,183	71.8	3,327,375	71.9
(Amenable)	(10,122)	(27.4)	(251,183)	(28.0)	(444,143)	(27.8)	(1,298,430)	(28.0)
Unavoidable	10,117	27.4	254,314	28.3	451,496	28.2	1,303,289	28.1
Total	36,929	100.0	898,637	100.0	1,598,679	100.0	4,630,664	100.0

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

In each of the areas in Table 11, the majority of avoidable mortality at ages 0 to 74 years occurred in the 65 to 74 year age group (Table 11), with 1,642.8 deaths per 100,000 population in Nepean 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 331.1 in Nepean Division.

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

Mortality category and age (years)	Nepean DGP		Sydney		New South Wales		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Avoidable								
0-14	55	24.5	1,098	26.6	1,836	27.5	5,669	28.8
15-24	62	44.0	1,303	44.9	2,241	50.9	7,045	52.8
25-44	234	83.4	4,802	74.3	8,119	82.9	24,356	83.9
45-64	540	331.1	12,603	289.9	22,358	311.1	64,282	304.9
65-74	560	1,624.8	16,903	1,307.3	31,597	1,375.8	88,493	1,358.1
Total	1,450	229.3	36,709	199.5	66,151	213.6	189,845	211.8
Amenable								
0-24	45	12.1	1,013	14.5	1,658	14.8	5,083	15.4
25-44	60	21.5	1,093	17.2	1,878	19.2	5,946	20.5
45-64	223	137.7	5,384	123.9	9,444	131.4	27,464	130.3
65-74	234	677.2	7,245	559.0	13,394	582.9	37,756	579.4
Total	562	90.9	14,736	80.6	26,374	85.0	76,249	85.1

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

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

The highest rates of avoidable mortality for the selected major condition groups in the Nepean DGP were for cardiovascular diseases, with a rate of 78.9 deaths per 100,000 population, and cancer, 76.5 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 58.0 per 100,000 population and 32.1 per 100,000, respectively.

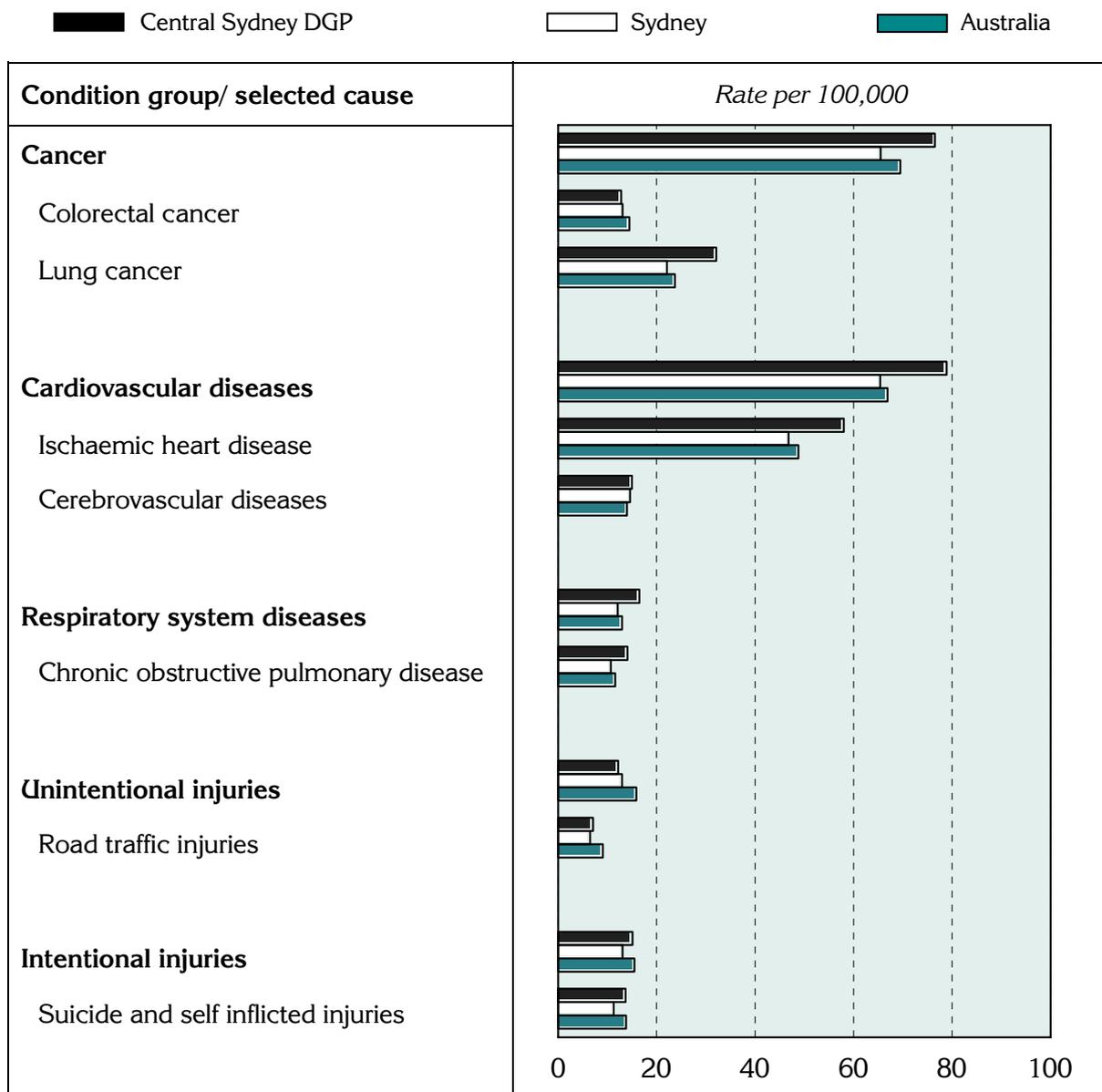
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Nepean DGP, Sydney, New South Wales and Australia, 1997 to 2001

Condition group/ selected cause	Nepean DGP		Sydney		New South Wales		Australia	
	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹	No.	Rate ¹
Cancer	454	76.5	11,919	65.5	21,158	68.1	62,338	69.5
Colorectal cancer	74	12.8	2,382	13.1	4,318	13.9	13,008	14.5
Lung cancer	180	32.1	3,983	22.1	7,297	23.4	21,208	23.7
Cardiovascular diseases	443	78.9	11,824	65.4	21,925	70.3	59,945	66.9
Ischaemic heart disease	327	58.0	8,461	46.8	15,935	51.1	43,712	48.8
Cerebrovascular diseases	84	15.0	2,641	14.6	4,656	14.9	12,558	14.0
Respiratory system diseases	88	16.5	2,177	12.1	4,313	13.8	11,612	13.0
Chronic obstructive pulmonary disease	72	14.1	1,916	10.7	3,882	12.4	10,395	11.6
Unintentional injuries	102	12.2	2,513	13.0	4,540	15.0	14,224	15.9
Road traffic injuries	60	7.1	1,249	6.5	2,528	8.4	8,138	9.1
Intentional injuries	125	15.1	2,558	13.1	4,497	14.9	13,891	15.5
Suicide and self inflicted injuries	113	13.7	2,211	11.3	3,941	13.0	12,393	13.8

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

Rates in the Division were above those in Australia and country New South Wales for the condition groups and selected causes for cancer (other than for colorectal cancer), circulatory and respiratory system diseases; rates for the injury categories were more variable (Figure 10).

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



Notes on the data

Data sources and limitations

General

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

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

Methods

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

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

Mapping

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

Statistical geography of the Nepean DGP

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

Statistical Local Areas (SLAs) are defined by the Australian Bureau of Statistics to produce areas for the presentation and analysis of data. In the Nepean Division all the SLAs are also Local Government Areas: the majority of Penrith lies within the Division as do small parts of Liverpool and Wollondilly (Table 14).

Table 14: SLAs and population in Nepean 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
10751	Blacktown - North	0.6	523
14900	Liverpool	1.0	1,670
16350	Penrith	97.2	173,022
18400	Wollondilly	12.2	5,045

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

Acknowledgements

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

Further developments and updates

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

PHIDU contact details

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