

Population health profile of the Monash

Division of General Practice: supplement

Population Profile Series: No. 48a

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Interpretation of differences between data in this profile and similar data from other sources needs to be undertaken with care, as such differences may be due to the use of different methodology to produce the data.

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

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

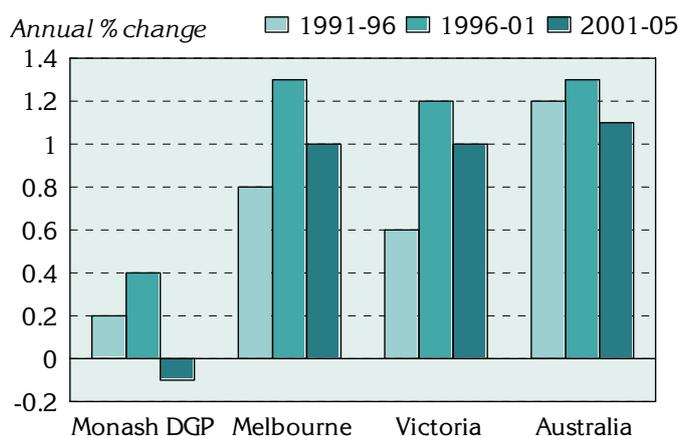
- Population [updated to June 2005]
- Additional socio-demographic indicators
- Unreferred attendances – patient flow/ GP catchment
- Additional prevalence estimates: chronic diseases and risk factors combined
- Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive 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 Monash Division had an Estimated Resident Population of 137,414 at 30 June 2005.

Figure 1: Annual population change, Monash DGP, Melbourne, Victoria and Australia, 1991 to 1996, 1996 to 2001 and 2001 to 2005



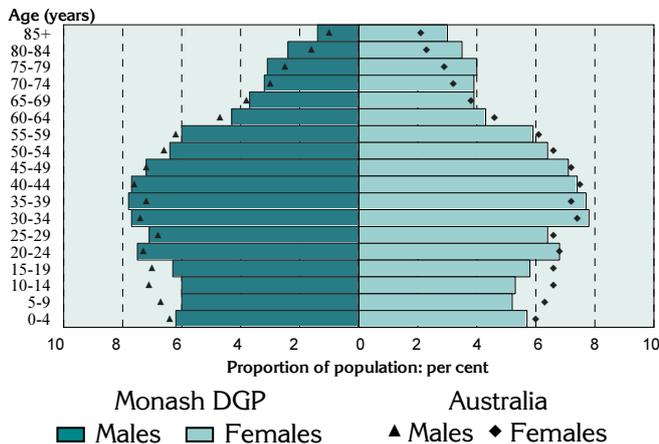
Over the five years from 1991 to 1996, the Division's population increased by 0.2% on average each year, lower than for Melbourne (0.8%), Victoria (0.6%), and Australia as a whole (1.2%). From 1996 to 2001, the annual percentage increase in the Division was 0.4%, again lower than for the other areas (1.3%, 1.2% and 1.3%, respectively). From 2001 to 2005 the population decreased by an average of 0.1% per year, compared to annual increases of 1.0% for Melbourne and Victoria, and 1.1% for Australia.

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

| Age group (years) | Monash DGP | | Australia | |
|-------------------|----------------|--------------|-------------------|--------------|
| | No. | % | No. | % |
| 0-14 | 23,614 | 17.2 | 3,978,221 | 19.6 |
| 15-24 | 18,070 | 13.1 | 2,819,834 | 13.9 |
| 25-44 | 40,869 | 29.7 | 5,878,107 | 28.9 |
| 45-64 | 32,704 | 23.8 | 4,984,446 | 24.5 |
| 65-74 | 10,157 | 7.4 | 1,398,831 | 6.9 |
| 75-84 | 8,938 | 6.5 | 954,143 | 4.7 |
| 85+ | 3,063 | 2.2 | 315,027 | 1.5 |
| Total | 137,414 | 100.0 | 20,328,609 | 100.0 |

As shown in the accompanying table and the age-sex pyramid below (Figure 2), the Monash DGP had relatively fewer children aged 0 to 14 years (17.2%) compared to Australia as a whole (19.6%) (Table 1). Conversely, the 65 years and over age groups had higher proportions compared to Australia.

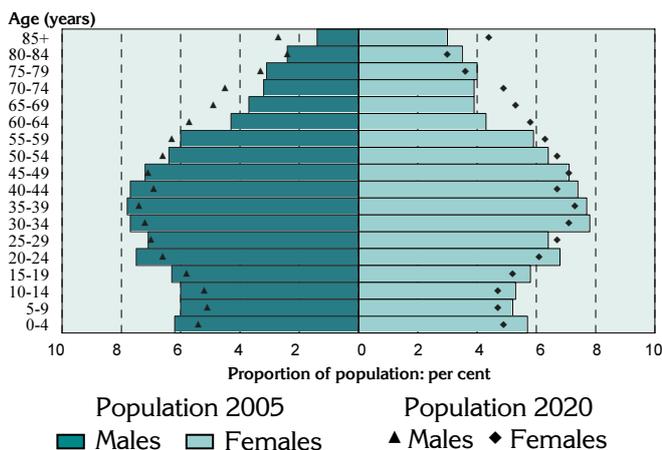
Figure 2: Population in Monash DGP and Australia, by age and sex, 2005



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

- at younger ages – lower proportions of children aged 0 to 14 years, and young people aged 15 to 19 years;
- from 30 to 39 years – slightly higher proportions of both males and females; and
- at older ages – higher proportions of males aged 70 years and over, and females aged 65 years and over.

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



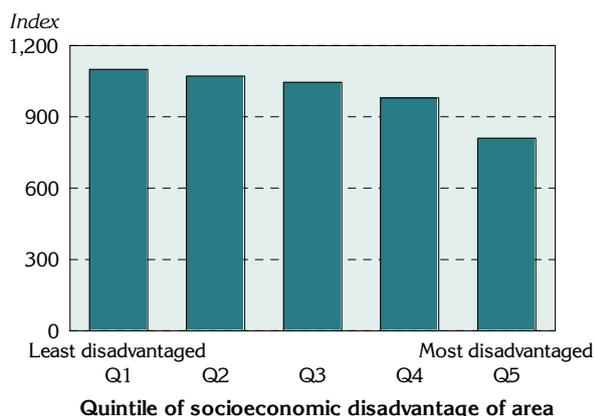
The population projections for the Division show a number of changes in age distribution, with the 2020 population projected to have:

- at younger ages – lower proportions of children, teenagers and young adults, aged 0 to 24 years;
- from 30 to 44 years – lower proportions of both males and females;
- from 50 to 74 – higher proportions of males and lower females; and
- at older ages – higher proportions of males aged over 75 years, and females aged 85 years and over.

Additional socio-demographic indicators

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



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

The Monash DGP has an index score of 1001, consistent with the score for Australia of 1000: this score varies widely across the Division, from a low of 810 in the most disadvantaged areas to 1099 in the least disadvantaged areas.

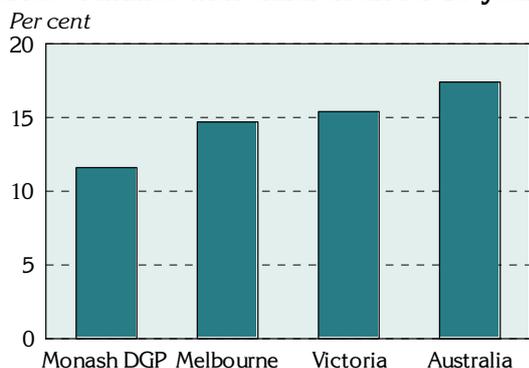
Note: each 'quintile' comprises approximately 20% of the population of the Division.

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 Monash DGP (11.6%), compared to Melbourne as a whole (14.7%) (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 similar proportion of people with private health insurance (48.8%), compared to Melbourne (49.2%) (Figure 5, Table 2).

Figure 5: Socio-demographic indicators, Monash DGP, Melbourne, Victoria and Australia, 2001

Jobless families with children under 15 years old



Private health insurance, 30 June



Table 2: Socio-demographic indicators, Monash DGP, Melbourne, Victoria and Australia, 2001

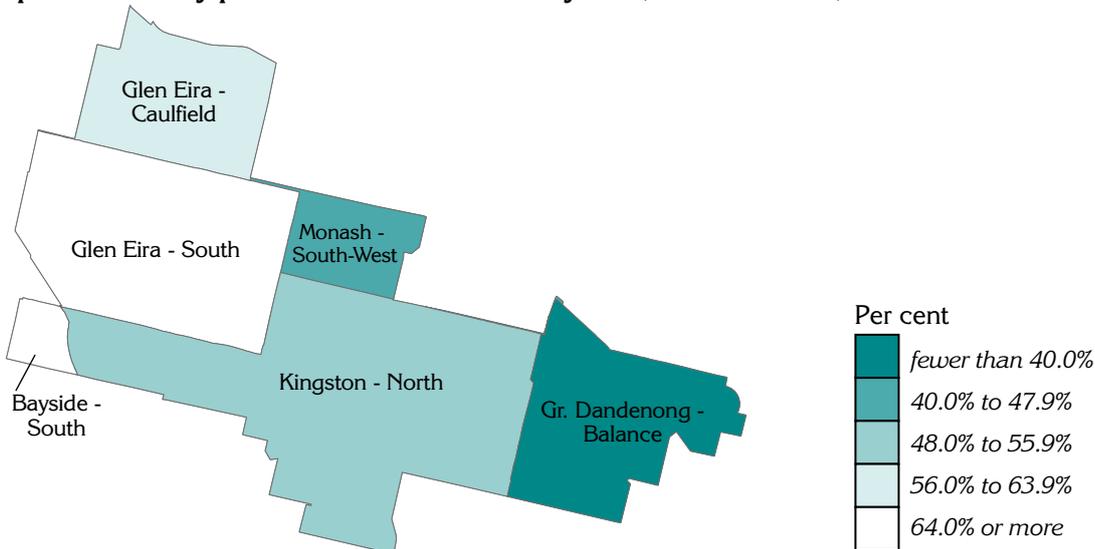
| Indicator | Monash DGP | | Melbourne | | Victoria | | Australia | |
|---|------------|------|-----------|------|-----------|------|-----------|------|
| | No. | % | No. | % | No. | % | No. | % |
| Jobless families with children under 15 years old | 1,539 | 11.6 | 52,418 | 14.7 | 77,142 | 15.4 | 357,563 | 17.4 |
| Private health insurance (30 June) | 64,312 | 48.8 | 1,653,598 | 49.2 | 2,196,890 | 47.5 | 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, Monash DGP, 2001



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



GP services to residents of the Monash 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.

Only just over half (52.4%) of all unreferred attendances to residents of Monash DGP were provided in the Division (ie. by a GP with a provider number in the Division): this represented 388,372 GP unreferred attendances (Table 3). A further 16.1% of unreferred attendances to residents were provided by GPs with a provider number in Greater South Eastern District DGP, with 13.9% provided by GPs in Southcity DGP.

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

| Division | | Unreferred attendances | |
|--------------|-----------------------------|------------------------|----------------|
| Number | Name | No. | % ³ |
| 312 | Monash DGP | 388,372 | 52.4 |
| 311 | Greater South Eastern DGP | 119,468 | 16.1 |
| 304 | Southcity DGP | 86,542 | 11.7 |
| 313 | Central Bayside DGP | 67,438 | 9.1 |
| 315 | Dandenong District DGP | 23,384 | 3.2 |
| 301 | Melbourne DGP | 19,617 | 2.6 |
| 303 | Inner Eastern Melbourne DGP | 8,361 | 1.1 |
| Other | .. | 27,341 | 3.7 |
| Total | .. | 740,523 | 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 312 by Division in which attendance occurred

Less than half (48.3%) of unreferred attendances provided by GPs with a provider number in Monash DGP were to people living in the Division (ie. their Medicare address was in the Division) (Table 4). A further 16.0% of unreferred attendances provided by GPs in the Division were to residents of Dandenong DGP, with 13.9% to people living in Central Bayside DGP.

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

| Division | | Unreferred attendances | |
|--------------|---------------------------|------------------------|----------------|
| Number | Name | No. | % ³ |
| 312 | Monash DGP | 388,372 | 48.3 |
| 315 | Dandenong District DGP | 128,267 | 16.0 |
| 313 | Central Bayside DGP | 112,003 | 13.9 |
| 311 | Greater South Eastern DGP | 73,487 | 9.1 |
| 304 | Southcity DGP | 31,406 | 3.9 |
| 314 | Knox DGP | 13,115 | 1.6 |
| 316 | Mornington Peninsula DGP | 12,317 | 1.5 |
| 310 | Whitehorse DGP | 10,219 | 1.3 |
| Other | .. | 34,255 | 4.3 |
| Total | .. | 803,441 | 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 312 by Division of patient address

Additional prevalence estimates: chronic diseases and risk factors combined

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

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

It is estimated that there were relatively fewer people in Monash DGP who had asthma and were smokers, compared to Melbourne or Australia as a whole (Figure 6, Table 5): that is, the prevalence rates per 1,000 population were lower. The rate in Monash DGP of people who had type 2 diabetes and were overweight/ obese was consistent with the levels in Melbourne and Australia.

Figure 6: Estimates of selected chronic diseases and risk factors, Monash DGP, Melbourne and Australia, 2001



Table 5: Estimates of selected chronic diseases and risk factors, Monash DGP, Melbourne, Victoria and Australia, 2001

| Variable | Monash DGP | | Melbourne | | Victoria | | Australia | |
|---|------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|
| | No. ¹ | Rate ² | No. ¹ | Rate ² | No. ¹ | Rate ² | No. ¹ | Rate ¹ |
| Had asthma & smoked ³ | 2,124 | 15.5 | 66,240 | 18.4 | 95,664 | 19.9 | 397,734 | 20.8 |
| Had type 2 diabetes & were overweight/ obese ⁴ | 2,162 | 15.4 | 50,057 | 15.6 | 69,192 | 15.1 | 283,176 | 15.2 |

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

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

³ Population aged 18 years and over

⁴ Population aged 15 years and over

Avoidable hospitalisations: hospital admissions resulting from ambulatory care sensitive conditions

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

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

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

In 2001 to 2002, the 4,245 admissions from ambulatory care sensitive (ACS) conditions accounted for 8.0% of all admissions in the Monash DGP (Table 6, Figure 7), below the levels in Victoria (8.8%) and Australia (8.7%).

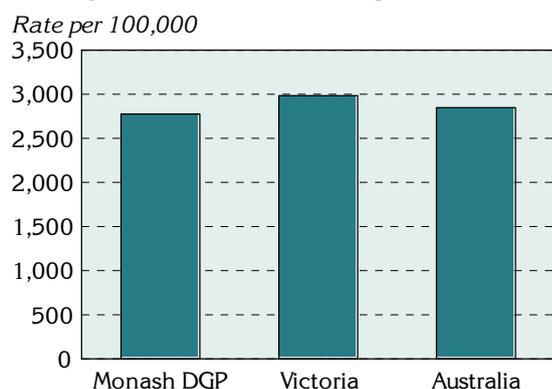
Table 6: Avoidable¹ and unavoidable hospitalisations, Monash DGP, Victoria, and Australia, 2001/02

| Category | Monash DGP | | | Victoria | | | Australia | | |
|------------------------|---------------|-------------------|--------------|------------------|-------------------|--------------|------------------|-------------------|--------------|
| | No. | Rate ² | % | No. | Rate ² | % | No. | Rate ² | % |
| Avoidable ¹ | 4,245 | 2,776.1 | 8.0 | 145,135 | 2,983.2 | 8.8 | 552,786 | 2,847.5 | 8.7 |
| Unavoidable | 48,993 | 33,042.9 | 92.0 | 1,510,437 | 31,088.3 | 91.2 | 5,818,199 | 29,970.7 | 91.3 |
| Total | 53,237 | 35,808.7 | 100.0 | 1,655,572 | 34,071.5 | 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 hospitalisations¹, Monash DGP, Victoria and Australia, 2001/02



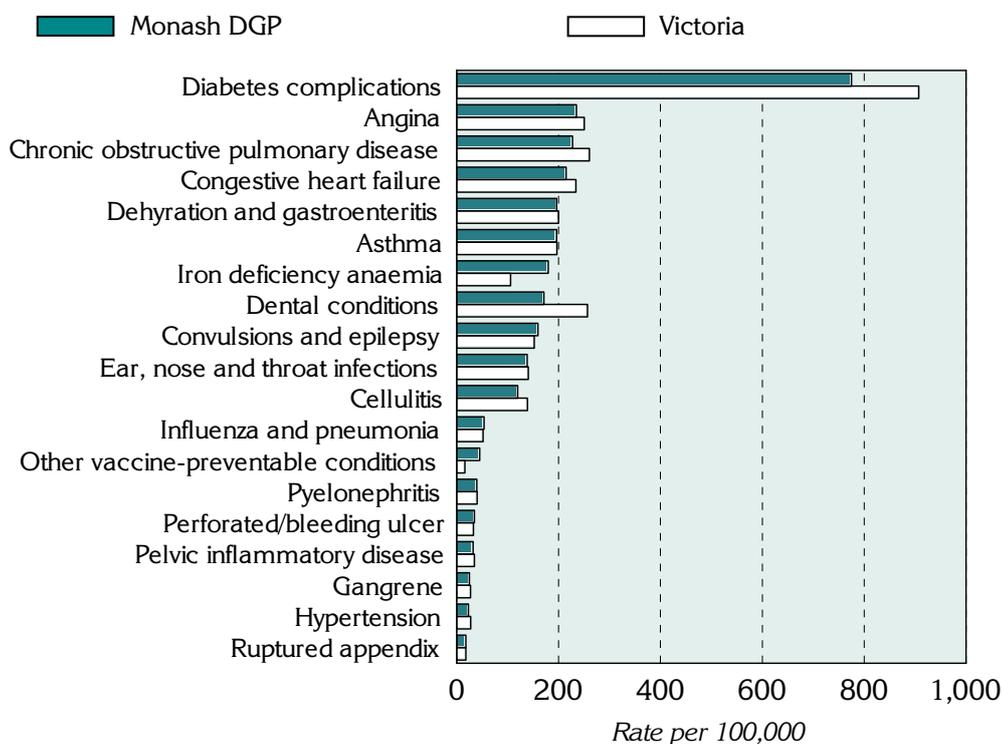
The rate of avoidable hospitalisations in Monash DGP, 2,776.1 admissions per 100,000 population, is lower than the rates for Victoria (a rate of 2,983.2) and for Australia (2,847.5).

¹ Admissions resulting from ACS conditions

Diabetes complications, angina, chronic obstructive pulmonary disease and congestive heart failure were the four conditions with the highest rates of avoidable hospitalisations in the Monash 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. The majority 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. Dehydration and gastroenteritis, and dental conditions have the highest rates of avoidable hospitalisations for the acute conditions.

Figure 8: Avoidable hospitalisations¹ by condition, Monash DGP and Victoria, 2001/02



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

Table 7: Avoidable hospitalisations¹ by condition, Monash DGP, Victoria and Australia, 2001/02

| Sub-category/ condition | Monash DGP | | Victoria | | Australia | |
|---|--------------|-------------------|----------------|-------------------|----------------|-------------------|
| | No. | Rate ² | No. | Rate ² | No. | Rate ² |
| Vaccine-preventable | 145 | 98.9 | 3,293 | 68.0 | 16,573 | 85.4 |
| Influenza and pneumonia | 82 | 53.7 | 2,525 | 52.0 | 13,021 | 67.1 |
| Other vaccine preventable | 63 | 45.2 | 768 | 16.0 | 3,552 | 18.3 |
| Chronic³ | 2,973 | 1,851.1 | 97,133 | 1,982.6 | 352,545 | 1,816 |
| Diabetes complications | 1,238 | 775.0 | 44,409 | 906.9 | 141,345 | 728.1 |
| Iron deficiency anaemia | 288 | 179.6 | 5,196 | 105.9 | 16,451 | 84.7 |
| Hypertension | 37 | 23.0 | 1,362 | 27.7 | 6,354 | 32.7 |
| Congestive heart failure | 384 | 214.8 | 11,655 | 234.1 | 42,447 | 218.6 |
| Angina | 383 | 235.0 | 12,285 | 250.4 | 49,963 | 257.4 |
| Chronic obstructive pulmonary disease | 383 | 227.6 | 12,850 | 260.7 | 54,853 | 282.6 |
| Asthma | 260 | 196.1 | 9,376 | 196.9 | 41,009 | 211.3 |
| Acute | 1,322 | 934.6 | 50,153 | 1,041.7 | 200,913 | 1,035 |
| Dehydration and gastroenteritis | 297 | 196.3 | 9,761 | 200.0 | 37,766 | 194.5 |
| Convulsions and epilepsy | 218 | 159.4 | 7,297 | 152.4 | 31,137 | 160.4 |
| Ear, nose and throat infections | 178 | 138.3 | 6,653 | 140.5 | 32,075 | 165.2 |
| Dental conditions | 225 | 171.2 | 12,235 | 256.7 | 43,667 | 224.9 |
| Perforated/bleeding ulcer | 58 | 34.8 | 1,618 | 32.9 | 5,795 | 29.9 |
| Ruptured appendix | 24 | 17.9 | 855 | 17.9 | 3,866 | 19.9 |
| Pyelonephritis | 56 | 39.5 | 1,948 | 40.2 | 7,386 | 38.0 |
| Pelvic inflammatory disease | 45 | 32.4 | 1,693 | 34.8 | 6,547 | 33.7 |
| Cellulitis | 180 | 119.8 | 6,751 | 139.0 | 28,204 | 145.3 |
| Gangrene | 41 | 25.0 | 1,342 | 27.3 | 4,470 | 23.0 |
| Total avoidable hospitalisations⁴ | 4,245 | 2,776.1 | 145,135 | 2,983.2 | 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.

Over two-thirds (69.9%) of all deaths in Monash DGP at ages 0 to 74 years over the period 1997 to 2001 are considered to be avoidable, slightly lower than the proportion for Melbourne (71.0%) (Table 8). Deaths amenable to health care (amenable mortality, a subset of avoidable mortality) accounted for 28.8% of all deaths at ages 0 to 74 years in Monash DGP, consistent with the level in Melbourne (28.7%).

Table 8: Avoidable and unavoidable mortality (0 to 74 years) by area, Monash DGP, Melbourne, Victoria and Australia, 1997 to 2001

| Mortality category | Monash DGP | | Melbourne | | Victoria | | Australia | |
|------------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|----------------|-------------------|
| | No. | Rate ¹ | No. | Rate ¹ | No. | Rate ¹ | No. | Rate ¹ |
| Avoidable | 1,296 | 182.3 | 30,654 | 193.0 | 45,466 | 201.3 | 189,845 | 211.8 |
| % of total | 69.9 | .. | 71.0 | .. | 70.9 | .. | 71.5 | .. |
| (Amenable) | (534) | (74.5) | (12,406) | (78.4) | (18,406) | (81.4) | (76,249) | (85.1) |
| (% of total) | (28.8) | (..) | (28.7) | (..) | (28.7) | (..) | (28.7) | (..) |
| Unavoidable | 559 | 78.3 | 12,517 | 79.1 | 18,617 | 82.4 | 75,582 | 84.3 |
| % of total | 30.1 | .. | 29.0 | .. | 29.1 | .. | 28.5 | .. |
| Total mortality | 1,855 | 260.6 | 51,477 | 272.1 | 64,083 | 283.7 | 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. Monash DGP's rate of avoidable mortality for males was 236.4 deaths per 100,000 males, higher than the rate of 127.6 for females. The rate of amenable mortality for males in the Division was also higher, 85.3, compared to 63.8 for females, a rate ratio of 1.34 (Figure 9, Table 9).

Figure 9: Avoidable and amenable mortality by sex (0 to 74 years), Monash DGP, Melbourne, Victoria and Australia, 1997 to 2001

Note: the different scales

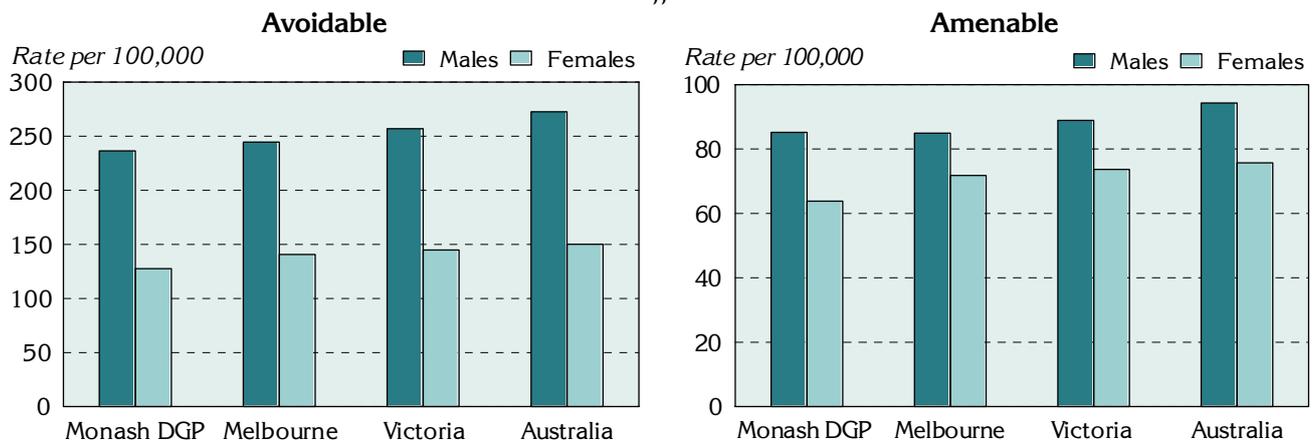


Table 9: Avoidable and amenable mortality (0 to 74 years) by sex, Monash DGP, Melbourne, Victoria and Australia, 1997 to 2001

| Mortality category and sex | Monash DGP | | Melbourne | | Victoria | | Australia | |
|-----------------------------------|--------------|-------------------|---------------|-------------------|---------------|-------------------|----------------|-------------------|
| | No. | Rate ¹ | No. | Rate ¹ | No. | Rate ¹ | No. | Rate ¹ |
| Avoidable | | | | | | | | |
| Males | 822 | 236.4 | 19,378 | 244.5 | 29,042 | 257.0 | 123,026 | 272.6 |
| Females | 473 | 127.6 | 11,276 | 140.7 | 16,424 | 144.8 | 66,819 | 150.1 |
| Total | 1,296 | 182.3 | 30,354 | 193.0 | 45,466 | 201.3 | 189,845 | 211.8 |
| Rate ratio-M:F² | .. | 1.85** | .. | 1.74** | .. | 1.77** | .. | 1.82** |
| Amenable | | | | | | | | |
| Males | 298 | 85.2 | 6,667 | 84.9 | 10,052 | 88.9 | 42,568 | 94.3 |
| Females | 235 | 63.8 | 5,739 | 71.8 | 8,354 | 73.7 | 33,681 | 75.7 |
| Total | 534 | 74.5 | 12,406 | 78.4 | 18,406 | 81.4 | 76,249 | 85.1 |
| Rate ratio-M:F² | .. | 1.34** | .. | 1.18** | .. | 1.21** | .. | 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 Monash DGP, Melbourne, Victoria and Australia over the period of the analysis are shown in Table 10 by mortality category. However, given the substantial variation in the populations of these areas, a comparison of the proportion of YLL for each area is also shown.

YLL from avoidable mortality accounted for 70.6% of total YLL (0 to 74 years) for Monash DGP, slightly lower than the proportion for Melbourne. The proportion of YLL from amenable mortality for Monash DGP (28.3%) was marginally higher than that for Melbourne (28.1%).

Table 10: Years of life lost from avoidable mortality (0 to 74 years), Monash DGP, Melbourne, Victoria and Australia, 1997 to 2001

| Mortality category | Monash DGP | | Melbourne | | Victoria | | Australia | |
|--------------------|---------------|--------------|----------------|--------------|------------------|--------------|------------------|--------------|
| | No. | % of total | No. | % of total | No. | % of total | No. | % of total |
| Avoidable | 21,731 | 70.6 | 536,388 | 71.6 | 790,054 | 71.5 | 3,327,375 | 71.9 |
| (Amenable) | (8,712) | (28.3) | (210,627) | (28.1) | (310,758) | (28.1) | (1,298,430) | (28.0) |
| Unavoidable | 9,062 | 29.4 | 212,979 | 28.4 | 315,555 | 28.5 | 1,303,289 | 28.1 |
| Total | 30,793 | 100.0 | 749,368 | 100.0 | 1,105,610 | 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 1,172.4 deaths per 100,000 population in the Monash 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 281.0 in the Monash Division.

Table 11: Avoidable and amenable mortality by age, Monash DGP, Melbourne, Victoria and Australia, 1997 to 2001

| Mortality category and age (years) | Monash DGP | | Melbourne | | Victoria | | Australia | |
|------------------------------------|--------------|-------------------|---------------|-------------------|---------------|-------------------|----------------|-------------------|
| | No. | Rate ¹ | No. | Rate ¹ | No. | Rate ¹ | No. | Rate ¹ |
| Avoidable | | | | | | | | |
| 0-14 | 26 | 20.9 | 874 | 26.0 | 1,290 | 27.1 | 5,669 | 28.8 |
| 15-24 | 27 | 29.8 | 1,120 | 45.2 | 1,627 | 49.3 | 7,045 | 52.8 |
| 25-44 | 144 | 67.3 | 4,090 | 75.6 | 5,705 | 78.9 | 24,356 | 83.9 |
| 45-64 | 421 | 281.0 | 10,123 | 273.0 | 15,004 | 286.9 | 64,282 | 304.9 |
| 65-74 | 678 | 1,172.4 | 14,447 | 1265.1 | 21,840 | 1306.6 | 88,493 | 1,358.1 |
| Total | 1,296 | 182.3 | 30,654 | 193.0 | 45,466 | 201.3 | 189,845 | 211.8 |
| Amenable | | | | | | | | |
| 0-24 | 26 | 12.5 | 836 | 14.6 | 1,189 | 14.9 | 5,083 | 15.4 |
| 25-44 | 28 | 13.1 | 963 | 18.0 | 1,382 | 19.1 | 5,946 | 20.5 |
| 45-64 | 183 | 121.7 | 4,398 | 118.2 | 6,489 | 123.8 | 27,464 | 130.3 |
| 65-74 | 296 | 509.0 | 6,209 | 542.7 | 9,348 | 558.6 | 37,756 | 579.4 |
| Total | 534 | 74.5 | 12,406 | 78.4 | 18,406 | 81.4 | 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 Monash DGP were for cancer, with a rate of 66.6 deaths per 100,000 population, and cardiovascular diseases, 52.8 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 38.0 per 100,000 population and 21.8 per 100,000, respectively.

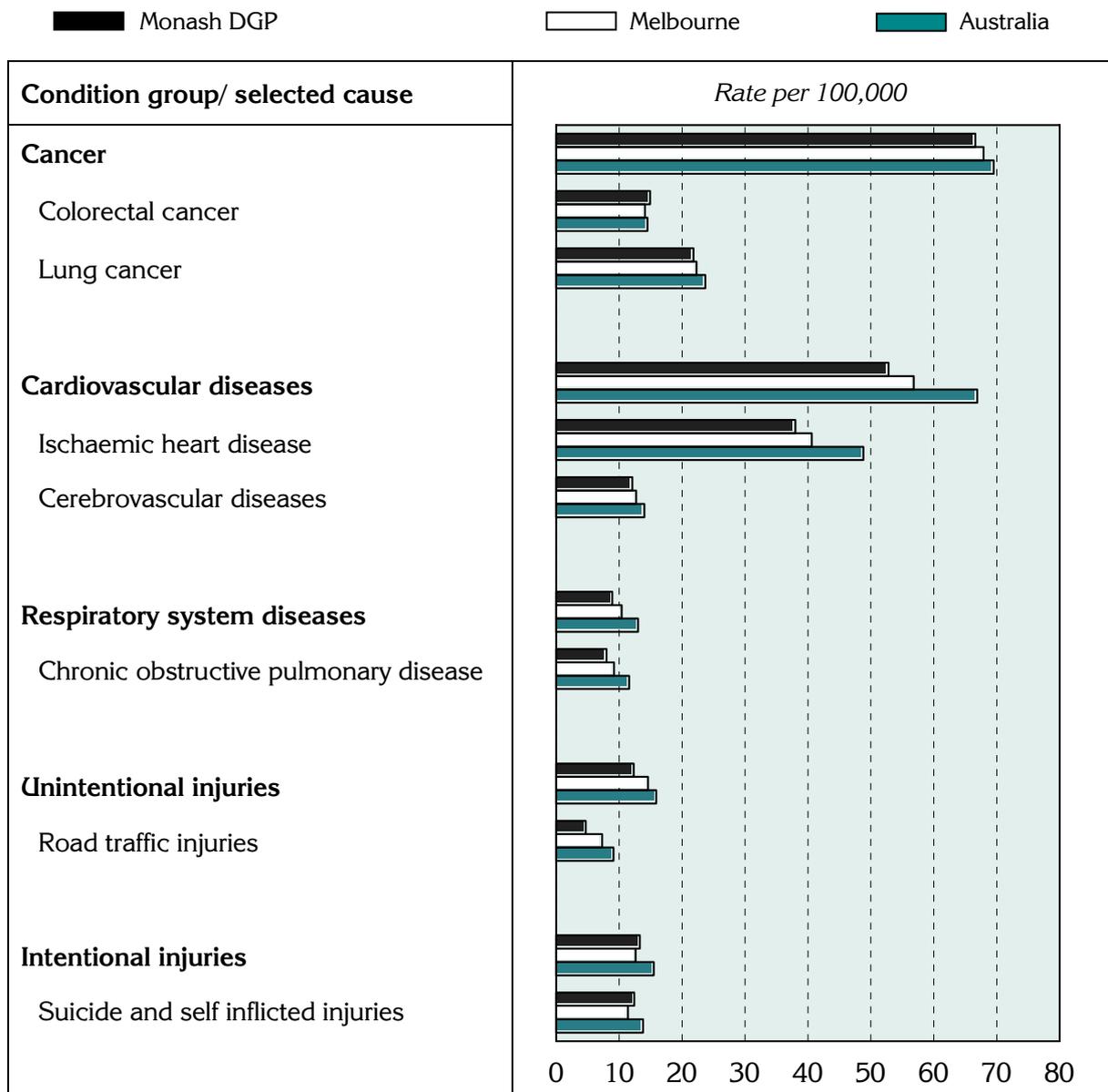
Table 12: Avoidable mortality (0 to 74 years) by major condition group and selected cause, Monash DGP, Melbourne, Victoria and Australia, 1997 to 2001

| Condition group/ selected cause | Monash DGP | | Melbourne | | Victoria | | Australia | |
|---------------------------------------|------------|-------------------|---------------|-------------------|---------------|-------------------|---------------|-------------------|
| | No. | Rate ¹ | No. | Rate ¹ | No. | Rate ¹ | No. | Rate ¹ |
| Cancer | 478 | 66.6 | 10,739 | 67.9 | 15,813 | 69.8 | 62,338 | 69.5 |
| Colorectal cancer | 107 | 14.9 | 2,218 | 14.1 | 3,351 | 14.8 | 13,008 | 14.5 |
| Lung cancer | 158 | 21.8 | 3,505 | 22.3 | 5,244 | 23.1 | 21,208 | 23.7 |
| Cardiovascular diseases | 388 | 52.8 | 8,946 | 56.8 | 13,612 | 60.0 | 59,945 | 66.9 |
| Ischaemic heart disease | 278 | 38.0 | 6,377 | 40.6 | 9,809 | 43.3 | 43,712 | 48.8 |
| Cerebrovascular diseases | 91 | 12.1 | 2,013 | 12.7 | 2,947 | 12.9 | 12,558 | 14.0 |
| Respiratory system diseases | 67 | 8.9 | 1,644 | 10.4 | 2,621 | 11.5 | 11,612 | 13.0 |
| Chronic obstructive pulmonary disease | 61 | 8.0 | 1,451 | 9.2 | 2,339 | 10.2 | 10,395 | 11.6 |
| Unintentional injuries | 80 | 12.3 | 2,394 | 14.6 | 3,536 | 15.9 | 14,224 | 15.9 |
| Road traffic injuries | 30 | 4.7 | 1,192 | 7.3 | 1,931 | 8.7 | 8,138 | 9.1 |
| Intentional injuries | 87 | 13.3 | 2,074 | 12.6 | 3,020 | 13.6 | 13,891 | 15.5 |
| Suicide and self inflicted injuries | 81 | 12.4 | 1,877 | 11.4 | 2,752 | 12.3 | 12,393 | 13.8 |
| Total | 478 | 66.6 | | | | | | |

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

Rates in the Division for almost all of the condition groups and selected causes were consistent with, or below, those in Melbourne and Australia (Figure 10).

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



Notes on the data

Data sources and limitations

General

References to 'Melbourne' relate to the Melbourne 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 Monash 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, Local Government Areas (LGAs) have been split into SLAs. For example, the LGA of Glen Eira has two SLAs – Caulfield and South. All or part of these SLAs and the other SLAs in Table 14 comprise the Division.

Table 14: SLAs and population in Monash 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 |
|----------|-----------------------|---|---|
| 20912 | Bayside - South | 8.1 | 4,321 |
| 22311 | Glen Eira - Caulfield | 41.3 | 31,109 |
| 22314 | Glen Eira - South | 100.0 | 47,360 |
| 22674 | Gr. Dandenong Balance | 26.2 | 18,607 |
| 23431 | Kingston - North | 34.5 | 31,310 |
| 24971 | Monash - South West | 11.2 | 4,707 |

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

Acknowledgements

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

Further developments and updates

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

PHIDU contact details

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