



# Smoking and Alcohol Consumption

2003

## Department of Human Services Grampians 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 Grampians Region. The results reported represent a snapshot for one year (2003).

### Grampians Region

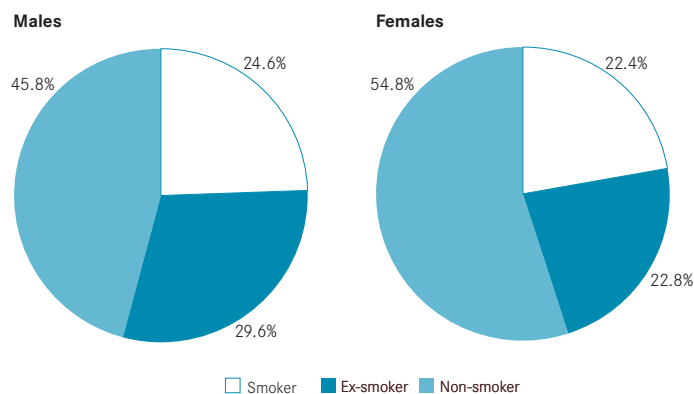
The Grampians Region covers an area of 47,980 square kilometres and had an estimated population of 256,727 people in 2003. From the region, 800 respondents (or 10.7 per cent of the total sample of 7500 households) completed the Victorian Population Health Survey in 2003.

### 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 10 per cent of disability-adjusted life years for Victoria.<sup>1</sup>

Current smokers are those who currently smoke daily or occasionally.<sup>2</sup> 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 Grampians 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 – Grampians Region



<sup>1</sup> Department of Human Services Victoria, 1999, *The Victorian burden of disease study: morbidity and mortality in 2001*, Melbourne.

<sup>2</sup> 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  
– Grampians Region and Victoria**

	Grampians Region		Victoria	
	%	95% confidence interval	%	95% confidence interval
<b>Males</b>				
Current smoker	24.5	19.5–30.2	24.8	22.8–26.9
Ex-smoker	29.5	24.3–35.3	26.6	24.5–28.7
Non-smoker	45.7	39.6–51.9	48.4	46.0–50.8
<b>Females</b>				
Current smoker	22.4	18.7–26.6	20.3	18.8–21.9
Ex-smoker	22.8	19.1–27.0	20.2	18.7–21.8
Non-smoker	54.8	50.1–59.5	59.2	57.3–61.1
<b>Persons</b>				
Current smoker	23.4	20.3–26.9	22.5	21.2–23.8
Ex-smoker	26.0	22.8–29.5	23.3	22.0–24.6
Non-smoker	50.4	46.5–54.3	54.0	52.4–55.5

- Almost one in four males (24.5 per cent) in the region were current smokers, compared with 22.4 per cent of females.
- More than half (54.8 per cent) of all females in the region were categorised as non-smokers, compared with 45.7 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 Grampians Region who were current smokers by selected characteristics.

**Table 2: Current smokers  
– Grampians Region and Victoria**

	Grampians Region		Victoria	
	%	95% confidence interval	%	95% confidence interval
<b>Age group (years)</b>				
18–24	37.5	25.5–51.4	27.6	23.6–32.0
25–34	33.4	25.1–43.0	30.5	27.2–34.0
35–44	28.1	21.1–36.4	26.2	23.5–29.1
45–54	25.1	18.3–33.5	22.4	19.7–25.5
55–64	12.3	7.6–19.3	17.0	14.1–20.3
65+	7.2	4.1–12.4	8.8	7.0–10.9
<b>Highest level of education</b>				
Primary	23.8	18.1–30.7	13.5	9.0–19.6
Secondary	28.9	22.3–36.6	26.3	24.5–28.1
Tertiary	22.0	15.5–30.3	18.7	16.8–20.7
<b>Household income per year</b>				
Less than \$20,000	18.0	12.3–25.7	19.9	17.6–22.3
\$20,000 to less than \$40,000	13.7	4.9–33.0	27.6	24.6–30.9
\$40,000 to less than \$60,000	28.1	23.9–32.8	22.7	19.9–25.8
\$60,000 or more	15.7	11.4–21.2	21.1	18.8–23.6
<b>Total</b>	<b>23.4</b>	<b>20.3–26.9</b>	<b>22.5</b>	<b>21.2–23.8</b>

- The proportion of adults in the Grampians Region who were current smokers ranged from 7.2 per cent of those aged 65 years or over to almost four in 10 (37.5 per cent) of those aged 18–24 years.
- 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.<sup>3</sup>

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 Grampians 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: Homes that were smoke-free  
– Grampians Region and Victoria**

	Grampians Region		Victoria	
	%	95% confidence interval	%	95% confidence interval
<b>Dependent children</b>				
Yes	83.9	78.5–88.2	81.8	80.2–83.3
No	78.2	73.8–82.0	87.2	85.5–88.7
<b>Education level</b>				
Primary	83.7	62.7–94.0	82.6	76.0–87.6
Secondary	77.1	72.6–81.0	79.8	78.1–81.5
Tertiary	85.3	80.0–89.4	88.8	87.3–90.2
<b>Household income per year</b>				
Less than \$20,000	74.5	67.6–80.3	78.4	75.9–80.8
\$20,000 to less than \$40,000	77.1	69.9–83.1	81.9	79.2–84.4
\$40,000 to less than \$60,000	80.3	72.2–86.5	85.8	83.2–88.1
\$60,000 or more	89.6	82.9–93.9	88.7	86.6–90.5
<b>Smoking status</b>				
Current smoker	48.8	40.8–56.9	57.2	54.1–60.4
Ex-smoker	86.5	80.6–90.9	89.5	87.6–91.2
Non-smoker	91.2	87.2–94.1	92.6	91.3–93.7
<b>Total</b>	<b>80.1</b>	<b>76.8–83.0</b>	<b>83.9</b>	<b>82.7–85.0</b>

- A significantly greater percentage (89.6 per cent) of households in the region with an annual household income of \$60,000 or more were smoke-free, compared with households with a household income of less than \$20,000 per year (74.5 per cent).
- There were no significant differences in the proportion of households in the region that were smoke-free by education level 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. Less than one half of current smokers (48.8 per cent) reported that their homes were smoke-free. Among households containing non-smokers and ex-smokers, the proportions with no smoking inside were 86.5 per cent and 91.2 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 about 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**



The *Australian alcohol guidelines*<sup>4</sup> for the whole population (table 4) 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 (table 4). 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.

<sup>4</sup> 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

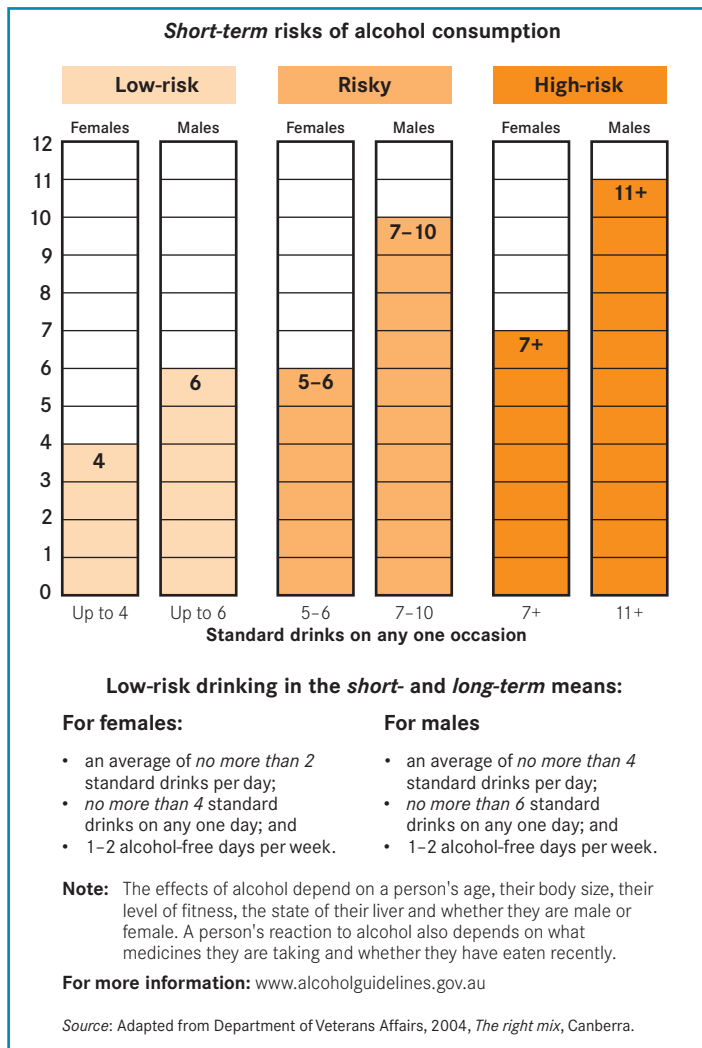
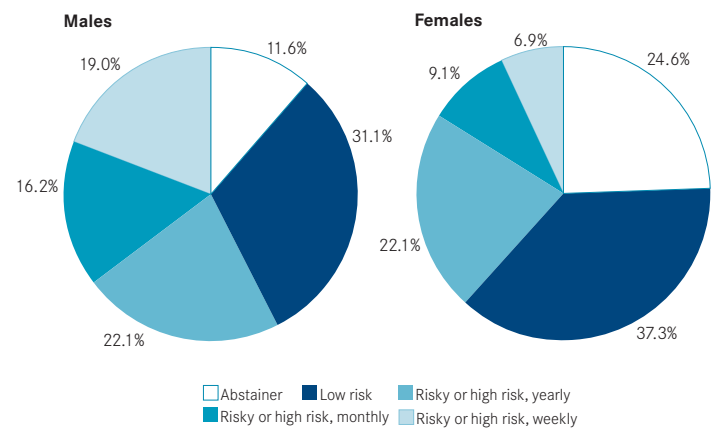


Figure 4 shows the proportion of males and females in the Grampians Region who were at no or low short-term risk of alcohol-related harm and those who were categorised as drinking alcohol at risky or high-risk levels on the occasions on which they drank alcohol.

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 at 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 – Grampians Region



- There was a significant difference in the proportion of males and females in the Grampians Region who were classified as abstainers. Approximately one in four females (24.6 per cent) in the region were abstainers, compared with 11.6 per cent of males.
- The proportions of males and females in the region who were classified as being at low risk of short-term alcohol-related harm in terms of their drinking behaviour were similar (31.1 per cent and 37.3 per cent respectively).
- Almost one in five males (19.0 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 Grampians 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 – Grampians Region

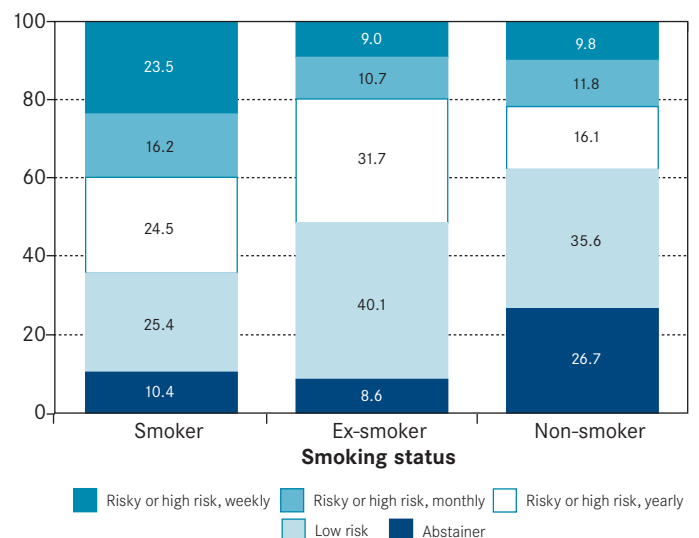
	Grampians Region		Victoria	
	%	95% confidence interval	%	95% confidence interval
<b>Sex</b>				
Males	19.0	14.5–24.4	14.6	13.1–16.3
Females	6.9	4.8–10.0	6.2	5.3–7.3
<b>Age group (years)</b>				
18–24	33.4	21.7–47.5	18.7	15.4–22.6
25–34	14.0	8.3–22.6	11.9	9.7–14.7
35–44	15.3	9.9–22.9	9.7	8.0–11.7
45–54	10.0	5.9–16.4	9.9	8.1–12.1
55–64	6.5	2.9–14.0	9.0	6.9–11.7
65+	3.7	1.6–8.3	3.9	2.7–5.5
<b>Education level</b>				
Primary	4.9	0.7–27.9	3.2	1.7–6.0
Secondary	15.2	11.7–19.4	12.4	11.1–13.8
Tertiary	9.0	5.8–13.8	8.3	7.0–9.7
<b>Household income per year</b>				
Less than \$20,000	8.3	4.8–14.2	6.7	5.3–8.5
\$20,000 to less than \$40,000	8.8	5.4–14.1	7.7	6.1–9.6
\$40,000 to less than \$60,000	14.5	9.3–21.9	12.7	10.6–15.3
\$60,000 or more	20.7	14.1–29.2	13.2	11.4–15.3
<b>Total</b>	<b>12.8</b>	<b>10.2–15.8</b>	<b>10.3</b>	<b>9.4–11.2</b>

- There were no significant differences between Victoria as a whole and the Grampians Region in the proportion of males and females who drank alcohol at risky or high-risk levels on at least one occasion per week.
- Approximately one third of adults aged 18–24 in the region reported drinking at risky or high-risk levels *at least weekly*.
- The proportion of adults in the region who reported drinking at risky or high-risk levels at least weekly was similar across levels of education and annual household income.

### 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 5 provides a breakdown of the proportion of smokers, ex-smokers and non-smokers, respectively, 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 – Grampians Region



- A significantly greater proportion of non-smokers were abstainers (26.7 per cent) compared with smokers and ex-smokers (10.4 per cent and 8.6 per cent respectively).
- The proportion of adults in the region who were at low risk of short-term harm from the consumption of alcohol was significantly greater for ex-smokers (40.1 per cent) than for current smokers (25.3 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: Adults at *weekly* risk of short-term alcohol-related harm, by smoking status – Grampians Region

Smoking status	Grampians Region		Victoria	
	%	95% confidence interval	%	95% confidence interval
Current smoker	23.5	17.0–31.6	20.1	17.6–22.9
Ex-smoker	9.0	5.4–14.5	9.6	7.9–11.5
Non-smoker	9.8	6.8–13.9	6.5	5.5–7.6
<b>Total</b>	<b>12.8</b>	<b>10.2–15.8</b>	<b>10.3</b>	<b>9.4–11.2</b>

- 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 Grampians Region, almost one in four current smokers (23.5 per cent) reported drinking at risky or high-risk levels *at least weekly*, compared with approximately one in ten ex-smokers and non-smokers (9.0 per cent and 9.8 per cent respectively).

### Rates

The 2001 Victorian population<sup>5</sup> 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](http://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](http://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.



<sup>5</sup> Department of Infrastructure, 2001, *Population projections 2001*, Government of Victoria, Melbourne.