# Population health profile of the 

## North E West Queensland

# Division of General Practice: supplement 

Population Profile Series: No. 81a

## PHIDU

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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 profile is a supplement to the Population health profile of the North $\mathcal{E}$ West Queensland Division of General Practice, dated November 2005, available from www.publichealth.gov.au. This supplement includes an update of the population of the North $\mathcal{E}$ West Queensland DGP 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
- 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 North E West Queensland Division had an Estimated Resident Population of 15,776 at 30 June 2005.

Figure 1: Annual population change, North \& West Queensland DGP, country Queensland, Queensland and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005


Over the five years from 1991 to 1996, the Division's population decreased by $0.5 \%$ on average each year, compared with marked growth in country Queensland (2.7\%) and Queensland (2.6\%). From 1996 to 2001, the Division's population again declined, by $0.2 \%$, compared with increases in country Queensland and Queensland (1.8\%). The growth rate of $0.1 \%$ per year from 2001 to 2005 was again substantially below the annual increases for country Queensland (2.2\%) and Queensland (2.3\%).

Table 1: Population by age, North \& West Queensland DGP and Australia, 2005

| Age group <br> (years) | North \& West <br> Queensland DGP |  |  | Australia |  |
| :--- | ---: | ---: | :--- | ---: | ---: |
|  | No. | $\%$ |  | No. | $\%$ |
| $0-14$ | 26,288 | 22.7 |  | $3,978,221$ | 19.6 |
| $15-24$ | 15,546 | 13.4 |  | $2,819,834$ | 13.9 |
| $25-44$ | 33,202 | 28.7 |  | $5,878,107$ | 28.9 |
| $45-64$ | 27,193 | 23.5 |  | $4,984,446$ | 24.5 |
| $65-74$ | 7,690 | 6.6 |  | $1,398,831$ | 6.9 |
| $75-84$ | 4,444 | 3.8 |  | 954,143 | 4.7 |
| $85+$ | 1,413 | 1.2 |  | 315,027 | 1.5 |
| Total | $\mathbf{1 5 , 7 7 6}$ | $\mathbf{1 0 0 . 0}$ |  | $\mathbf{2 0 , 3 2 8 , 6 0 9}$ | $\mathbf{1 0 0 . 0}$ |

As shown in the accompanying table and the age-sex pyramid below, North $\mathcal{E}$ West Queensland DGP had a higher proportion of 0 to 14 year olds (22.7\%) compared with Australia as a whole (19.6\%). (Table 1). Conversely, the proportions of the Division's population aged 15 years and over were lower (although often marginally so) than those for Australia.

Figure 2: Population in North $\mathcal{E}$ West Queensland DGP and Australia, by age and sex, 2005


North E West Queensland DGP
Australia
$\Delta$ Males $\bullet$ Females

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

- at younger ages - relatively more females aged 0 to 14 years and males o to 19 years;
- from 20 to 24 years and 35 to 44 years relatively fewer males and females (to 44 years); and
- from 45 to 85+ years, relatively fewer males and females, except for males aged 65 to 69 years.

Figure 3: Population projections for North E West Queensland DGP, by age and sex, 2005 and 2020


Population 2005
Population 2020
© Males • Females

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

- below 55 years of age - relatively fewer males (except for males aged 25 to 29 years) and females (below 50 years of age); and
- from age 55 years - relatively more males and females (most pronounced at ages 60 to 74 years).


## Additional socio-demographic indicators

Please refer to the earlier Population health profile of the North $\mathcal{E}$ West Queensland, 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, North E West Queensland DGP, 2001


Quintile of socioeconomic disadvantage of area

One of four socioeconomic indexes for areas produced at the 2001 ABS Census is the Index of Relative Socio-Economic Disadvantage.
The North $\mathcal{E}$ West Queensland DGP has an index score of 955, below the score for Australia of 1000: this score varies across the Division, from a low of 841 in the most disadvantaged areas to 1033 in the least disadvantaged areas.

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

A new indicator, produced for the first time at the 2001 ABS Census, shows the number of jobless families with children under 15 years of age. There were markedly fewer jobless families in the North $\mathcal{E}$ West Queensland DGP ( $15.5 \%$ ), than for country Queensland as a whole ( $19.9 \%$ ) (Figure 5, Table 2).
With the introduction of the $30 \%$ rebate for private health insurance premiums, there was a once-off registration process, providing information of the postcode and residence of those who had such insurance (these data are not available at this area level for later dates). In 2001, the Division had fewer people with private health insurance (36.9\%) than in country Queensland (40.3\%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, North \& West Queensland DGP, country Queensland, Queensland and Australia, 2001

Jobless families with children under 15 years old


Private health insurance, 30 June


Table 2: Socio-demographic indicators, North $\mathcal{E}$ West Queensland DGP, country Queensland, Queensland and Australia, 2001

| Indicator | North \& West Queensland DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| Jobless families with children under 15 years old | 1,986 | 15.5 | 42,801 | 19.9 | 74,942 | 18.9 | 357,563 | 17.4 |
| Private health insurance (30 June) | 45,583 | 36.9 | 812,860 | 40.3 | 1,511,613 | 41.7 | 8,671,106 | 46.0 |

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

Map 1: Jobless families with children under 15 years of age by SLA,
North E West Queensland DGP, 2001

Per cent

|  | $32.0 \%$ or more |
| :--- | :--- |
| $24.0 \%$ to $31.9 \%$ |  |
|  | $16.0 \%$ to $23.9 \%$ |
| $8.0 \%$ to $15.9 \%$ |  |
|  | fewer than $8.0 \%$ |
| not mapped |  |

[^0]

| Alphabetical key to Statistical Local Areas, North \& West Queensland DGP, 2001 |  |  |  |
| :--- | ---: | :--- | ---: |
| Aramac | 4 | Flinders | 29 |
| Barcaldine | 5 | Hinchinbrook excl. Palm Island | 19 |
| Barcoo | 6 | Hinchinbrook - Palm Island | 20 |
| Blackall | 7 | Ilfracombe | 10 |
| Bauhinia | 36 | Isisford | 11 |
| Boulia | 8 | Jericho | 2 |
| Bowen | 15 | Longreach | 12 |
| Burdekin | 16 | McKinlay | 30 |
| Burke | 26 | Mornington | 31 |
| Cardwell | 23 | Mount Isa | 32 |
| Carpentaria | 27 | Peak Downs | 3 |
| Charters Towers | 17 | Richmond | 33 |
| Cloncurry | 28 | Tableland | 34 |
| Croydon | 24 | Tambo | 13 |
| Dalrymple | 18 | Tennant Creek - Balance | 35 |
| Diamantina | 9 | Thuringowa - Part B | 21 |
| Emerald | 1 | Townsville - Part B | 22 |
| Etheridge | 25 | Winton | 14 |

## GP services to residents of the North E West Queensland 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.

Over four fifths ( $81.4 \%$ ) of GP unreferred attendances to residents of North $\mathcal{E}$ West Queensland DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented $335,614 \mathrm{GP}$ unreferred attendances (Table 3). A further $7.7 \%$ of unreferred attendances were provided by GPs with a provider number in Townsville DGP, and $2.8 \%$ in Capricornia DGP.

Table 3: Patient flow - People living ${ }^{1}$ in North $\mathcal{E}$ West Queensland DGP by Division where attendance occurred ${ }^{2}$, 2003/04

| Division |  | Unreferred attendances |  |
| :---: | :---: | :---: | :---: |
| Number | Name | No. | $\%^{3}$ |
| 416 | North \& West Queensland DGP | 335,614 | 81.4 |
| 412 | Townsville DGP | 31,904 | 7.7 |
| 419 | Capricornia DGP | 11,714 | 2.8 |
| 417 | Far North Queensland Rural DGP | 3,828 | 0.9 |
| 405 | GPpartners DGP | 3,601 | 0.9 |
| 410 | Central Queensland Rural DGP | 3,097 | 0.8 |
| 413 | Cairns DGP | 3,071 | 0.7 |
| 411 | Mackay DGP | 2,848 | 0.7 |
| Other | .. | 2,890 | 5.4 |
| Total | .. | 53,437 | 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 416 by Division in which attendance occurred

The majority ( $89.2 \%$ ) of unreferred attendances provided by GPs with a provider number in North $\mathcal{E}$ West Queensland DGP were to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further $2.3 \%$ of unreferred attendances were to people living in Townsville DGP.

Table 4: GP catchment - Unreferred attendances provided by GPs ${ }^{1}$ in North $\mathcal{E}$ West Queensland DGP by Division of patient address ${ }^{2}$, 2003/04

| Division |  | Unreferred attendances |  |
| :---: | :---: | :---: | :---: |
| Number | Name | No. | $\%^{3}$ |
| 416 | North E West Queensland DGP | 335,614 | 89.2 |
| 412 | Townsville DGP | 8,502 | 2.3 |
| 417 | Far North Queensland DGP | 2,489 | 0.7 |
| 411 | Mackay DGP | 2,395 | 0.6 |
| 419 | Capricornia DGP | 2,143 | 0.6 |
| 410 | Central Queensland Rural DGP | 1,711 | 0.5 |
| Other | .. | 23,536 | 6.3 |
| Total | .. | 376,390 | 100.0 |

[^1]
## 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 4,672 admissions from ambulatory care sensitive (ACS) conditions accounted for $11.4 \%$ of all admissions in the North \& West Queensland DGP, markedly above the levels in Queensland (8.5\%) and Australia (8.7\%).

Table 5: Avoidable ${ }^{1}$ and unavoidable hospitalisations, North E West Queensland DGP, Queensland, and Australia, 2001/02

| Category | North E West Queensland DGP |  |  | Queensland |  |  | Australia |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{2}$ | \% | No. | Rate ${ }^{2}$ | \% | No. | Rate ${ }^{2}$ | \% |
| Avoidable ${ }^{1}$ | 4,672 | 4,421.3 | 11.4 | 106,884 | 3,025.0 | 8.5 | 552,786 | 2,847.5 | 8.7 |
| Unavoidable | 36,475 | 34,382.0 | 88.6 | 1,153,519 | 32,410.1 | 91.5 | 5,818,199 | 29,970.7 | 91.3 |
| Total | 41,147 | 38,799.3 | 100.0 | 1,260,403 | 35,435.5 | 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 6: Avoidable hospitalisations ${ }^{1}$, North E West Queensland DGP, Queensland and Australia, 2001/02


The rate of avoidable hospitalisations in North \& West Queensland DGP is substantially higher, a rate of 4,421.3 admissions per 100,000 population, compared to Queensland (a rate of $3,025.0)$, and Australia $(2,847.5)$.

Diabetes complications, chronic obstructive pulmonary disease, angina, and cellulitis were the four conditions with the highest rates of avoidable hospitalisations in the North E West Queensland 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. Cellulitis; and ear, nose and throat infections have the highest rates of avoidable hospitalisations for the acute conditions.

Figure 7: Avoidable hospitalisations ${ }^{1}$ by condition, North $\mathcal{E}$ West Queensland DGP and Queensland, 2001/02

${ }^{1}$ Admissions resulting from ACS conditions: excludes nutritional deficiencies as less than ten admissions
Table 6: Avoidable hospitalisations ${ }^{1}$ by condition, North $\mathcal{E}$ West Queensland DGP, Queensland and Australia, 2001/02

| Sub-category/ condition | North \& West Queensland DGP |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{2}$ | No. | Rate ${ }^{2}$ | No. | Rate ${ }^{2}$ |
| Vaccine-preventable | 223 | 205.0 | 3,188 | 89.6 | 16,573 | 85.4 |
| Influenza and pneumonia | 192 | 178.4 | 2,646 | 74.6 | 13,021 | 67.1 |
| Other vaccine preventable | 31 | 26.6 | 542 | 15.0 | 3,552 | 18.3 |
| Chronic ${ }^{3}$ | 2,466 | 2,463.4 | 65,455 | 1,882.0 | 352,545 | 1,816 |
| Diabetes complications | 717 | 710.6 | 25,175 | 722.9 | 141,345 | 728.1 |
| Iron deficiency anaemia | 59 | 60.2 | 2,772 | 79.7 | 16,451 | 84.7 |
| Hypertension | 95 | 98.4 | 1,324 | 38.3 | 6,354 | 32.7 |
| Congestive heart failure | 328 | 360.8 | 7,617 | 225.5 | 42,447 | 218.6 |
| Angina | 459 | 464.9 | 11,134 | 321.5 | 49,963 | 257.4 |
| Chronic obstructive pulmonary disease | 506 | 517.8 | 10,619 | 308.5 | 54,853 | 282.6 |
| Asthma | 302 | 250.7 | 6,814 | 185.6 | 41,009 | 211.3 |
| Acute | 2,108 | 1,864.9 | 41,300 | 1,143.3 | 200,913 | 1,035 |
| Dehydration and gastroenteritis | 301 | 292.2 | 8,278 | 234.1 | 37,766 | 194.5 |
| Convulsions and epilepsy | 379 | 322.5 | 5,902 | 162.3 | 31,137 | 160.4 |
| Ear, nose and throat infections | 416 | 329.7 | 6,829 | 184.4 | 32,075 | 165.2 |
| Dental conditions | 331 | 276.4 | 9,101 | 247.8 | 43,667 | 224.9 |
| Perforated/bleeding ulcer | 36 | 36.4 | 892 | 25.8 | 5,795 | 29.9 |
| Ruptured appendix | 45 | 39.8 | 754 | 20.7 | 3,866 | 19.9 |
| Pyelonephritis | 77 | 72.8 | 1,437 | 39.8 | 7,386 | 38.0 |
| Pelvic inflammatory disease | 50 | 47.5 | 1,315 | 36.2 | 6,547 | 33.7 |
| Cellulitis | 431 | 405.5 | 5,930 | 167.4 | 28,204 | 145.3 |
| Gangrene | 42 | 42.1 | 862 | 24.8 | 4,470 | 23.0 |
| Total avoidable hospitalisations ${ }^{4}$ | 4,672 | 4,421.3 | 106,884 | 3,025.0 | 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 $\mathcal{E}$ 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 (72.8\%) of all deaths in North $\mathcal{E}$ West Queensland DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, consistent with the proportion for country Queensland (72.8\%) (Table 8). However, the rate in the Division is markedly higher than that in country Queensland, a differential of 1.36.

Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for $27.9 \%$ of all deaths at ages 0 to 74 years in North $\mathcal{E}$ West Queensland DGP, compared to $29.3 \%$ in country Queensland.

Table 7: Avoidable and unavoidable mortality ( 0 to 74 years) by area,
North E West Queensland DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Mortality category | North \& West Queensland DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ |
| Avoidable | 1,627 | 310.7 | 20,859 | 227.8 | 35,515 | 220.6 | 189,845 | 211.8 |
| \% of total | 72.8 | .. | 72.8 | .. | 72.8 | .. | 71.5 | .. |
| (Amenable) | (624) | (120.8) | $(8,383)$ | (91.5) | $(14,323)$ | (89.3) | $(76,249)$ | (85.1) |
| (\% of total) | (27.9) | (..) | (29.3) | (..) | (29.3) | (..) | (28.7) | (..) |
| Unavoidable | 609 | 117.0 | 7,793 | 85.0 | 13,291 | 82.7 | 75,582 | 84.3 |
| \% of total | 27.2 | .. | 27.2 | .. | 27.2 | .. | 28.5 | .. |
| Total mortality | 2,236 | 427.7 | 28,652 | 312.8 | 48,806 | 303.4 | 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. North E West Queensland DGP's rate of avoidable mortality for males was 407.5 deaths per 100,000 males, notably higher than the rate of 211.1 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 137.7, compared to 102.9 for females, a rate ratio of 1.34 (Figure 9, Table 9).

Figure 8: Avoidable and amenable mortality by sex ( 0 to 74 years),
North \& West Queensland DGP, country Queensland, Queensland and Australia, 1997 to 2001
Mote: the different scales


Table 8: Avoidable and amenable mortality (0 to 74 years) by sex,
North \& West Queensland DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Mortality category and sex | North \& West Queensland DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ |
| Avoidable |  |  |  |  |  |  |  |  |
| Males | 1,139 | 407.5 | 9,362 | 269.5 | 23,316 | 285.3 | 123,026 | 272.6 |
| Females | 489 | 211.1 | 5,294 | 152.0 | 12,199 | 155.1 | 66,819 | 150.1 |
| Total | 1,627 | 310.7 | 14,656 | 211.2 | 35,515 | 220.6 | 189,845 | 211.8 |
| Rate ratio-M: $\mathrm{F}^{2}$ | .. | 1.93 ** | .. | $1.77{ }^{* *}$ | .. | $1.84 * *$ | .. | 1.82** |
| Amenable |  |  |  |  |  |  |  |  |
| Males | 384 | 137.7 | 3,249 | 95.2 | 8,181 | 100.4 | 42,568 | 94.3 |
| Females | 240 | 102.9 | 2,691 | 77.4 | 6,142 | 78.0 | 33,681 | 75.7 |
| Total | 624 | 120.8 | 5,940 | 86.4 | 14,323 | 89.3 | 76,249 | 85.1 |
| Rate ratio-M: $\mathrm{F}^{2}$ | .. | $1.34 * *$ | .. | 1.23** | .. | 1.29** | .. | 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 North $\mathcal{E}$ West Queensland DGP, country Queensland, Queensland and Australia over the period of analysis are shown in Table 10 by mortality category. However, given the substantial variation in the populations of these areas, a comparison of the proportion of YLL for each area is also shown.

YLL from avoidable mortality accounted for $72.3 \%$ of total YLL (0 to 74 years) for North $\mathcal{E}$ West Queensland DGP, consistent with the $72.9 \%$ for country Queensland: the proportion of YLL from amenable mortality for North $\mathcal{E}$ West Queensland DGP (27.0\%) was lower than for country Queensland (28.5\%).

Table 9: Years of life lost from avoidable mortality ( 0 to 74 years), North \& West Queensland DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Mortality category | North \& West Queensland DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% of total | No. | \% of total | No. | \% of total | No. | \% of total |
| Avoidable | 29,826 | 72.3 | 369,609 | 72.9 | 629,779 | 72.9 | 3,327,375 | 71.9 |
| (Amenable) | $(11,141)$ | (27.0) | $(144,553)$ | (28.5) | $(247,893)$ | (28.7) | $(1,298,430)$ | (28.0) |
| Unavoidable | 11,440 | 27.7 | 137,686 | 27.1 | 234,699 | 27.1 | 1,303,289 | 28.1 |
| Total | 41,265 | 100.0 | 507,294 | 100.0 | 864,478 | 100.0 | 4,630,664 | 100.0 |

[^2]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 $1,874.5$ deaths per 100,000 population in North $\mathcal{E}$ West Queensland 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 452.5 in North $\mathcal{E}$ West Queensland DGP.

Table 10: Avoidable and amenable mortality by age, North $\mathcal{E}$ West Queensland DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Mortality category and age (years) | North $\mathcal{E}$ West Queensland DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ |
| Avoidable |  |  |  |  |  |  |  |  |
| 0-14 | 77 | 53.7 | 500 | 30.1 | 1,208 | 32.2 | 5,669 | 28.8 |
| 15-24 | 81 | 97.5 | 562 | 44.8 | 1,386 | 54.3 | 7,045 | 52.8 |
| 25-44 | 228 | 124.6 | 1,916 | 77.8 | 4,527 | 84.9 | 24,356 | 83.9 |
| 45-64 | 568 | 452.5 | 5,107 | 301.7 | 12,543 | 322.5 | 64,282 | 304.9 |
| 65-74 | 672 | 1,874.5 | 6,571 | 1410.9 | 15,851 | 1404.6 | 88,493 | 1,358.1 |
| Total | 1,627 | 310.7 | 14,656 | 211.2 | 35,515 | 220.6 | 189,845 | 211.8 |
| Amenable |  |  |  |  |  |  |  |  |
| 0-24 | 61 | 25.6 | 451 | 15.9 | 1,059 | 16.8 | 5,083 | 15.4 |
| 25-44 | 61 | 34.6 | 491 | 20.1 | 1,165 | 21.8 | 5,946 | 20.5 |
| 45-64 | 222 | 179.4 | 2,236 | 132.2 | 5,352 | 137.9 | 27,464 | 130.3 |
| 65-74 | 280 | 789.7 | 2,762 | 591.5 | 6,748 | 599.1 | 37,756 | 579.4 |
| Total | 624 | 120.8 | 5,940 | 86.4 | 14,323 | 89.3 | 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 North E West Queensland DGP were for cardiovascular diseases, with a rate of 99.5 deaths per 100,000 population, and cancer, 85.2 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 lung cancer, with rates of 71.8 per 100,000 population and 31.0 per 100,000, respectively.

Table 11: Avoidable mortality ( 0 to 74 years) by major condition group and selected cause, North \& West Queensland DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Condition group/ selected cause | North E West Queensland DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ |
| Cancer | 435 | 85.2 | 6,690 | 72.8 | 11,618 | 72.6 | 62,338 | 69.5 |
| Colorectal cancer | 97 | 18.9 | 1,425 | 15.5 | 2,392 | 15.0 | 13,008 | 14.5 |
| Lung cancer | 161 | 31.0 | 2,329 | 25.1 | 4,062 | 25.4 | 21,208 | 23.7 |
| Cardiovascular diseases | 511 | 99.5 | 6,646 | 72.2 | 11,294 | 71.0 | 59,945 | 66.9 |
| Ischaemic heart disease | 372 | 71.8 | 5,005 | 54.2 | 8,434 | 52.9 | 43,712 | 48.8 |
| Cerebrovascular diseases | 104 | 20.7 | 1,263 | 13.8 | 2,210 | 14.0 | 12,558 | 14.0 |
| Respiratory system diseases | 128 | 25.3 | 1,262 | 13.8 | 2,168 | 13.7 | 11,612 | 13.0 |
| Chronic obstructive pulmonary disease | 121 | 24.0 | 1,159 | 12.6 | 1,970 | 12.5 | 10,395 | 11.6 |
| Unintentional injuries | 128 | 22.9 | 1,662 | 18.5 | 2,630 | 15.8 | 14,224 | 15.9 |
| Road traffic injuries | 88 | 15.7 | 1,054 | 11.8 | 1,565 | 9.4 | 8,138 | 9.1 |
| Intentional injuries | 136 | 24.3 | 1,712 | 19.1 | 3,017 | 18.2 | 13,891 | 15.5 |
| Suicide and self inflicted injuries | 116 | 20.6 | 1,521 | 17.0 | 2,719 | 16.4 | 12,393 | 13.8 |

[^3]Rates in the Division for all of the condition groups and selected causes were above those for country Queensland and Australia (Figure 10).

Figure 9: Avoidable mortality ( 0 to 74 years) by major condition group and selected cause, North \& West Queensland DGP, country Queensland and Australia, 1997 to 2001

North \& West Queensland DGP $\square$ Country Queensland
Australia


## Notes on the data

## Data sources and limitations

## General

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

## Data sources

Table 12 details the data sources for the material presented in this profile.

## Table 12: Data sources

Section Source

## Population

Figures 1 and 2; Table 1
Figure 3

Estimated Resident Population, ABS, 30 June for the periods shown
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 $2 \quad$ Private health insurance, from Hansard
GP services - patient flow/ GP catchment
Tables 3 and 4
Medicare Australia, 2003/04
Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions

Tables 5 and 6;
Figures 6 and 7

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 7, 8, 9, 10 and 11; ABS Deaths 1997-2001; data produced in HealthWIZ by Prometheus
Figures 8 and $9 \quad$ 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 North E West Queensland 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-divisionsdivspc.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, Fitzroy comprises two SLAs, Part A and Part B (both of which are all in the Division). These SLAs and all or part of the other SLAs listed in Table 13 comprise the Division.

Table 13: SLAs and population in North E West Queensland DGP, 2005 on 2001 boundaries

| $\begin{aligned} & \hline \text { SLA } \\ & \text { code } \end{aligned}$ | SLA name | Per cent of the SLA's population in the Division* | Estimated of the SLA's 2005 population in the Division |
| :---: | :---: | :---: | :---: |
| 30150 | Aramac | 100.0 | 705 |
| 30250 | Aurukun | 4.0 | \# |
| 30350 | Banana | 3.1 | 442 |
| 30400 | Barcaldine | 100.0 | 1,708 |
| 30450 | Barcoo | 87.0 | 396 |
| 30500 | Bauhinia | 5.3 | 118 |
| 30750 | Blackall | 100.0 | 1,607 |
| 30900 | Boulia | 100.0 | 550 |
| 30950 | Bowen | 100.0 | 12,546 |
| 31900 | Burdekin | 94.5 | 17,712 |
| 31950 | Burke | 100.0 | 1,719 |
| 32074 | Cairns - Trinity | 0.1 | \# |
| 32078 | Cairns - Part B | 2.0 | \# |
| 32200 | Cardwell | 19.2 | 146 |
| 32250 | Carpentaria | 58.8 | 2,160 |
| 32300 | Charters Towers | 100.0 | 2,374 |
| 32450 | Cloncurry | 100.0 | 8,831 |
| 32501 | Cook (excl. Weipa) | 3.1 | 3,841 |
| 32600 | Croydon | 4.0 | 216 |
| 32700 | Dalrymple | 100.0 | \# |
| 32750 | Diamantina | 100.0 | 3,455 |
| 32800 | Douglas | 1.6 | 306 |
| 32850 | Duaringa | 5.1 | 191 |
| 33000 | Emerald | 1.9 | 392 |
| 33100 | Etheridge | 4.0 | 263 |
| 33151 | Fitzroy - Part A | 15.0 | \# |
| 33154 | Fitzroy - Part B | 13.9 | 751 |
| 33200 | Flinders | 100.0 | 744 |
| 33801 | Hinchinbrook excl. Palm Island | 100.0 | 1,997 |
| 33804 | Hinchinbrook - Palm Island | 100.0 | 12,209 |
| 33850 | Ilfracombe | 100.0 | 2,378 |
| 34050 | Isisford | 100.0 | 363 |
| 34100 | Jericho | 60.1 | 301 |
| 34150 | Johnstone | 0.6 | 664 |
| 34550 | Livingstone | 4.6 | 123 |
| 34700 | Longreach | 100.0 | 1,311 |
| 34800 | McKinlay | 100.0 | 3,986 |
| 34850 | Mareeba | 0.4 | 1,024 |
| 35250 | Mornington | 4.0 | \# |
| 35300 | Mount Isa | 100.0 | \# |
| 35350 | Mount Morgan | 1.9 | 21,043 |
| 35850 | Peak Downs | 7.3 | \# |
| 36300 | Richmond | 100.0 | 242 |
| 36350 | Rockhampton | 0.0 | 1,147 |
| 36650 | Tambo | 89.8 | \# |
| 36831 | Thuringowa - Part B | 15.9 | 590 |
| 37084 | Townsville - Part B | 100.0 | 1,215 |
| 37400 | Winton | 100.0 | 3,599 |
| 73409 | Tableland | 13.8 | 1,536 |
| 74009 | Tennant Creek - Balance | 21.2 | 140 |

[^4]
## 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

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

Phone: 08-83036236 or e-mail: PHIDU1@publichealth.gov.au


[^0]:    \# data were not mapped: see 'Mapping' note under Methods

[^1]:    ${ }^{1}$ 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 416 by Division of patient address

[^2]:    ${ }^{1}$ 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.

[^3]:    ${ }^{1}$ Rate is the indirectly age-standardised rate per 100,000 population

[^4]:    * 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

