Population health profile of the New England Division of General Practice: supplement

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1. Public health - New South Wales - New England - Statistics.
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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 New England Division of General Practice: supplement

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

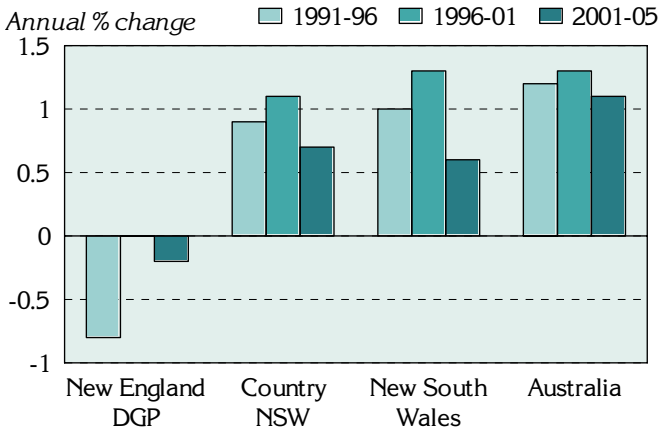
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive 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 New England Division had an Estimated Resident Population of 65,437 at 30 June 2005.

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



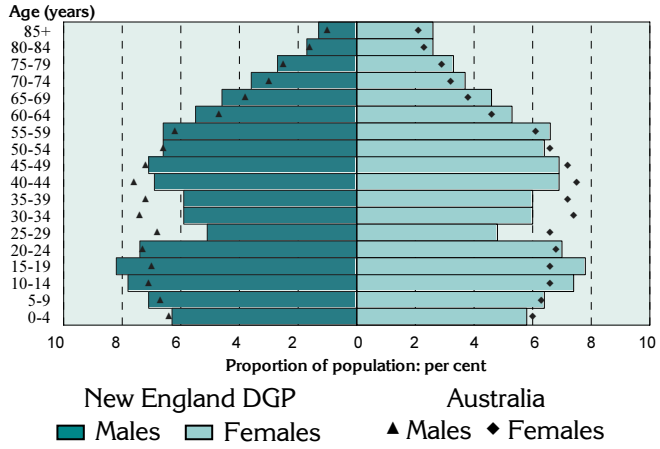
Over the five years from 1991 to 1996, the Division's population declined by 0.8% on average each year, compared with increases of 0.9% for country New South Wales, 1.0% for New South Wales and 1.2% for Australia as a whole. From 1996 to 2001, there was no change in population in the Division, compared to growth in country New South Wales (1.1%) and New South Wales (1.3%). The decline (0.2% per year) from 2001 to 2005 contrasts with increases of 0.7% for country New South Wales and 0.6% for New South Wales.

Table 1: Population by age, New England DGP and Australia, 2005

Age group (years)	New England DGP		Australia	
	No.	%	No.	%
0-14	13,302	20.3	3,978,221	19.6
15-24	9,930	15.2	2,819,834	13.9
25-44	15,515	23.7	5,878,107	28.9
45-64	16,673	25.5	4,984,446	24.5
65-74	5,366	8.2	1,398,831	6.9
75-84	3,373	5.2	954,143	4.7
85+	1,278	2.0	315,027	1.5
Total	**65,437**	**100.0**	**20,328,609**	**100.0**

As shown in the accompanying table and the age-sex pyramid below (Figure 2), New England DGP had a higher proportion in its population of children aged 0 to 14 years (20.3%) and young people aged 15 to 24 (15.2%) compared to Australia (19.6% and 13.9%). There was a lower proportion of the population aged 25 to 44 years (23.7%) compared to Australia (28.9%) (Table 1). Conversely, the 65 years and over age groups had higher proportions compared to Australia as a whole

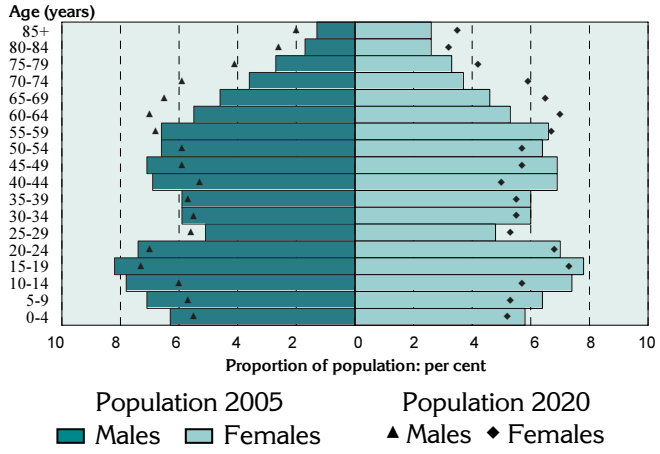
Figure 2: Population in New England DGP and Australia, by age and sex, 2005



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

- at the youngest ages – marginally fewer children aged 0 to 4 years;
- from 5 to 24 years – relatively more males and females;
- from 25 to 49 years relatively fewer males and females (in particular ages 25 to 29 years); and
- at older ages – relatively more males, and females aged 55 years and over

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



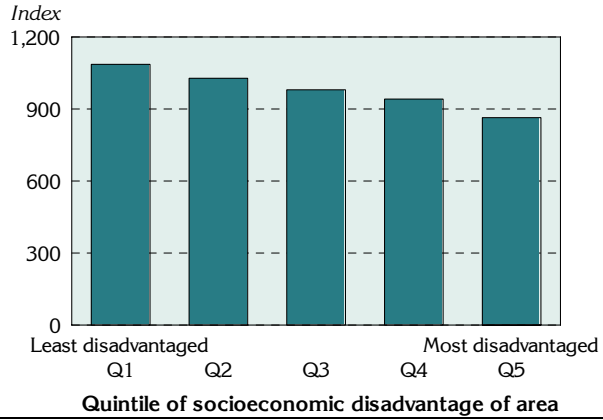
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages – lower (often much lower) proportions of the population at ages 0 to 24 years;
- from ages 30 to 54 years – lower proportions of both males and females; and
- from age 55 years onwards – relatively more males and females (most pronounced at ages 60 to 74 years.

Additional socio-demographic indicators

Please refer to the earlier *Population health profile of the New England 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, New England DGP, 2001



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

The New England DGP has an index score of 979, below the score for Australia of 1000: this score varies across the Division, from a low of 864 in the most disadvantaged areas to 1086 in the least disadvantaged areas.

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

A new indicator, produced for the first time at the 2001 ABS Census, shows the number of jobless families with children under 15 years of age. There were more jobless families in the New England DGP (21.8%), compared to 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 notably higher proportion of the population with private health insurance (49.1%), compared to country New South Wales (44.9%) (Figure 5, Table 2).

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

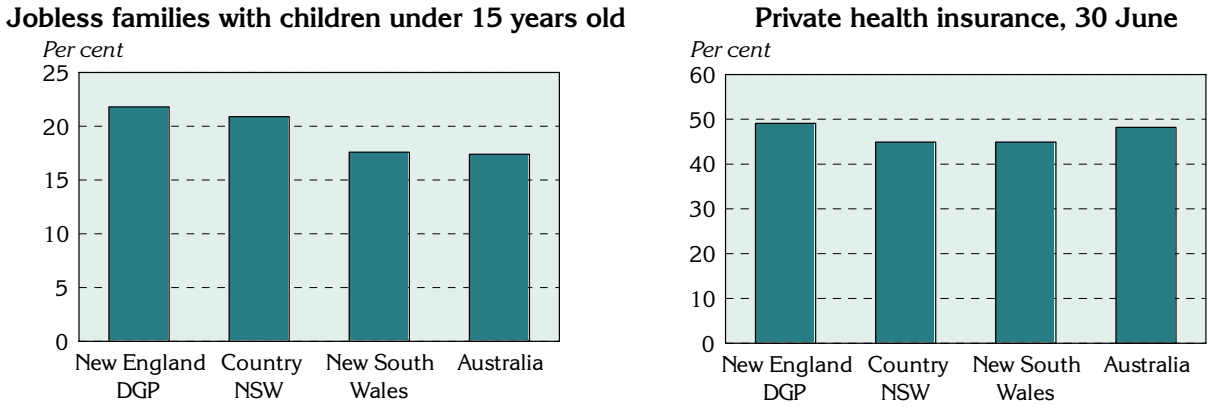
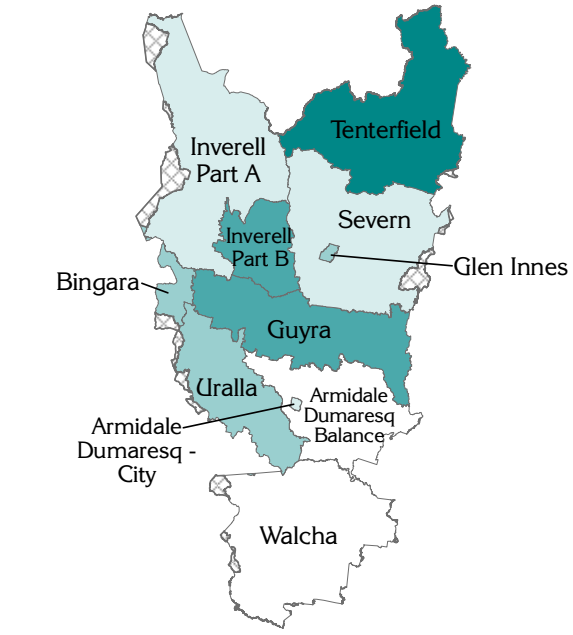


Table 2: Socio-demographic indicators, New England DGP, country New South Wales, New South Wales and Australia, 2001

Indicator	New England DGP		Country NSW		New South Wales		Australia	
	No.	%	No.	%	No.	%	No.	%
Jobless families with children under 15 years old	1,485	21.8	54,883	20.9	121,409	17.6	357,563	17.4
Private health insurance (30 June)	30,905	49.1	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, New England DGP, 2001

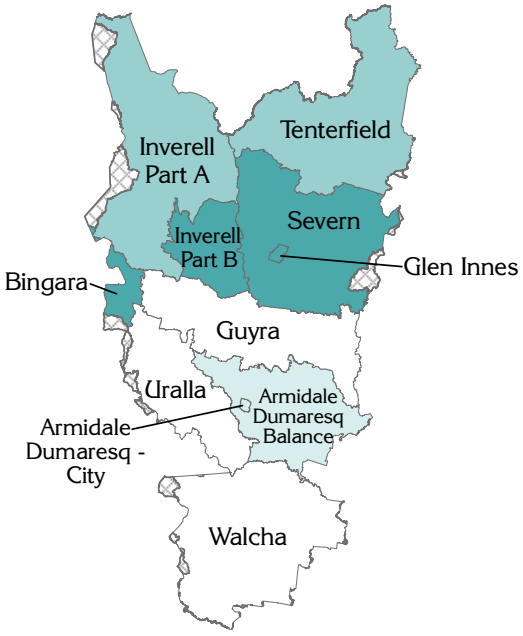


Per cent

- *29.0% or more*
- *25.0% to 28.9%*
- *21.0% to 24.9%*
- *17.0% to 20.9%*
- *fewer than 17.0%*
- *not mapped#*

 # data were not mapped: see 'Mapping' note under Methods

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



Per cent

- *Fewer than 40.0%*
- *40.0% to 43.9%*
- *44.0% to 47.9%*
- *48.0% to 51.9%*
- *62.0% or more*
- *not mapped#*

 # data were not mapped: see 'Mapping' note under Methods

GP services to residents of the New England 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 (90.8%) of GP unreferred attendances to residents of New England DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 241,948 GP unreferred attendances (Table 3). A further 1.1% of unreferred attendances to residents were provided by GPs with a provider number in Southern Queensland Rural DGP.

Table 3: Patient flow – People living[1] in New England DGP by Division where attendance occurred[2], 2003/04

Division		Unreferred attendances	
Number	Name	No.	%[3]
227	New England DGP	241,948	90.8
414	Southern Queensland Rural DGP	2,993	1.1
231	Barwon DGP	2,101	0.8
225	Northern Rivers DGP	1,176	0.4
224	Mid North Coast DGP	1,167	0.4
405	Gppartners DGP	1,146	0.4
Other	..	16,000	6.0
Total	..	**435,486**	**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 227 by Division in which attendance occurred

The majority (91.4%) of unreferred attendances provided by GPs with a provider number in New England DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 1.3% of unreferred attendances by GPs in the Division were to residents of North West Slopes DGP, with 1.2% to people living in Southern Queensland Rural DGP.

Table 4: GP catchment – Unreferred attendances provided by GPs[1] in New England DGP by Division of patient address[2], 2003/04

Division		Unreferred attendances	
Number	Name	No.	%[3]
227	New England DGP	241,948	91.4
236	North West Slopes DGP	3,336	1.3
414	Southern Queensland Rural DGP	3,297	1.2
231	Barwon DGP	2,266	0.9
224	Mid North Coast DGP	2,049	0.8
Other	..	11,920	4.5
Total	..	**264,816**	**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 227 by Division of patient address

Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier *Population health profile of the New England 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 additional estimates, which combine the prevalence of selected chronic diseases with a risk factor, are shown for the Division. The measures are smokers with asthma, and overweight/ obese people with type 2 diabetes: 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 New England DGP who had asthma and were smokers, compared to Australia as a whole, although fewer than 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 slightly fewer people in New England DGP who had type 2 diabetes and were overweight/ obese, relative to country New South Wales and Australia.

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

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

Variable	New England DGP		Country NSW		New South Wales		Australia	
	No.[1]	Rate[2]	No.[1]	Rate[2]	No.[1]	Rate[2]	No.[1]	Rate[1]
Had asthma & smoked[3]	1,428	23.5	54,344	24.7	126,542	19.7	397,734	20.8
Had type 2 diabetes & were overweight/ obese[4]	985	14.6	40,784	15.5	100,235	15.7	283,176	15.2

[1] No. is a weighted estimate of the number of people in New England 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.

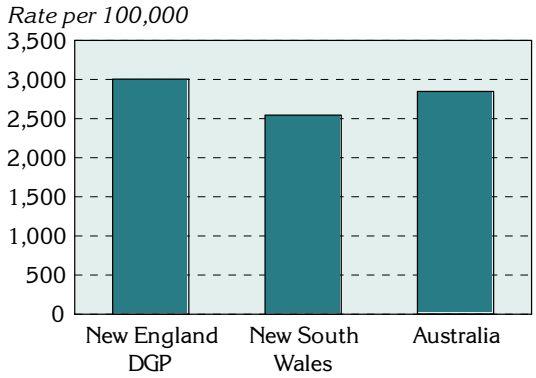
In 2001 to 2002, the 2,087 admissions from ambulatory care sensitive (ACS) conditions accounted for 10.8% of all admissions in the New England DGP (Table 6, Figure 7), markedly above the levels in New South Wales (8.6%) and Australia (8.7%).

Table 6: Avoidable[1] and unavoidable hospitalisations, New England DGP, New South Wales, and Australia, 2001/02

Category	New England DGP			New South Wales			Australia		
	No.	Rate[2]	%	No.	Rate[2]	%	No.	Rate[2]	%
Avoidable[1]	2,087	3,004.4	10.8	170,066	2,543.8	8.6	552,786	2,847.5	8.7
Unavoidable	17,182	25,579.6	89.2	1,810,901	27,255.3	91.4	5,818,199	29,970.7	91.3
Total	**19,269**	**28,601.8**	**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 hospitalisations[1], New England DGP, New South Wales and Australia, 2001/02



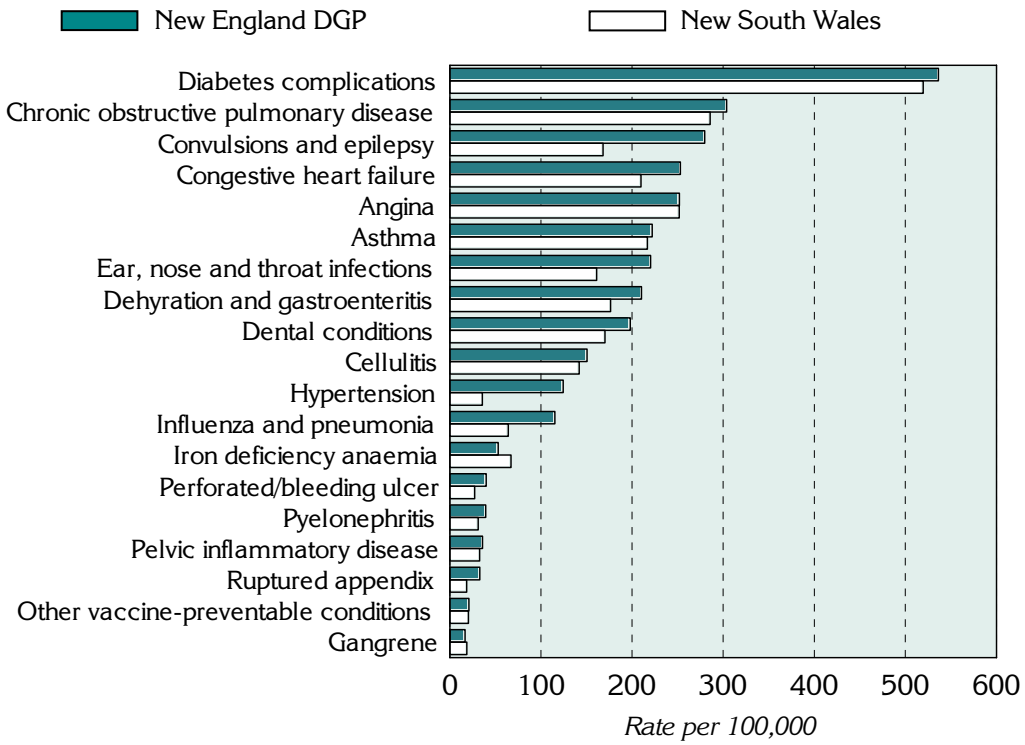
[1] **Admissions resulting from ACS conditions**

The rate of avoidable hospitalisations in New England DGP is notably higher, a rate of 3,004.4 admissions per 100,000 population, compared to both New South Wales (a rate of 2,543.8) and Australia (2,847.5).

Diabetes complications, chronic obstructive pulmonary disease, convulsions and epilepsy, congestive heart failure and angina were the five conditions with the highest rates of avoidable hospitalisations in the New England 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. Convulsions and epilepsy; and ear nose and throat infections have the highest rates of avoidable hospitalisations for the acute conditions.

Figure 8: Avoidable hospitalisations[1] by condition, New England DGP and New South Wales, 2001/02



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

Table 7: Avoidable hospitalisations[1] by condition, New England DGP, New South Wales and Australia, 2001/02

Sub-category/ condition	New England DGP		New South Wales		Australia	
	No.	Rate[2]	No.	Rate[2]	No.	Rate[2]
Vaccine-preventable	**92**	**136.1**	**5,630**	**84.5**	**16,573**	**85.4**
Influenza and pneumonia	79	115.3	4,280	64.1	13,021	67.1
Other vaccine preventable	13	20.8	1,350	20.4	3,552	18.3
Chronic[3]	**1,246**	**1,744.2**	**106,803**	**1,587.0**	**352,545**	**1,816**
Diabetes complications	382	536.3	34,975	519.5	141,345	728.1
Iron deficiency anaemia	37	53.0	4,494	67.0	16,451	84.7
Hypertension	88	124.3	2,398	35.7	6,354	32.7
Congestive heart failure	188	252.9	14,270	209.7	42,447	218.6
Angina	182	251.9	16,987	251.8	49,963	257.4
Chronic obstructive pulmonary disease	221	303.7	19,359	285.6	54,853	282.6
Asthma	148	222.1	14,289	216.8	41,009	211.3
Acute	**812**	**1,223.4**	**62,543**	**946.0**	**200,913**	**1,035**
Dehydration and gastroenteritis	141	210.3	11,725	176.4	37,766	194.5
Convulsions and epilepsy	182	279.7	11,093	168.1	31,137	160.4
Ear, nose and throat infections	145	220.2	10,615	161.1	32,075	165.2
Dental conditions	130	198.0	11,196	170.3	43,667	224.9
Perforated/bleeding ulcer	29	39.9	1,830	27.1	5,795	29.9
Ruptured appendix	22	32.8	1,212	18.5	3,866	19.9
Pyelonephritis	26	39.4	2,038	31.0	7,386	38.0
Pelvic inflammatory disease	22	35.8	2,134	32.7	6,547	33.7
Cellulitis	103	150.6	9,451	142.0	28,204	145.3
Gangrene	12	16.7	1,249	18.6	4,470	23.0
Total avoidable hospitalisations[4]	**2,087**	**3,004.4**	**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 (71.4%) of all deaths in New England DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, consistent with 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 27.5% of all deaths at ages 0 to 74 years in New England DGP, compared to 28.3% in country New South Wales.

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

Mortality category	New England DGP		Country NSW		New South Wales		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable	765	227.7	29,442	234.3	66,151	213.6	189,845	211.8
% of total	**71.4**	**..**	**71.6**	**..**	**71.4**	**..**	**71.5**	**..**
(Amenable)	(295)	(86.0)	(11,638)	(91.2)	(26,374)	(85.0)	(76,249)	(85.1)
(% of total)	**(27.5)**	**(..)**	**(28.3)**	**(..)**	**(28.5)**	**(..)**	**(28.7)**	**(..)**
Unavoidable	307	90.2	11,700	92.1	26,468	85.3	75,582	84.3
% of total	**28.6**	**..**	**28.4**	**..**	**28.6**	**..**	**28.5**	**..**
Total mortality	**1,072**	**317.9**	**41,142**	**326.4**	**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. New England DGP's rate of avoidable mortality for males was 315.4 deaths per 100,000 males, more than twice the rate of 141.1 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 102.3, compared to 70.1 for females, a rate ratio of 1.46 (Figure 9, Table 9).

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

Note: the different scales

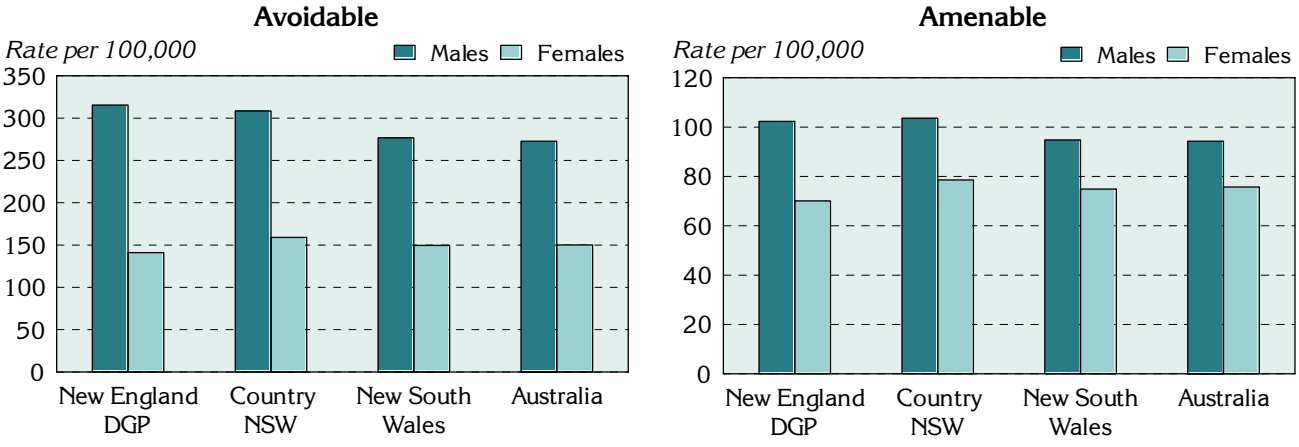


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, New England DGP, country New South Wales, New South Wales and Australia, 1997 to 2001

Mortality category and sex	New England DGP		Country NSW		New South Wales		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable								
Males	513	315.4	19,569	308.5	43,074	276.8	123,026	272.6
Females	253	141.1	9,873	159.1	23,077	149.6	66,819	150.1
Total	**765**	**227.7**	**29,442**	**234.3**	**66,151**	**213.6**	**189,845**	**211.8**
Rate ratio–M:F[2]	**..**	**2.24****	**..**	**1.94****	**..**	**1.85****	**..**	**1.82****
Amenable								
Males	169	102.3	6,743	103.6	14,811	94.8	42,568	94.3
Females	126	70.1	4,895	78.6	11,562	74.9	33,681	75.7
Total	**295**	**86.0**	**11,638**	**91.2**	**26,374**	**85.0**	**76,249**	**85.1**
Rate ratio–M:F[2]	**..**	**1.46****	**..**	**1.32****	**..**	**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 New England 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 71.0% of total YLL (0 to 74 years) for New England DGP, marginally lower than the 71.8% for country New South Wales. Similarly, the proportion of YLL from amenable mortality for New England DGP (26.5%) was lower than that in country New South Wales (27.6%).

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

Mortality category	New England DGP		Country NSW		New South Wales		Australia	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
Avoidable	13,144	71.0	502,860	71.8	1,147,183	71.8	3,327,375	71.9
(Amenable)	(4,911)	(26.5)	(192,960)	(27.6)	(444,143)	(27.8)	(1,298,430)	(28.0)
Unavoidable	5,372	29.0	197,182	28.2	451,496	28.2	1,303,289	28.1
Total	**18,516**	**100.0**	**700,042**	**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 1,429.7 deaths per 100,000 population in New England 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 343.1 in New England Division.

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

Mortality category and age (years)	New England DGP		Country NSW		New South Wales		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Avoidable								
0-14	18	25.0	738	29.0	1,836	27.5	5,669	28.8
15-24	24	47.7	938	62.6	2,241	50.9	7,045	52.8
25-44	84	94.8	3,317	99.6	8,119	82.9	24,356	83.9
45-64	278	343.1	9,755	343.5	22,358	311.1	64,282	304.9
65-74	361	1,429.7	14,694	1464.0	31,597	1,375.8	88,493	1,358.1
Total	**765**	**227.7**	**29,442**	**234.3**	**66,151**	**213.6**	**189,845**	**211.8**
Amenable								
0-24	13	10.7	645	15.5	1,658	14.8	5,083	15.4
25-44	21	22.2	784	23.0	1,878	19.2	5,946	20.5
45-64	115	140.7	4,060	142.9	9,444	131.4	27,464	130.3
65-74	146	574.2	6,148	613.7	13,394	582.9	37,756	579.4
Total	**295**	**86.0**	**11,638**	**91.2**	**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 New England DGP were for cardiovascular diseases, with a rate of 82.6 deaths per 100,000 population, and cancer, 56.0 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 60.8 per 100,000 population and 18.9 per 100,000, respectively.

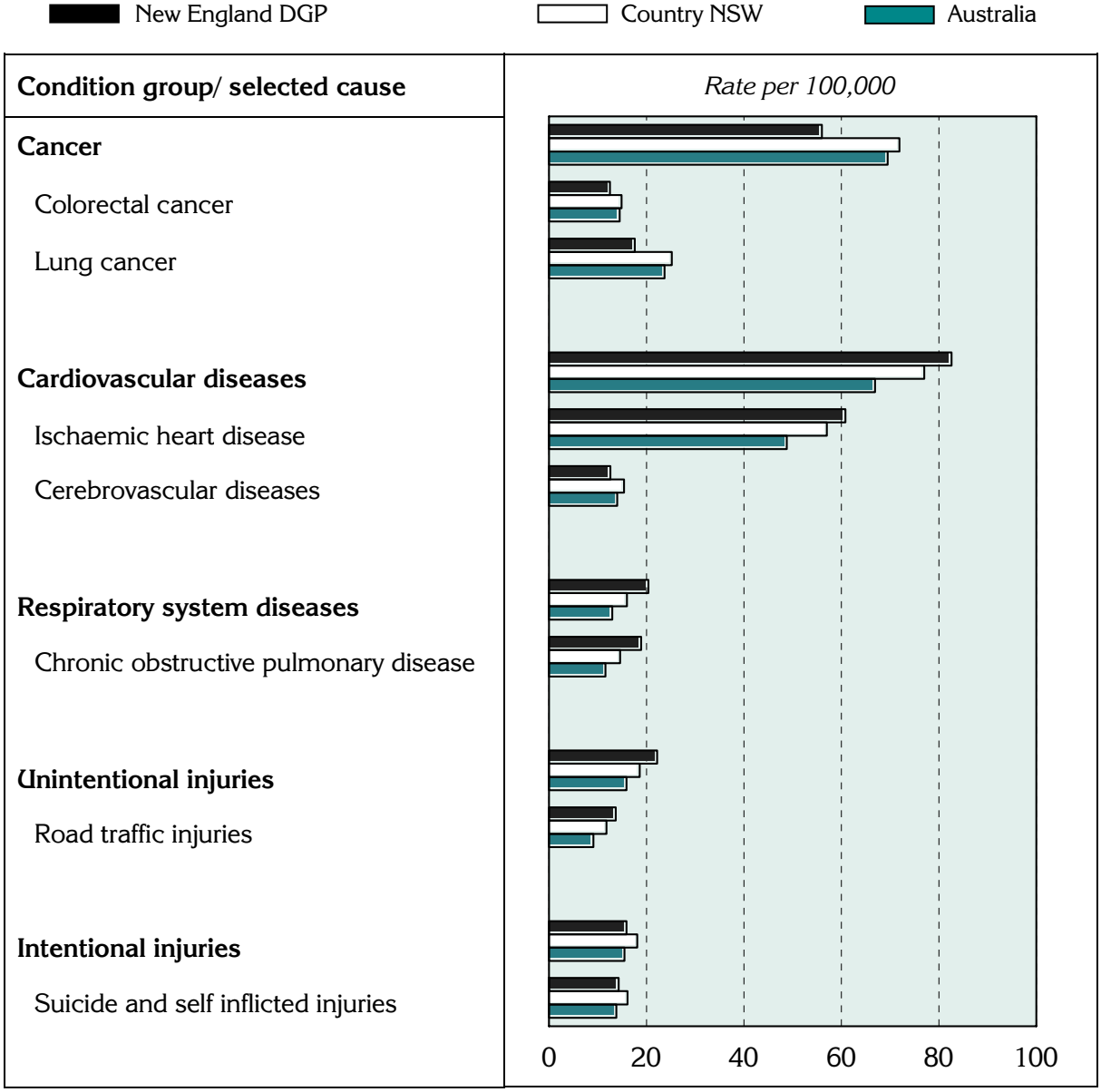
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, New England DGP, country New South Wales, New South Wales and Australia, 1997 to 2001

Condition group/ selected cause	New England DGP		Country NSW		New South Wales		Australia	
	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]	No.	Rate[1]
Cancer	**194**	**56.0**	**9,239**	**71.9**	**21,158**	**68.1**	**62,338**	**69.5**
Colorectal cancer	43	12.5	1,936	14.9	4,318	13.9	13,008	14.5
Lung cancer	61	17.6	3,314	25.2	7,297	23.4	21,208	23.7
Cardiovascular diseases	**283**	**82.6**	**10,101**	**77.0**	**21,925**	**70.3**	**59,945**	**66.9**
Ischaemic heart disease	208	60.8	7,474	57.0	15,935	51.1	43,712	48.8
Cerebrovascular diseases	43	12.6	2,015	15.4	4,656	14.9	12,558	14.0
Respiratory system diseases	**71**	**20.4**	**2,136**	**16.0**	**4,313**	**13.8**	**11,612**	**13.0**
Chronic obstructive pulmonary disease	66	18.9	1,966	14.6	3,882	12.4	10,395	11.6
Unintentional injuries	**68**	**22.2**	**2,027**	**18.6**	**4,540**	**15.0**	**14,224**	**15.9**
Road traffic injuries	43	13.7	1,279	11.8	2,528	8.4	8,138	9.1
Intentional injuries	**47**	**15.9**	**1,939**	**18.1**	**4,497**	**14.9**	**13,891**	**15.5**
Suicide and self inflicted injuries	43	14.3	1,730	16.1	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, or consistent with, those in Australia for the condition groups and selected causes shown, with the exception of cancer (total, colorectal and lung cancer), for which rates were lower. In comparison with country New South Wales, rates were more variable (Figure 10).

Figure 10: Avoidable mortality (0 to 74 years) by major condition group and selected cause, New England 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)[1]
Additional socio-demographic indicators	
Figure 4	ABS SEIFA package, Census 2001
Table 2; Figure 5; Map 1	Jobless families, ABS, 2001 (unpublished)
Table 2; Figure 5; Map 2	Private health insurance, from Hansard
GP services – patient flow/ GP catchment	
Tables 3 and 4	Medicare Australia, 2003/04
Additional prevalence estimates: chronic diseases and risk factors combined	
Figure 6; Table 5	Estimated from 2001 National Health Survey (NHS), ABS (unpublished)
Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions	
Tables 6 and 7; Figures 7 and 8	National Hospital Morbidity Database at Australian Institute of Health & Welfare, 2001/02; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)
Avoidable mortality	
Tables 8, 9, 10, 11 and 12; Figures 9 and 10	ABS Deaths 1997-2001; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)

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

Methods

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

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

Mapping

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

Statistical geography of the New England DGP

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

Statistical Local Areas (SLAs) are defined by the Australian Bureau of Statistics to produce areas for the presentation and analysis of data. In this Division, some Local Government Areas (LGAs) have been split into SLAs. For example, Armidale Dumaresq is comprised of two SLAs, City (all of which is in the Division) and Balance (a majority of which is in the Division). These SLAs, and all or parts of the other SLAs listed in Table 14 comprise the Division.

Table 14: SLAs and population in New England 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
10111	Armidale Dumaresq - City	100.0	20,727
10112	Armidale Dumaresq - Balance	100.0	3,884
10700	Bingara	5.7	115
13000	Glen Innes	100.0	5,930
13650	Guyra	100.0	4,460
14201	Inverell - Part A	100.0	4,600
14202	Inverell - Part B	100.0	11,194
14550	Kygole	0.1	#
16611	***Richmond Valley - Casino***	***2.0***	***207***
16612	***Richmond Valley - Balance***	***0.6***	#
16850	Severn	100.0	2,831
17400	Tenterfield	78.3	5,305
17650	Uralla	95.7	5,817
17850	Walcha	9.0	295

*** 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

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Further developments and updates

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

PHIDU contact details

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