# Population health profile of the 

## Far North Queensland Rural

## Division of General Practice: supplement

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## 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 Far North Queensland Rural Division of General Practice, dated November 2005, available from www.publichealth.gov.au. This supplement includes an update of the population of the Far North Queensland Rural 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 Far North Queensland Rural Division had an Estimated Resident Population of 106,532 at 30 June 2005.

Figure 1: Annual population change, Far North Queensland Rural 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 increased by $2.0 \%$ on average each year, lower than in country Queensland (2.7\%) and Queensland (2.6\%). From 1996 to 2001, the annual percentage growth rate in the Division decreased to $1.0 \%$, again lower than in country Queensland and Queensland (1.8\%). The growth rate of $0.9 \%$ per year from 2001 to 2005 was well below the annual increases for country Queensland (2.2\%) and Queensland (2.3\%).

Table 1: Population by age, Far North Queensland Rural DGP and Australia, 2005

| $\begin{gathered} \hline \text { Age group } \\ \text { (years) } \end{gathered}$ | $\qquad$ Queensland Rural DGP |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% |
| 0-14 | 23,968 | 22.5 | 3,978,221 | 19.6 |
| 15-24 | 13,453 | 12.6 | 2,819,834 | 13.9 |
| 25-44 | 29,260 | 27.5 | 5,878,107 | 28.9 |
| 45-64 | 27,151 | 25.5 | 4,984,446 | 24.5 |
| 65-74 | 7,428 | 7.0 | 1,398,831 | 6.9 |
| 75-84 | 4,095 | 3.8 | 954,143 | 4.7 |
| 85+ | 1,178 | 1.1 | 315,027 | 1.5 |
| Total | 106,532 | 100.0 | 20,328,609 | 100.0 |

As shown in the accompanying table and the age-sex pyramid below, Far North Queensland Rural DGP had relatively more people in the 0 to 14 year ( $22.5 \%$ ) and 45 to 64 year ( $25.5 \%$ ) age groups, compared with Australia as a whole ( $19.6 \%$ and $24.5 \%$ ). (Table 1). Conversely, the proportions of the Division's population in the remaining age groups were lower than those for Australia.

Figure 2: Population in Far North Queensland Rural DGP and Australia, by age and sex, 2005


Far North Queensland Rural DGP Australia
$\square$ Males $\square$ Females $\Delta$ 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 males aged 0 to 14 and females aged 0 to 19 years;
- from 20 to 39 years - relatively fewer males and females; and
- from 70 to $85+$ years - fewer females and males (from 75 years).

Figure 3: Population projections for Far North Queensland Rural 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:

- at ages below 55 years - relatively fewer males and females (except for males and females aged 25 to 29 years); and
- at ages 55 years and over - 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 Far North Queensland Rural, Division of General Practice, dated November 2005, available from www.publichealth.gov.au, for other sociodemographic indicators.

Figure 4: Index of Relative Socio-Economic Disadvantage, Far North Queensland Rural DGP, 2001


One of four socioeconomic indexes for areas produced at the 2001 ABS Census is the Index of Relative Socio-Economic Disadvantage.
The Far North Queensland Rural DGP has an index score of 936, below the score for Australia of 1000: this score varies widely across the Division, from a low of 734 in the most disadvantaged areas to 1056 in the least disadvantaged areas.
Note: each 'quintile’ comprises approximately $20 \%$ of the population of the Division.

A new indicator, produced for the first time at the 2001 ABS Census, shows the number of jobless families with children under 15 years of age. The proportion of jobless families in the Division (19.5\%) was consistent with that for country Queensland (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 Far North Queensland Rural DGP had a markedly lower proportion of the population with private health insurance (29.4\%) than in country Queensland (40.3\%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, Far North Queensland Rural 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, Far North Queensland Rural DGP, country Queensland, Queensland and Australia, 2001

| Indicator | Far North Queensland Rural DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% | No. | \% | No. | \% | No. | \% |
| Jobless families with children under 15 years old | 2,199 | 19.5 | 42,801 | 19.9 | 74,942 | 18.9 | 357,563 | 17.4 |
| Private health insurance (30 June) | 32,316 | 29.4 | 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, Far North Queensland Rural DGP, 2001

$26.0 \%$ or more
$22.0 \%$ to $25.9 \%$
$18.0 \%$ to $21.9 \%$
$14.0 \%$ to $17.9 \%$
fewer than 14.0\%
not mapped ${ }^{\#}$

Map 2: People covered by private health insurance by SLA, Far North Queensland Rural DGP, 30 June 2001


Per cent
Fewer than 20.0\%
$20.0 \%$ to $25.9 \%$
26.0\% to 31.9\%
$32.0 \%$ to $37.9 \%$
$38.0 \%$ or more
not mapped ${ }^{\#}$

[^0]
## GP services to residents of the Far North Queensland Rural 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 ( $84.0 \%$ ) of GP unreferred attendances to residents of Far North Queensland Rural DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented $305,145 \mathrm{GP}$ unreferred attendances (Table 3). A further $9.9 \%$ of unreferred attendances were provided in Cairns DGP.

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

| Division |  | Unreferred attendances |  |
| :---: | :---: | :---: | :---: |
| Number | Name | No. | $\%^{3}$ |
| 417 | Far North Queensland Rural DGP | 305,145 | 84.0 |
| 413 | Cairns DGP | 35,884 | 9.9 |
| 412 | Townsville DGP | 3,930 | 1.1 |
| 405 | GPpartners DGP | 2,531 | 0.7 |
| 416 | North E West Queensland DGP | 2,489 | 0.7 |
| Other | .. | 3,836 | 3.7 |
| Total | .. | 363,456 | 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 417 by Division in which attendance occurred

Over four fifths ( $85.5 \%$ ) of unreferred attendances provided by GPs with a provider number in Far North Queensland Rural DGP were also to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further $3.7 \% \%$ of unreferred attendance provided by the Division's GPs were to people living in Cairns DGP.

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

| Division |  | Unreferred attendances |  |
| :---: | :---: | :---: | :---: |
| Number | Name | No. | $\%^{3}$ |
| 417 | Far North Queensland Rural DGP | 305,145 | 85.5 |
| 413 | Cairns DGP | 13,051 | 3.7 |
| 416 | North E West Queensland DGP | 3,828 | 1.1 |
| 412 | Townsville DGP | 2,305 | 0.6 |
| Other | .. | 32,665 | 9.1 |
| Total | .. | 356,994 | 100.0 |

[^1]
## Additional prevalence estimates: chronic diseases and risk factors combined

Please refer to the earlier Population health profile of the Far North Queensland Rural 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 more people in Far North Queensland Rural DGP who had asthma and were smokers, compared to country Queensland and Australia as a whole (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were higher. However, there were relatively fewer people in Far North Queensland Rural DGP who had type 2 diabetes who were overweight/ obese, compared to country Queensland and Australia.

Figure 6: Estimates of selected chronic diseases and risk factors, Far North Queensland Rural DGP, country Queensland and Australia, 2001
Far North Queensland Rural DGP $\quad \square$ Country Queensland $\quad \square$ Australia


Table 5: Estimates of selected chronic diseases and risk factors, Far North Queensland Rural DGP, country Queensland, Queensland and Australia, 2001

| Variable | Far North Queensland Rural DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. ${ }^{1}$ | Rate ${ }^{2}$ | No. ${ }^{1}$ | Rate ${ }^{2}$ | No. ${ }^{1}$ | Rate ${ }^{2}$ | No. ${ }^{1}$ | Rate ${ }^{1}$ |
| Had asthma \& smoked $^{3}$ | 2,426 | 26.8 | 46,582 | 24.8 | 83,759 | 23.2 | 397,734 | 20.8 |
| Had type 2 diabetes $\mathcal{E}$ were overweight/obese ${ }^{4}$ | 2,143 | 13.8 | 29,819 | 14.5 | 52,952 | 15.0 | 283,176 | 15.2 |

[^2]
## 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 4,844 admissions from ambulatory care sensitive (ACS) conditions accounted for $12.0 \%$ of all admissions in the Far North Queensland Rural DGP (Table 6, Figure 7), substantially above the levels in Queensland (8.5\%) and Australia (8.7\%).

Table 6: Avoidable ${ }^{1}$ and unavoidable hospitalisations, Far North Queensland Rural DGP, Queensland, and Australia, 2001/02

| Category | Far North Queensland Rural DGP |  |  | Queensland |  |  | Australia |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{2}$ | \% | No. | Rate ${ }^{2}$ | \% | No. | Rate ${ }^{2}$ | \% |
| Avoidable ${ }^{1}$ | 4,844 | 4,837.4 | 12.0 | 106,884 | 3,025.0 | 8.5 | 552,786 | 2,847.5 | 8.7 |
| Unavoidable | 35,470 | 35,302.9 | 88.0 | 1,153,519 | 32,410.1 | 91.5 | 5,818,199 | 29,970.7 | 91.3 |
| Total | 40,314 | 40,135.6 | 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 7: Avoidable hospitalisations ${ }^{1}$, Far North Queensland Rural DGP, Queensland and Australia, 2001/02


The rate of avoidable hospitalisations in Far North Queensland Rural DGP is substantially higher, a rate of 4,837.4 admissions per 100,000 population, compared to Queensland (a rate of $3,025.0)$, and Australia $(2,847.5)$.

Diabetes complications, cellulitis, chronic obstructive pulmonary disease and dehydration and gastroenteritis were the four conditions with the highest rates of avoidable hospitalisations in the Far North Queensland Rural 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 dehydration and gastroenteritis have the highest rates of avoidable hospitalisations for the acute conditions.

Figure 8: Avoidable hospitalisations ${ }^{1}$ by condition, Far North Queensland Rural DGP and Queensland, 2001/02

${ }^{1}$ Admissions resulting from ACS conditions: excludes nutritional deficiencies as less than ten admissions
Table 7: Avoidable hospitalisations ${ }^{1}$ by condition, Far North Queensland Rural DGP, Queensland and Australia, 2001/02

| Sub-category/ condition | Far North Queensland Rural DGP |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{2}$ | No. | Rate ${ }^{2}$ | No. | Rate ${ }^{2}$ |
| Vaccine-preventable | 109 | 107.0 | 3,188 | 89.6 | 16,573 | 85.4 |
| Influenza and pneumonia | 86 | 85.2 | 2,646 | 74.6 | 13,021 | 67.1 |
| Other vaccine preventable | 23 | 21.8 | 542 | 15.0 | 3,552 | 18.3 |
| Chronic ${ }^{3}$ | 2,748 | 2,848.9 | 65,455 | 1,882.0 | 352,545 | 1,816 |
| Diabetes complications | 1,290 | 1,324.8 | 25,175 | 722.9 | 141,345 | 728.1 |
| Iron deficiency anaemia | 93 | 98.8 | 2,772 | 79.7 | 16,451 | 84.7 |
| Hypertension | 92 | 98.9 | 1,324 | 38.3 | 6,354 | 32.7 |
| Congestive heart failure | 284 | 325.4 | 7,617 | 225.5 | 42,447 | 218.6 |
| Angina | 282 | 295.3 | 11,134 | 321.5 | 49,963 | 257.4 |
| Chronic obstructive pulmonary disease | 443 | 469.1 | 10,619 | 308.5 | 54,853 | 282.6 |
| Asthma | 264 | 236.6 | 6,814 | 185.6 | 41,009 | 211.3 |
| Acute | 2,155 | 2,074.0 | 41,300 | 1,143.3 | 200,913 | 1,035 |
| Dehydration and gastroenteritis | 337 | 347.7 | 8,278 | 234.1 | 37,766 | 194.5 |
| Convulsions and epilepsy | 362 | 334.9 | 5,902 | 162.3 | 31,137 | 160.4 |
| Ear, nose and throat infections | 309 | 269.4 | 6,829 | 184.4 | 32,075 | 165.2 |
| Dental conditions | 307 | 274.5 | 9,101 | 247.8 | 43,667 | 224.9 |
| Perforated/bleeding ulcer | 60 | 63.9 | 892 | 25.8 | 5,795 | 29.9 |
| Ruptured appendix | 9 | 8.7 | 754 | 20.7 | 3,866 | 19.9 |
| Pyelonephritis | 112 | 112.4 | 1,437 | 39.8 | 7,386 | 38.0 |
| Pelvic inflammatory disease | 53 | 53.1 | 1,315 | 36.2 | 6,547 | 33.7 |
| Cellulitis | 564 | 565.2 | 5,930 | 167.4 | 28,204 | 145.3 |
| Gangrene | 42 | 44.2 | 862 | 24.8 | 4,470 | 23.0 |
| Total avoidable hospitalisations ${ }^{4}$ | 4,844 | 4,837.4 | 106,884 | 3,025.0 | 552,786 | 2,847.5 |

[^3]
## 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 (74.9\%) of all deaths in Far North Queensland Rural DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, higher than 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 1.29.

Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for $29.2 \%$ of all deaths at ages 0 to 74 years in Far North Queensland Rural DGP, compared to $29.3 \%$ in country Queensland.

Table 8: Avoidable and unavoidable mortality ( 0 to 74 years) by area,
Far North Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Mortality category | Far North Queensland Rural DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ |
| Avoidable | 1,379 | 294.6 | 20,859 | 227.8 | 35,515 | 220.6 | 189,845 | 211.8 |
| \% of total | 74.9 | .. | 72.8 | .. | 72.8 | .. | 71.5 | .. |
| (Amenable) | (537) | (115.3) | $(8,383)$ | (91.5) | $(14,323)$ | (89.3) | $(76,249)$ | (85.1) |
| (\% of total) | (29.2) | (..) | (29.3) | (..) | (29.3) | (..) | (28.7) | (..) |
| Unavoidable | 461 | 98.6 | 7,793 | 85.0 | 13,291 | 82.7 | 75,582 | 84.3 |
| \% of total | 25.1 | .. | 27.2 | .. | 27.2 | .. | 28.5 | .. |
| Total mortality | 1,840 | 393.2 | 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. Far North Queensland Rural DGP's rate of avoidable mortality for males was 367.3 deaths per 100,000 males, notably higher than the rate of 222.8 for females. Similarly, the rate of amenable mortality for males in the Division was higher, 121.4, compared to 110.1 for females, a rate ratio of 1.10 (Figure 9, Table 9).

Figure 9: Avoidable and amenable mortality by sex ( 0 to 74 years), Far North Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001

Note: the different scales

Avoidable


Amenable


Table 9: Avoidable and amenable mortality ( 0 to 74 years) by sex,
Far North Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Mortality category and sex | Far North Queensland Rural DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ |
| Avoidable |  |  |  |  |  |  |  |  |
| Males | 909 | 367.3 | 9,362 | 269.5 | 23,316 | 285.3 | 123,026 | 272.6 |
| Females | 470 | 222.8 | 5,294 | 152.0 | 12,199 | 155.1 | 66,819 | 150.1 |
| Total | 1,379 | 294.6 | 14,656 | 211.2 | 35,515 | 220.6 | 189,845 | 211.8 |
| Rate ratio-M: $\mathrm{F}^{2}$ | .. | 1.65** | .. | $1.77{ }^{* *}$ | .. | $1.84{ }^{* *}$ | .. | 1.82** |
| Amenable |  |  |  |  |  |  |  |  |
| Males | 303 | 121.4 | 3,249 | 95.2 | 8,181 | 100.4 | 42,568 | 94.3 |
| Females | 234 | 110.1 | 2,691 | 77.4 | 6,142 | 78.0 | 33,681 | 75.7 |
| Total | 537 | 115.3 | 5,940 | 86.4 | 14,323 | 89.3 | 76,249 | 85.1 |
| Rate ratio-M: $\mathrm{F}^{2}$ | .. | 1.10 | .. | $1.23{ }^{* *}$ | .. | 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 * $\mathrm{p}<0.05$; ** 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 Far North Queensland Rural 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 $74.8 \%$ of total YLL ( 0 to 74 years) for Far North Queensland Rural DGP, higher than the $72.9 \%$ for country Queensland: the proportion of YLL from amenable mortality for Far North Queensland Rural DGP (28.4\%) was consistent with that for country Queensland (28.5\%).

Table 10: Years of life lost from avoidable mortality ( 0 to 74 years),
Far North Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Mortality category | Far North Queensland Rural DGP |  | $\begin{gathered} \text { Country } \\ \text { Queensland } \end{gathered}$ |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | \% of total | No. | \% of total | No. | \% of total | No. | \% of total |
| Avoidable | 25,600 | 74.8 | 369,609 | 72.9 | 629,779 | 72.9 | 3,327,375 | 71.9 |
| (Amenable) | $(9,723)$ | (28.4) | $(144,553)$ | (28.5) | $(247,893)$ | (28.7) | $(1,298,430)$ | (28.0) |
| Unavoidable | 8,642 | 25.2 | 137,686 | 27.1 | 234,699 | 27.1 | 1,303,289 | 28.1 |
| Total | 34,242 | 100.0 | 507,294 | 100.0 | 864,478 | 100.0 | 4,630,664 | 100.0 |

[^4]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 $1,591.2$ deaths per 100,000 population in Far North Queensland Rural 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 461.0 in Far North Queensland Rural DGP.

Table 11: Avoidable and amenable mortality by age, Far North Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Mortality category and age (years) | Far North Queensland Rural DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ |
| Avoidable |  |  |  |  |  |  |  |  |
| 0-14 | 48 | 37.8 | 500 | 30.1 | 1,208 | 32.2 | 5,669 | 28.8 |
| 15-24 | 62 | 96.1 | 562 | 44.8 | 1,386 | 54.3 | 7,045 | 52.8 |
| 25-44 | 225 | 143.3 | 1,916 | 77.8 | 4,527 | 84.9 | 24,356 | 83.9 |
| 45-64 | 533 | 461.0 | 5,107 | 301.7 | 12,543 | 322.5 | 64,282 | 304.9 |
| 65-74 | 512 | 1,591.2 | 6,571 | 1410.9 | 15,851 | 1404.6 | 88,493 | 1,358.1 |
| Total | 1,379 | 294.6 | 14,656 | 211.2 | 35,515 | 220.6 | 189,845 | 211.8 |
| Amenable |  |  |  |  |  |  |  |  |
| 0-24 | 41 | 19.9 | 451 | 15.9 | 1,059 | 16.8 | 5,083 | 15.4 |
| 25-44 | 68 | 43.5 | 491 | 20.1 | 1,165 | 21.8 | 5,946 | 20.5 |
| 45-64 | 217 | 190.3 | 2,236 | 132.2 | 5,352 | 137.9 | 27,464 | 130.3 |
| 65-74 | 212 | 665.5 | 2,762 | 591.5 | 6,748 | 599.1 | 37,756 | 579.4 |
| Total | 537 | 115.3 | 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 Far North Queensland Rural DGP were for cancer, with a rate of 84.5 deaths per 100,000 population, and cardiovascular diseases, 84.2 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 61.9 per 100,000 population and 29.3 per 100,000, respectively.

Table 12: Avoidable mortality ( 0 to 74 years) by major condition group and selected cause, Far North Queensland Rural DGP, country Queensland, Queensland and Australia, 1997 to 2001

| Condition group/ selected cause | Far North Queensland Rural DGP |  | Country Queensland |  | Queensland |  | Australia |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ | No. | Rate ${ }^{1}$ |
| Cancer | 392 | 84.5 | 6,690 | 72.8 | 11,618 | 72.6 | 62,338 | 69.5 |
| Colorectal cancer | 66 | 14.2 | 1,425 | 15.5 | 2,392 | 15.0 | 13,008 | 14.5 |
| Lung cancer | 137 | 29.3 | 2,329 | 25.1 | 4,062 | 25.4 | 21,208 | 23.7 |
| Cardiovascular diseases | 391 | 84.2 | 6,646 | 72.2 | 11,294 | 71.0 | 59,945 | 66.9 |
| Ischaemic heart disease | 289 | 61.9 | 5,005 | 54.2 | 8,434 | 52.9 | 43,712 | 48.8 |
| Cerebrovascular diseases | 65 | 14.3 | 1,263 | 13.8 | 2,210 | 14.0 | 12,558 | 14.0 |
| Respiratory system diseases | 81 | 17.7 | 1,262 | 13.8 | 2,168 | 13.7 | 11,612 | 13.0 |
| Chronic obstructive pulmonary disease | 70 | 15.5 | 1,159 | 12.6 | 1,970 | 12.5 | 10,395 | 11.6 |
| Unintentional injuries | 101 | 21.2 | 1,662 | 18.5 | 2,630 | 15.8 | 14,224 | 15.9 |
| Road traffic injuries | 64 | 13.5 | 1,054 | 11.8 | 1,565 | 9.4 | 8,138 | 9.1 |
| Intentional injuries | 143 | 29.9 | 1,712 | 19.1 | 3,017 | 18.2 | 13,891 | 15.5 |
| Suicide and self inflicted injuries | 114 | 24.0 | 1,521 | 17.0 | 2,719 | 16.4 | 12,393 | 13.8 |

[^5]Rates in the Division for the condition groups and selected causes were generally above, or consistent with, those for country Queensland and Australia: the exception was colorectal cancer, with higher rates in country Queensland (Figure 10).

Figure 10: Avoidable mortality ( 0 to 74 years) by major condition group and selected cause, Far North Queensland Rural DGP, country Queensland and Australia, 1997 to 2001
$\square$ Far North Queensland Rural DGP $\quad \square$ Country Queensland $\square$ 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 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
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 $4 \quad$ 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; National Hospital Morbidity Database at Australian Institute of Health $\mathcal{E}$ Welfare,
Figures 7 and 8 2001/02; data produced in HealthWIZ by Prometheus Information (not available in public release dataset)

## Avoidable mortality

Tables 8, 9, 10, 11 and 12; ABS Deaths 1997-2001; data produced in HealthWIZ by Prometheus
Figures 9 and 10 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 Far North Queensland Rural 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, Cook is comprised of two SLAs, Cook (excluding Weipa) and Cook-Weipa only. These SLAs, and all or part of the other SLAs listed in Table 14 comprise the Division.

Table 14: SLAs and population in Far North Queensland Rural DGP, 2005 on 2001 boundaries

| SLA code | SLA/SLA group name | Per cent of SLA/SLA <br> group's population in <br> the Division* | Estimate of the SLA/ SLA <br> group's 2005 population <br> in the Division |
| :--- | :--- | :---: | :---: |
| 30200 | Atherton | 100.0 | 11,212 |
| 30250 | Aurukun | 911 |  |
| 32072 | Cairns - Northern Suburbs | 0.2 | $\#$ |
| 32074 | Cairns - Trinity | 2.3 | $\#$ |
| 32078 | Cairns - Part B | 48.1 | 771 |
| 32200 | Cardwell | 80.8 | 3,462 |
| 32250 | Carpentaria | 33.5 | 9,095 |
| 32501 | Cook (excluding Weipa) | 82.9 | 1,351 |
| 32504 | Cook - Weipa only | 100.0 | 5,734 |
| 32600 | Croydon | 78.0 | 1,991 |
| 32800 | Douglas | 91.0 | 228 |
| 32900 | Eacham | 100.0 | 10,649 |
| 33100 | Etheridge | 78.0 | 6,337 |
| 33700 | Herberton | 100.0 | 789 |
| 34150 | Johnstone | 96.5 | 5,449 |
| 34850 | Mareeba | 97.6 | 18,912 |
| 35250 | Mornington (Qld) | 78.0 | 18,398 |
| 36950 | Torres | 100.0 | 814 |

* Proportions are approximate and are known to be incorrect in some cases, due to errors in the concordance used to allocate CDs to form postal areas. In addition, in a small number of cases, part(s) of an SLA can be allocated to another Division, sometimes several hundred kilometres away. Although adjustments have not been made to the concordance to correct these errors, the affected SLAs are highlighted in the table (shown in bold italic typeface)
\# Not shown as the total population is less than 100


## Acknowledgements

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

## Further developments and updates

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

## PHIDU contact details

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

Phone: 08-83036236 or e-mail: PHIDU@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 417 by Division of patient address

[^2]:    ${ }^{1}$ No. is a weighted estimate of the number of people in Far North Queensland Rural 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

[^3]:    ${ }^{1}$ 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

[^4]:    ${ }^{1}$ 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.

[^5]:    ${ }^{1}$ Rate is the indirectly age-standardised rate per 100,000 population

