



Smoking and Alcohol Consumption

2003

Department of Human Services Southern Metropolitan Region

Victorian Population Health Survey

The Victorian Population Health Survey is an annual statewide survey that the Department of Human Services (Health Surveillance and Evaluation Section, Public Health Group) undertakes in the second half of each calendar year to collect a wide range of information on the health of the adult Victorian population and the determinants of that health.

This fact sheet presents major findings from the Victorian Population Health Survey 2003 relating to smoking and alcohol consumption for persons aged 18 years or over in the department's Southern Metropolitan Region. The results reported represent a snapshot for one year (2003).

Southern Metropolitan Region

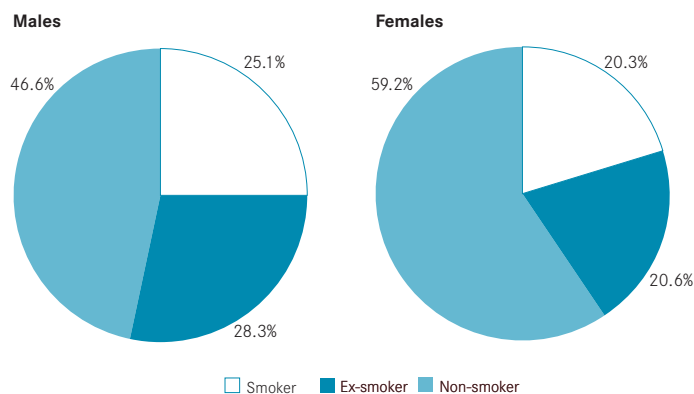
The Southern Metropolitan Region has the largest population of the departmental regions, with an estimated population of 1.156 million people in 2003. From the region, 831 respondents (or 11.1 per cent of the total sample of 7500 households) completed the Victorian Population Health Survey in 2003.

Smoking

Smoking is the main cause—or a significant cause—of many diseases, including coronary heart disease, stroke and numerous cancers, and it is one of the leading causes of death in Victoria. Among all lifestyle-related risk factors, smoking is responsible for the greatest burden of premature death and disability in the state. Tobacco smoking accounts for almost 8.2 per cent of disability-adjusted life years for Victoria.¹

Current smokers are those who currently smoke daily or occasionally.² Ex-smokers are those who have smoked at least 100 cigarettes (or an equivalent amount of tobacco) in their lifetime but no longer smoke. Non-smokers are those who have never smoked or who have consumed fewer than 100 cigarettes during their lifetime. Figure 1 shows the proportion of males and females in the Southern Metropolitan Region who are classified as current smokers, ex-smokers and non-smokers. The inset table summarises the proportions of males and females in the region and in Victoria who were current smokers, ex-smokers and non-smokers (table 1).

Figure 1: Smoking status, by sex – Southern Metropolitan Region



1 Department of Human Services Victoria, 2005, *The Victorian burden of disease study: morbidity and mortality in 2001*, Melbourne.

2 The term 'occasionally' does not refer to a specific frequency. It is defined by the respondent who, when asked which of a number of alternative response options (including 'I smoke daily') best describes his or her smoking status, chooses the response option, 'I smoke occasionally'.



Table 1: Smoking status, by sex
– Southern Metropolitan Region and Victoria

| | Southern Metropolitan Region | | Victoria | |
|----------------|------------------------------|-------------------------|----------|-------------------------|
| | % | 95% confidence interval | % | 95% confidence interval |
| | | | | |
| Males | | | | |
| Current smoker | 25.0 | 20.1–30.7 | 24.8 | 22.8–26.9 |
| Ex-smoker | 28.2 | 23.2–40.5 | 26.6 | 24.5–28.7 |
| Non-smoker | 46.5 | 40.5–52.6 | 48.4 | 46.0–50.8 |
| Females | | | | |
| Current smoker | 20.1 | 16.5–24.2 | 20.3 | 18.8–21.9 |
| Ex-smoker | 20.4 | 17.0–24.4 | 20.2 | 18.7–21.8 |
| Non-smoker | 58.7 | 54.0–63.3 | 59.2 | 57.3–61.1 |
| Persons | | | | |
| Current smoker | 22.5 | 19.4–25.9 | 22.5 | 21.2–23.8 |
| Ex-smoker | 24.2 | 21.1–27.5 | 23.3 | 22.0–24.6 |
| Non-smoker | 52.9 | 49.0–56.7 | 54.0 | 52.4–55.5 |

- More than one in four males (25.0 per cent) in the Southern Metropolitan Region were current smokers, compared with 20.1 per cent of females.
- Almost six in 10 females (58.7 per cent) in the region were categorised as non-smokers, compared with 46.5 per cent of males.
- There were no significant differences between the region and Victoria in the proportions of males or females who were current smokers, ex-smokers or non-smokers.

Current smokers, by selected characteristics

Table 2 presents the proportion of adults in the Southern Metropolitan Region who were current smokers by selected characteristics.

Table 2: Proportion of current smokers
by selected characteristics
– Southern Metropolitan Region and Victoria

| | Southern Metropolitan Region | | Victoria | |
|-----------------------------------|------------------------------|-------------------------|-------------|-------------------------|
| | % | 95% confidence interval | % | 95% confidence interval |
| | | | | |
| Age Group | | | | |
| 18–24 years | 24.4 | 15.8–35.7 | 27.6 | 23.6–32.0 |
| 25–34 years | 32.4 | 24.4–41.5 | 30.5 | 27.2–34.0 |
| 35–44 years | 24.2 | 17.9–31.9 | 26.2 | 23.5–29.1 |
| 45–54 years | 21.0 | 14.6–29.4 | 22.4 | 19.7–25.5 |
| 55–64 years | 19.5 | 12.3–29.5 | 17.0 | 14.1–20.3 |
| 65+ years | 10.3 | 6.2–16.7 | 8.8 | 7.0–10.9 |
| Highest level of education | | | | |
| Primary | 26.5 | 8.8–57.4 | 13.5 | 9.0–19.6 |
| Secondary | 25.8 | 21.4–30.8 | 26.3 | 24.5–28.1 |
| Tertiary | 19.0 | 14.8–24.0 | 18.7 | 16.8–20.7 |
| Household income per year | | | | |
| Less than \$20,000 | 23.4 | 16.7–31.7 | 19.9 | 17.6–22.3 |
| \$20,000 to less than \$40,000 | 24.6–30.9 | 27.0 | 19.2–36.5 | 27.6 |
| \$40,000 to less than \$60,000 | 19.9–25.8 | 20.7 | 14.6–28.6 | 22.7 |
| \$60,000 or more | 20.9 | 15.8–27.0 | 21.1 | 18.8–23.6 |
| Total | 22.5 | 19.4–25.9 | 22.5 | 21.2–23.8 |

- The proportion of adults in the Southern Metropolitan Region who were current smokers ranged from 10.3 per cent of those aged 65 years or over to more than one in three of those aged 25–34 years (32.4 per cent).
- For the region, there were no significant differences in the proportion of adults who were current smokers by highest level of education attained or by annual household income.

Environmental tobacco smoke

Children are particularly susceptible to the effects of environmental tobacco smoke. Among places where exposure to tobacco smoke may occur, the home is probably the most significant source of exposure for children. Passive smoking increases the risk of lower respiratory illness, middle ear disease, and eye and nose irritation in children.³

The VPHS 2003 asked respondents to indicate whether their home situation is best described as one in which people smoke frequently, occasionally or not at all (that is, smoke-free). Table 3 presents the proportion of adults in the Southern Metropolitan Region who reported that their homes were smoke-free by selected characteristics.



3 National Health and Medical Research Council, 1997, *The health effects of passive smoking: a scientific information paper*, Canberra; Australian Department of Health and Aged Care, 1998, *National drug strategy framework 1998–99 to 2002–03*, Canberra.



Table 3: Proportion of homes that were smoke-free – Southern Metropolitan Region and Victoria

| | Southern Metropolitan Region | | Victoria | |
|----------------------------------|------------------------------|-------------------------|-------------|-------------------------|
| | % | 95% confidence interval | % | 95% confidence interval |
| Dependent children | | | | |
| Yes | 87.9 | 83.4–91.3 | 81.8 | 80.2–83.3 |
| No | 79.6 | 75.1–83.4 | 87.2 | 85.5–88.7 |
| Education level | | | | |
| Primary | 61.9 | 34.3–83.5 | 82.6 | 76.0–87.6 |
| Secondary | 79.1 | 74.3–83.2 | 79.8 | 78.1–81.5 |
| Tertiary | 87.6 | 83.3–90.9 | 88.8 | 87.3–90.2 |
| Household income per year | | | | |
| Less than \$20,000 | 76.5 | 68.2–83.1 | 78.4 | 75.9–80.8 |
| \$20,000 to less than \$40,000 | 83.5 | 75.3–89.3 | 81.9 | 79.2–84.4 |
| \$40,000 to less than \$60,000 | 87.6 | 80.9–92.2 | 85.8 | 83.2–88.1 |
| \$60,000 or more | 84.4 | 78.6–88.8 | 88.7 | 86.6–90.5 |
| Smoking status | | | | |
| Current smoker | 54.7 | 46.5–62.7 | 57.2 | 54.1–60.4 |
| Ex-smoker | 89.5 | 84.1–93.2 | 89.5 | 87.6–91.2 |
| Non-smoker | 92.1 | 88.6–94.6 | 92.6 | 91.3–93.7 |
| Total | 83.0 | 79.9–85.7 | 83.9 | 82.7–85.0 |

- The proportion of households in the Southern Metropolitan Region that were smoke-free was significantly greater for those who had completed tertiary studies, compared with those for whom secondary school was the highest level of education.
- There were no significant differences in the proportion of households in the region that were smoke-free by annual household income or whether there were dependent children who resided in the household.
- Compared with current smokers, a significantly greater proportion of non-smokers and ex-smokers reported that their homes were smoke-free. Approximately six in 10 current smokers (54.7 per cent) reported that their homes were smoke-free. Among households containing non-smokers and ex-smokers, the proportions with no smoking inside were 89.5 per cent and 92.1 per cent respectively.

Alcohol consumption

Regular excessive consumption of alcohol places people at increased risk of chronic ill health and premature death, and episodes of heavy drinking may place the person (and others) at risk of injury or death. In the short term, intoxication and acute alcohol-related problems include violence, risky behaviour, road trauma and injury. The significant psychosocial and economic consequences that arise from such patterns of drinking affect not only the individuals concerned but also their families and the wider community.

The VPHS 2003 included a number of questions on alcohol consumption. Information was collected as to the short-term risks of alcohol consumption by asking *how frequently* individuals who are not abstainers drink an excessive amount of alcohol. Excessive intake of alcohol is defined in relation to the number of standard drinks that are consumed on a particular occasion. A standard drink is equal to one middy (285 ml) of full strength beer, one small serve (100 ml) of wine or one pub-standard nip (30 ml) of spirits—approximately 10 grams or 12.5 millilitres of alcohol (figure 2). (By law, the label on every container of an alcoholic drink has to show how many standard drinks there are in that container).

Figure 2: Examples of typical standard drinks

One drink isn't always one drink.



1.8
180ml



1.5
375ml



1.5
375ml

These are all equal to about one standard drink:

- Low alcohol beer (3.5 per cent alcohol):** 1.6 pots/middies total volume 375 ml)
- Table wine (12 per cent alcohol):** one small glass (100 ml)
- Mixed drinks:** one glass (30 ml) of spirits (40 per cent) plus mixer
- Low alcohol beer (3.5 per cent):** one can (375 ml)
- Regular beer (4.9 per cent):** one pot/middy (285 ml)
- Alcoholic soda (5.5 per cent):** three-quarters of a 330 ml bottle
- Spirits or liqueurs (40 per cent):** one nip (30 ml)
- Regular beer (4.9 per cent):** three-quarters of a stubby (375 ml).

Example: Two (2) full-strength pots/middies of beer + one small glass of wine + one rum and coke = four (4) standard drinks.

The *Australian Alcohol Guidelines*⁴ for the whole population (figure 3) indicate that males who drink up to six (6) standard drinks and females who drink up to four (4) standard drinks are at low risk of *short-term* harm due to alcohol consumption. Drinking more than these specified levels on heavier drinking days is classified as risky or high-risk in terms of possible alcohol-related harm in the short term.

⁴ National Health and Medical Research Council, 2001, *Australian alcohol guidelines: health risks and benefits*, Canberra.



Figure 3: Australian alcohol guidelines for risk to health in the short term, by sex

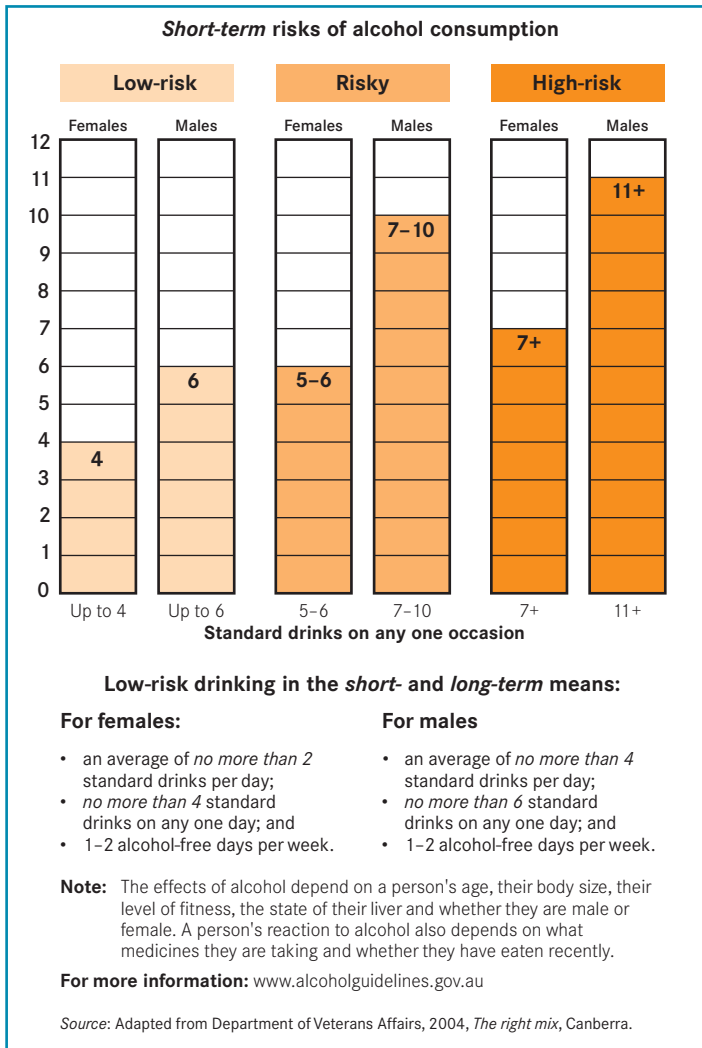
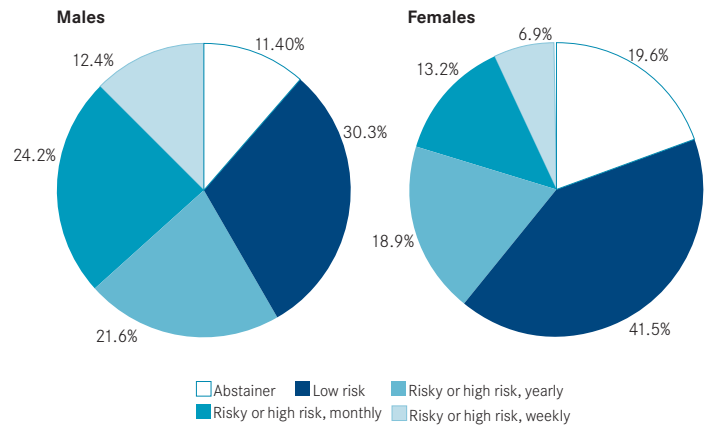


Figure 4 shows the proportion of males and females in the Southern Metropolitan Region who were at no or low short-term risk of alcohol-related harm and those who were categorised as drinking alcohol at risky or high risk levels on the occasions on which they drank alcohol.

Those who were not at risk of alcohol-related harm in the short term include total abstainers and those who did not exceed the guidelines in terms of the number of standard drinks consumed per drinking occasion (low risk). Total abstainers comprise abstainers (that is, those who had not had an alcoholic drink of any kind in the 12 months before the survey) and 'recent' abstainers.

Figure 4 provides a further breakdown of the frequency with which alcohol was consumed at levels categorised as risky or high-risk in the short term. Drinking alcohol at risky or high-risk levels in the short term was categorised according to whether it occurs at least weekly, monthly or yearly.

Figure 4: Adherence to Australian guidelines for risk of alcohol-related harm in the short term, by sex – Southern Metropolitan Region



- Approximately one in five females (19.6 per cent) in the Southern Metropolitan Region were abstainers, compared with 11.4 per cent of males.
- A significantly greater proportion of females in the region were classified as being at low risk of short-term alcohol-related harm in terms of their drinking behaviour compared with males in the region (41.5 per cent and 30.3 per cent respectively).
- Almost one in eight males (12.4 per cent) in the region reported that they drank at risky or high-risk levels *at least weekly*, compared with 6.9 per cent of females in the region.

Table 4 provides a breakdown of the proportion of adults in the Southern Metropolitan Region who reported they drink at risky or high-risk levels at least weekly, by selected characteristics.





Table 4: Proportion of adults at weekly risk of short-term alcohol-related harm by selected characteristics – Southern Metropolitan Region

| | Southern Metropolitan Region | | Victoria | |
|--------------------------------|------------------------------|-------------------------|-------------|-------------------------|
| | % | 95% confidence interval | % | 95% confidence interval |
| Sex | | | | |
| Males | 12.4 | 9.1–16.8 | 14.6 | 13.1–16.3 |
| Females | 6.9 | 4.7–10.2 | 6.2 | 5.3–7.3 |
| Age Group | | | | |
| 18–24 years | 12.2 | 6.4–21.8 | 18.7 | 15.4–22.6 |
| 25–34 years | 15.8 | 10.1–23.9 | 11.9 | 9.7–14.7 |
| 35–44 years | 8.0 | 4.4–14.1 | 9.7 | 8.0–11.7 |
| 45–54 years | 7.1 | 3.9–12.6 | 9.9 | 8.1–12.1 |
| 55–64 years | 11.8 | 6.4–21 | 9.0 | 6.9–11.7 |
| 65+ years | 3.0 | 1.2–7.3 | 3.9 | 2.7–5.5 |
| Education level | | | | |
| Primary | 0.0 | – | 3.2 | 1.7–6.0 |
| Secondary | 11.9 | 8.7–16.0 | 12.4 | 11.1–13.8 |
| Tertiary | 7.7 | 5.1–11.3 | 8.3 | 7.0–9.7 |
| Annual household income | | | | |
| Less than \$20,000 | 8.4 | 4.2–16.0 | 6.7 | 5.3–8.5 |
| \$20,000 to less than \$40,000 | 3.5 | 1.6–7.4 | 7.7 | 6.1–9.6 |
| \$40,000 to less than \$60,000 | 10.9 | 6.5–17.5 | 12.7 | 10.6–15.3 |
| \$60,000 or more | 11.9 | 8.1–17.1 | 13.2 | 11.4–15.3 |
| Total | 9.6 | 7.5–12.2 | 10.3 | 9.4–11.2 |

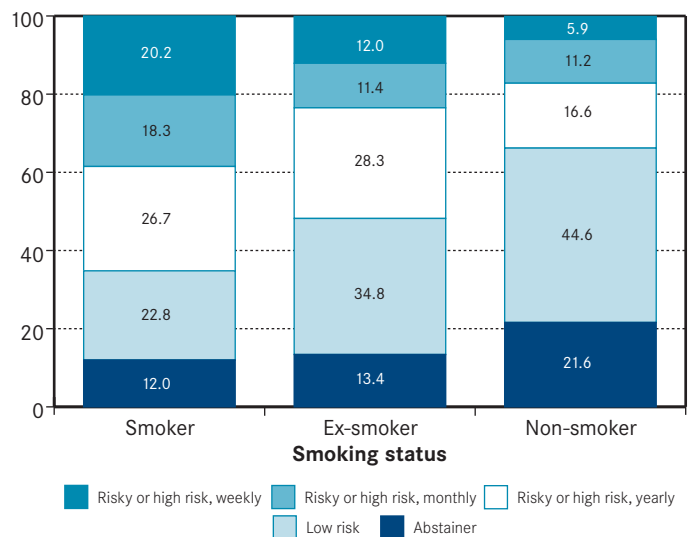
- There were no significant differences between Victoria as a whole and the Southern Metropolitan Region in the proportion of males and females who drank alcohol at risky or high-risk levels on at least one occasion per week.
- The proportion of adults in the region who reported drinking alcohol at risky or high-risk levels *at least weekly* ranged from 3.0 per cent of those aged 65 years or over to 15.8 per cent of those aged 25–34 years.
- There were no significant differences in the proportion of adults in the region who reported drinking at risky or high-risk levels at least weekly by level of education.

- A significantly greater proportion of those in the region with annual household incomes of \$60,000 or more were at risk of short-term alcohol-related harm at least weekly, compared with those with household incomes in the range of \$20,000 to less than \$40,000 (11.9 per cent and 3.5 per cent respectively).

Smoking and alcohol consumption

Smoking and alcohol consumption are health behaviours for which individuals have a degree of control and that act directly to cause disease. Figure 4 provides a breakdown of the proportion of smokers, ex-smokers and non-smokers by their level of risk of short-term harm due to alcohol consumption.

Figure 5: Smokers, ex-smokers and non-smokers by risk of short-term alcohol-related harm – Southern Metropolitan Region



- The proportion of adults in the region who were classified as abstainers was significantly greater for non-smokers (19.9 per cent), compared with current smokers (8.9 per cent).
- The proportion of adults in the region who were at low risk of short-term harm from the consumption of alcohol was similar for current smokers (31.3 per cent), ex-smokers (33.0 per cent) and non-smokers (38.9 per cent).

Table 5 shows the proportion of adults in the region and in Victoria who were at risk of short-term alcohol-related harm *at least once per week* by their smoking status.





Table 5: Proportion of adults at *weekly* risk of short-term alcohol-related harm, by smoking status – Southern Metropolitan Region

| Smoking status | Southern Metropolitan Region | | Victoria | |
|----------------|------------------------------|-------------------------|-------------|-------------------------|
| | % | 95% confidence interval | % | 95% confidence interval |
| | | | | |
| Current smoker | 20.4 | 14.4–28.1 | 20.1 | 17.6–22.9 |
| Ex-smoker | 8.4 | 5–13.7 | 9.6 | 7.9–11.5 |
| Non-smoker | 5.6 | 3.6–8.7 | 6.5 | 5.5–7.6 |
| Total | 9.6 | 7.5–12.2 | 10.3 | 9.4–11.2 |

- For Victoria as a whole, there was a significant difference in the proportion of adults who reported drinking alcohol at levels associated with short-term harm *at least weekly* by smoking status. Current smokers were approximately three times more likely to drink at risky or high-risk levels at least once per week compared with non-smokers (20.1 per cent versus 6.5 per cent) and more than twice as likely to do so than ex-smokers (20.1 per cent versus 9.6 per cent).
- In the Southern Metropolitan Region, the pattern was similar but did not reach statistical significance. More than one in five current smokers (20.4 per cent) reported drinking at risky or high-risk levels *at least weekly*, compared with 8.4 per cent of ex-smokers and 5.6 per cent of non-smokers.

Rates

The 2001 Victorian population⁵ has been used when specifying population weights to ensure that the adjusted sample distribution is representative of the population by age group, gender and region. Differences between regions in the age and sex distribution of their populations may account, in part, for differences in overall region-specific rates.

Confidence intervals

The rates reported in this publication are based on information collected from a sample of adults, selected at random by household telephone number. As a result, they are subject to sampling variability. This means that the rates are estimates and may differ from those that would result if all adults in Victoria had been included in the survey.

One measure of the amount of variation associated with an estimate is the confidence interval. If several independent, random samples were drawn from the same population, and 95 per cent confidence intervals were to be calculated, then, on average, 19 of every 20 (95 per cent) such confidence intervals would contain the true population estimate. Estimates with wider confidence intervals reflect a higher degree of unreliability in the estimate and should be used with caution. Confidence intervals that do not overlap are interpreted as representing significant differences.

Additional information

The method of the Victorian Population Health Survey 2003 and other results may be found in the report, *Victorian Population Health Survey 2003: selected findings*. This report and other useful resources may be viewed or downloaded from the website www.health.vic.gov.au/healthstatus

VicHealth provided support for the Victorian Population Health Survey data analysis. Information about VicHealth's initiatives to promote the health of Victorians is available at the website www.vichealth.vic.gov.au

For media enquiries please contact Bram Alexander, Department of Human Services Media Unit: (03) 9616 8803.

Source: *Victorian Population Health Survey 2003*, Public Health Group, Rural and Regional Health and Aged Care Services Division, Victorian Government Department of Human Services, Melbourne, Victoria.



⁵ Department of Infrastructure, 2001, *Population projections 2001*, Government of Victoria, Melbourne.